

**ENHANCING THE TRANSITION EXPERIENCES OF INTERNATIONAL
STUDENTS AT THE UNIVERSITY OF DELAWARE
THROUGH ORIENTATION PROGRAMMING**

by

Vina Titaley

An Education Leadership Portfolio submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Doctor of Education in Educational Leadership.

Summer 2023

© 2023 Vina Titaley
All Rights Reserved

**ENHANCING THE TRANSITION EXPERIENCES OF INTERNATIONAL
STUDENTS AT THE UNIVERSITY OF DELAWARE
THROUGH ORIENTATION PROGRAMMING**

by

Vina Titaley

Approved:

Steve Amendum, Ph.D.
Interim Director of the School of Education

Approved:

Gary T. Henry, Ph.D.
Dean of the College of Education and Human Development

Approved:

Louis F. Rossi, Ph.D.
Vice Provost for Graduate and Professional Education and
Dean of the Graduate College

I certify that I have read this Education Leadership Portfolio and that in my opinion it meets the academic and professional standard required by the University as an Education Leadership Portfolio for the degree of Doctor of Education.

Signed:

Carol Wong, Ph.D.
Professor in Charge of Education Leadership Portfolio

I certify that I have read this Education Leadership Portfolio and that in my opinion it meets the academic and professional standard required by the University as an Education Leadership Portfolio for the degree of Doctor of Education.

Signed:

Florence Xiaotao Ran, Ph.D.
Member of Education Leadership Portfolio Committee

I certify that I have read this Education Leadership Portfolio and that in my opinion it meets the academic and professional standard required by the University as an Education Leadership Portfolio for the degree of Doctor of Education.

Signed:

Laura Eisenman, Ph.D.
Member of Education Leadership Portfolio Committee

I certify that I have read this Education Leadership Portfolio and that in my opinion it meets the academic and professional standard required by the University as an Education Leadership Portfolio for the degree of Doctor of Education.

Signed:

Ravichandran Ammigan, Ph.D.
Member of Education Leadership Portfolio Committee

ACKNOWLEDGMENTS

I am grateful to my advisor, Dr. Carol Wong, for her incredible guidance, patience, and support throughout this ELP journey. I am at awe at her brilliance in seeing the big picture and helping me find my way whenever I lost my aim. I am thankful for her insistence in pushing for my writing to be more precise and tighter.

I am grateful for committee members Dr. Laura Eisenman and Dr. Florence Ran for their support and feedback throughout this process. I am also grateful for the professional and personal support that I continue to receive from committee member, mentor, and supervisor, Dr. Ravi Ammigan. His vision for CGPS and passion for improving the international student experience continues to inspire me in my own work.

I would like to thank my colleagues at CGPS, particularly those who have been on the orientation improvement journey with me, including Rachael Selway, Matt Drexler, Cesar Caro, and Maria Ali. I am also thankful for the sustained encouragement and cheerleading from other colleagues, including Karen Boyce, Lisa Kelly, Crystal Coleman, and Brenda Foraker, as well as former colleague and good friend, Elisa Facetti.

My sincere thanks to Cecily, who has championed my well-being throughout.

A special thanks to ELP colleagues and writing buddies, Dr. Rachel Mroz and Dr. Amanda Cahill. I am grateful to be able to make it to the finish line with you both.

Finally, I am grateful for the immense love, encouragement, and spiritual and logistical support from my family: my father (Dr. John Titaley), brother (Dr. Ivan

Titaley), husband (Dr. Curt Davis), and mother (honorary doctor Ida Imam). Without your support, none of this would have been possible.

TABLE OF CONTENTS

LIST OF TABLES	viii
LIST OF FIGURES	xii
ABSTRACT	xiv

Chapter

1	INTRODUCTION	1
	Document Organization and Description of Artifact Appendices	2
2	STATEMENT OF THE PROBLEM.....	7
	Organizational Context.....	7
	Organizational Role.....	8
	International Student Context at the University of Delaware	9
	Statement of the Problem	12
	Overall Improvement Goal and Strategies	23
3	IMPROVEMENT GOAL AND STRATEGIES	25
	Improvement Strategies.....	25
4	IMPROVEMENT STRATEGY RESULTS.....	49
	Improvement Strategy 1: Before You Arrive Webinar Series	49
	Improvement Strategy 2: Improved International Student Orientation.....	62
	Improvement Strategy 3: First-Year Seminar Course	72
5	REFLECTIONS ON IMPROVEMENT STRATEGY EFFORTS	87
	Improvement Strategy 1: Before You Arrive Webinar Series	87
	Improvement Strategy 2: Improved International Student Orientation.....	92
	Improvement Strategy 3: First-Year Seminar Course	96
	Summary of Reflections	101
	Next Steps Beyond the ELP	107
6	REFLECTIONS ON LEADERSHIP DEVELOPMENT.....	108

Development as a Scholar	108
Development as a Problem Solver	110
Development as a Partner	111
Final Thoughts.....	112
REFERENCES	113
Appendix	
A ARTIFACT 1 – LITERATURE REVIEW	121
B ARTIFACT 2 – STUDENT NEEDS ASSESSMENT	202
C ARTIFACT 3 – INTERNATIONAL STUDENT ORIENTATION SATISFACTION SURVEYS	273
D ARTIFACT 4 – DESIGN OF PRE-ARRIVAL ORIENTATION WEBINARS	303
E ARTIFACT 5 – DESIGN OF IMPROVED INTERNATIONAL STUDENT ORIENTATION	325
F ARTIFACT 6 – FIRST-YEAR SEMINAR SYLLABUS AND EVALUATION	354
G ARTIFACT 7 – EVALUATION OF PRE-ARRIVAL ORIENTATION WEBINARS	407
H ARTIFACT 8 – EVALUATION OF THE IMPROVED INTERNATIONAL STUDENT ORIENTATION	467
I ARTIFACT 9 – ELP PROPOSAL	501

LIST OF TABLES

Table 1	Top Five Countries of Origin of International Undergraduate and Graduate Students at UD (excluding Optional Practical Training), Fall 2019 – Fall 2022	12
Table 2	Detailed Description of Each Session of the Before You Arrive Pre-Arrival Webinar Series, Summer 2022	29
Table 3	Improved International Student Orientation Schedule and Improvements, Fall 2022	41
Table 4	Reasons for Attending a Live Webinar vs. Watching a Video.....	61
Table 5	T-Test from Pre- and Post-Session Results	65
Table 6	Categories of Aspects that were Liked and Examples of Comments.....	70
Table 7	Data Sources and Prompts for Evaluating FYS Objectives	74
Table 8	Resources Students Learned from the FYS Course	83
Table 9	Summary of Changes in Orientation Programming and Future Programming	105
Table B1	Frequency Table of Reported Concerns and Questions	211
Table B2	Frequency of Specific Reported Immigration-related Concerns, by Education Level.....	212
Table B3	Frequency of Specific Reported COVID-19 related Concerns, by Education Level.....	213
Table B4	Frequency of Specific Reported Academic-related Concerns, by Education Level.....	214
Table B5	Frequency of Specific Reported Financial-related Concerns, by Education Level.....	215

Table B6	Frequency of Specific Reported Housing-related Concerns, by Education Level.....	217
Table B7	Frequency of Specific Reported Transportation-related Concerns, by Education Level.....	217
Table B8	Frequency of specific reported social and cultural-related concerns by education level.....	219
Table B9	Frequency of Specific Reported Concerns Related to Living in the U.S., by Education Level.....	219
Table B10	Frequency of Specific Resolved and Unresolved Concerns, by Education Level.....	221
Table B11	Frequency of Specific Unresolved Immigration-related Concerns, by Education Level.....	223
Table B12	Frequency of Specific Unresolved COVID-19 related Concerns, by Education Level.....	223
Table B13	Frequency of Specific Unresolved Academic-related Concerns, by Education Level.....	224
Table B14	Frequency of Specific Unresolved Financial-related Concerns, by Education Level.....	226
Table B15	Frequency of Specific Unresolved Housing-related Concerns, by Education Level.....	226
Table B16	Frequency of Specific Unresolved Transportation-related Concerns, by Education Level.....	227
Table B17	Frequency of Specific Unresolved Social and Cultural-related Concerns, by Education Level.....	230
Table B18	Frequency of Specific Unresolved Concerns Related to Living in the U.S., by Education Level.....	230
Table B19	Topics and When to Introduce Them	239
Table C1	International Student Orientation Schedule for Fall 2021 and Spring 2022 Semesters	274

Table C2	Satisfaction Scores of International Student Orientation in Fall 2021 and Spring 2022 Semesters	281
Table C3	Frequency of Useful Events and Sessions during International Student Orientation Fall 2021	282
Table C4	Frequency of Useful Events and Sessions during International Student Orientation Spring 2022	282
Table C5	Topics Considered Lacking or Insufficient from Fall 2021 and Spring 2022 Programs	285
Table C6	Additional Topics Considered Insufficient or Lacking	287
Table C7	Shortcomings in Execution of Fall 2021 and Spring 2022 Orientation Programs	292
Table D1	Detailed Description of Each Session of the Before You Arrive Webinar Series	306
Table D2	Information Topics of Before You Arrive Webinars and Bases for Including Topics	315
Table E1	Agenda of International Student Orientation Fall 2009	327
Table E2	Agenda of International Student Orientation Fall 2018	327
Table E3	Summary of Improvement Strategies	341
Table E4	Draft Schedule of International Student Orientation for Fall 2022	344
Table F1	Enrolled Student Codes and Countries of Origin	356
Table F2	Prompts and Data Sources for Evaluating Objectives	369
Table F3	Frequency of Cited Strategies to Avoid Academic Honesty Violations	377
Table F4	Summary of Exit Tickets and Reflection Paper Responses for Question 1	379
Table F5	Frequency of Cited Resources	382
Table F6	Frequency of Cited Academic Resources	383
Table F7	Frequency of Potentially Used Academic Resources	384

Table F8	Frequency of Cited Social Resources.....	385
Table F9	What Resources Students Learned from the FYS Course.....	385
Table F10	Summary of Exit Tickets and Reflection Paper Responses for Question 2.....	387
Table G1	Detailed Description of Each Session of the Before You Arrive Webinar Series.....	409
Table G2	Reasons for Attending a Live Webinar Versus Watching a Video	429
Table G3	Frequency of Information Channel Preference Ranking.....	432
Table G4	Rating of Quality of Webinars (%)	437
Table H1	Schedule of Improved International Student Orientation Fall 2022	469
Table H2	T-Test from Pre- and Post-Session Results	479
Table H3	Socialization Moments at International Student Orientation	480
Table H4	Proportion of Respondents' Likes and Dislikes of International Student Orientation.....	481
Table H5	Themes of the Orientation that Attendees Liked and Disliked	482
Table H6	Categories of Aspects that were Liked and Examples of Comments....	485
Table H7	Categories of Aspects that were Disliked and Examples of Comments	486
Table I1	Top Five Sending Countries of International Students at UD, Fall 2020	508
Table I2	Artifact Table.....	526

LIST OF FIGURES

Figure 1	International Student Enrollment at UD by Education Level, Fall 2019 - 2022	11
Figure 2	International Student Lifecycle	15
Figure 3	Attendance of Webinars and Video Views of Before You Arrive Pre-Arrival Webinar Series, Summer 2022	34
Figure 4	Participation Levels of Webinars (%)	52
Figure 5	Extent to which Attending Webinars and/or Watching Videos Answered Questions Related to Arrival Preparation (%).....	54
Figure 6	Extent to which Attending Webinars and/or Watching Videos Answered Questions Related to Transition Preparation (%).....	55
Figure 7	Helpfulness of Webinars in Transition and Adjustment in the U.S. (%)	56
Figure 8	Information Channels that Respondents Used to Participate in the Pre-Arrival Webinar Series (%)	59
Figure A1	International Student Lifecycle	132
Figure A2	International Student Lifecycle according to Department of Homeland Security	133
Figure A3	Student Lifecycle Framework according to Lizzio (2011).....	135
Figure A4	Transition Model	140
Figure A5	Schlossberg, Waters, and Goodman's 4 S System.....	144
Figure A6	State of Information Matrix.....	173
Figure B1	Timeline of Orientation Programs Fall 2021	203
Figure B2	Participants' Date of Entry to the U.S.....	210
Figure D1	Screenshot of the Before You Arrive website. Taken on July 14, 2022.	309

Figure D2	Screenshot of the Before Your Arrive webpage with a sample of the first few topics and supplemental materials.	310
Figure G1	Participation Levels of Webinars (%)	417
Figure G2	Zoom Attendance Levels and UDCapture Video View Levels	418
Figure G3	Extent to which Attending Webinar/Watching Videos Answered Questions (%)	420
Figure G4	Extent to which Attending Webinar/Watching Videos Answered Questions (%)	422
Figure G5	Helpfulness of Webinars in Transition and Adjustment in the U.S. (%)	423
Figure G6	Information in Pre-Arrival Webinars were Used in Respondents' Daily Lives	424
Figure G7	Extent to which Webinars Prepared Students for Expectations of Life in the U.S.	425
Figure G8	Information Channels Used to Participate in Pre-Arrival Webinar Series (%)	427
Figure G9	Top Three Preferred Information Channels	435
Figure G10	Bottom Three Preferred Information Channels	436
Figure I1	Mintzberg's Organizational Model	504
Figure I2	International Student Enrollment at UD by Level of Education, Fall 2019, 2020, and 2021 Semesters	506
Figure I3	International Student Enrollment by Level of Education in the U.S., AY 2019-2020 and AY 2020-2021.	507
Figure I4	Timeline of Transition and Adjustment Programming at CGPS since 2017	510
Figure I5	International Student Lifecycle	516

ABSTRACT

This Education Leadership Portfolio (ELP) documents my efforts to enhance the transition experiences of international students at the University of Delaware by optimizing orientation programming. Orientation programming for international students consists of pre-arrival orientation, upon-arrival orientation, and extended orientation, which are aligned with the international student lifecycle.

The problem that this ELP focuses on was framed based on a literature review, a student needs assessment survey, and satisfaction surveys of previous international student orientation programs. Based on the literature and data, the problem that this ELP sought to improve was that the current orientation programming was not optimally meeting the transition and adjustment needs of new international students. As such, the improvement goal was to increase the quantity and quality of orientation programming at the University of Delaware to better meet the needs of international students.

I implemented three improvement strategies to address the improvement goal. The first improvement strategy was the creation of the Before You Arrive Pre-Arrival Webinar series. The second improvement strategy was to improve the quality of upon-arrival orientation. The third improvement strategy was to improve the quality of the extended orientation program, namely the First Year Seminar course.

I conducted an evaluation of each improvement strategy to measure the effectiveness of each strategy in achieving the improvement goal. The results of the evaluation of the first improvement strategy indicated that students found the pre-

arrival webinars to be useful in preparing them for their arrival and transition to the U.S. and at UD. The evaluation of the second improvement strategy indicated that students perceived to have increased understanding of the information provided at upon-arrival orientation and that they were satisfied with the program. The evaluation of the third improvement strategy suggested that the First Year Seminar course for international students had begun to achieve the goals of increasing students' academic skills and preparedness, increase students' familiarity with campus support services, and facilitate intercultural communication skills. However, the results of the evaluation were inconclusive in terms of the extent to which the third improvement strategy achieved the improvement goal.

This ELP concludes with a reflection on the aspects that worked well in each improvement strategy and recommendations for further improvement beyond the ELP.

Chapter 1

INTRODUCTION

International students have been a part of the student body in higher education in the United States for many decades. Enrollment increased from approximately 250,000 by the end of the 1970s to over a million students in 2018 (Institute of International Education [IIE], 2022). Although there has been a steady decline in international student enrollment in the past several years, the U.S. continues to be one of the top destinations for international students (IDP, 2019).

The COVID-19 pandemic and the subsequent pandemic policies impacted new international student enrollment drastically in academic year 2020/21 (IIE, 2022). There was a 45% decline in new international student enrollment during that year, resulting in a total international student enrollment of 914,095 (IIE, 2022). The decline brought about anxiety and concern among international educators. Many wondered if the decline marked the start of future decreases in international student enrollment. The University of Delaware's international student enrollment level was also impacted during this time, when compared to the previous year, there was a 35.4% decline in international student enrollment in the academic year 2020-2021.

Fortunately, the current international student enrollment level in U.S. host institutions has gradually increased and appears to be trending to return to pre-pandemic levels (IIE, 2022). Nonetheless, host institutions in the U.S. have learned that a return to business as usual is not an option if they aim to be competitive with other countries (Glass et al., 2021). Given the University of Delaware is not immune

to national trends, UD needs to improve its support services for international students as well as enhance student experiences, including their transition experience to the U.S. and to the University of Delaware.

The present Education Leadership Portfolio (ELP) seeks to address and improve the transition experience of international students at the University of Delaware (UD). In this ELP, I identified limitations in terms of the quantity and quality of the current orientation programming. The existing orientation model at UD relied heavily on conveying information through what is known as upon-arrival orientation. However, the literature shows that additional orientation programming, including pre-arrival orientation (Garza, 2015; Jeon-Huh, 2015) and extended orientation (Brunsting, et al., 2018; Senyshyn, 2019), are warranted to better meet students' needs during different phases of transition and adjustment. Therefore, the goal of this ELP is to improve the transition experience of new international students by increasing the quantity and quality of orientation programming at UD. To achieve this goal, I employed three improvement strategies that focused on pre-arrival orientation, upon-arrival orientation, and extended orientation.

Document Organization and Description of Artifact Appendices

The problem statement, the improvement goal and strategies, as well as the results of the improvement strategies and reflection are discussed in six chapters and eight appendices. In chapter one, I introduce the problem. In chapter two, I discuss the problem in more detail, including the organizational context in which it occurs and my role within the organization. This chapter concludes with the improvement goal. In chapter three, I discuss the improvement strategies that were employed to achieve the goal. In this chapter, I include details regarding local planning and data, published

research, and best practices from the literature. In chapter four, I synthesize the results of each improvement strategy and how each contributes to achieving the improvement goal. I reflect on the improvement results and propose recommendations for future work in chapter five. Finally, I reflect on my professional and scholarly development throughout the ELP and provide concluding final thoughts in chapter six.

I developed eight artifacts that informed the problem, the improvement goal and strategies, and evaluated the progress of the improvement strategies. Each artifact is briefly described and is attached in the appendices.

Artifact 1: Literature Review (Appendix A)

The literature review provided an examination of the studies and theories on international students in higher education with a focus on orientation programming as a specific support service. The introduction focuses on the international student context in the U.S., including the various benefits that they bring to the U.S., the unique transition and adjustment needs that they encounter, and the international student lifecycle in which those transition needs occur. The literature review examined two theories on transition, namely Tinto's (1993) Student Departure Theory and Schlossberg, Waters, and Goodman's (1995) Transition Theory—the latter of which was used as the main theoretical framework to understand student transitions. The last section of the literature review examined orientation programming as a support service to international students, which includes pre-arrival orientation, upon-arrival orientation, and extended orientation. Existing and emerging models of these types of orientations were examined as well as some of the current limitations of each model.

This artifact served to inform how the problem was framed, which in turn, informed the conceptualization of the improvement goal and the design of the improvement strategies.

Artifact 2: Student Needs Assessment (Appendix B)

The Student Needs Assessment is a survey, which was distributed to new international students at UD who arrived in the U.S. in Fall 2021 designed to understand the specific transition needs and concerns of international students. The survey asked about the types of questions or concerns they had upon arriving in the U.S., including those related to academics, immigration, COVID-19, finances, and transportation.

This artifact served to inform how the problem was framed, which, in turn, informed the conceptualization of the improvement goal and the design of the improvement strategies of this ELP.

Artifact 3: International Student Orientation Satisfaction Surveys (Appendix C)

Artifact 3 discussed the results of the satisfaction surveys, which were distributed to attendees of international student orientation in Fall 2021 and Spring 2022. Findings from these surveys revealed the level of satisfaction of the attendees, topics or sessions that were useful to attendees, and shortcomings of the orientation program.

This artifact served to inform how the problem was framed, which in turn informed the conceptualization of the improvement goal and the design of the improvement strategies of this ELP.

Artifact 4: Design of Pre-Arrival Orientation Webinars (Appendix D)

This artifact described the design of the first improvement strategy, namely the Before You Arrival Pre-Arrival Webinar series, which served as the pre-arrival orientation. This webinar series was piloted in Summer 2022 and delivered to new international students who arrived at UD in Fall 2022. The design of the pre-arrival orientation, including the selection of topics, collaborators, and content of each webinar, was informed by the results of the Student Needs Assessment (Appendix B) and the International Student Orientation Satisfaction Surveys (Appendix C).

This artifact served as an improvement strategy to achieve the improvement goal, which in turn addressed the problem of this ELP.

Artifact 5: Design of Improved International Student Orientation (Appendix E)

This artifact described the design of the second improvement strategy, namely the improved international student orientation, which served as the upon-arrival orientation. The orientation program was implemented before the start of the Fall 2022 semester. It included a description of the program improvements, which were based on the gaps that were identified in the International Student Orientation Satisfaction Surveys (Appendix C).

This artifact served as an improvement strategy to achieve the improvement goal, which in turn addressed the problem of this ELP.

Artifact 6: First-Year Seminar Syllabus and Evaluation (Appendix F)

This artifact described the third improvement strategy, the First-Year Seminar (FYS) course for international students, which served as an extended orientation. This artifact also included an evaluation of the FYS course based on data from course assessments.

The FYS course, which I co-instructed with a peer mentor in Fall 2022, was designed to meet the specific transition needs of new international undergraduate students, which were examined in the literature (Appendix A) and outlined in the Student Needs Assessment (Appendix B).

This artifact served two purposes: (a) to describe the third improvement strategy, the first-year seminar for new international students; and (b) to evaluate the first-year seminar in terms of meeting the improvement goal.

Artifact 7: Evaluation of the Pre-Arrival Orientation Webinars (Appendix G)

This artifact described the evaluation of the Before You Arrive Webinar series (Appendix D). The results of the evaluation provided data about the extent to which the improvement strategy contributed towards meeting the improvement goal.

Artifact 8: Evaluation of the Improved International Student Orientation (Appendix H)

This artifact described the evaluation of the improved international student orientation (Appendix E). The results of the evaluation provided data about the extent to which the improvement strategy contributed towards meeting the improvement goal.

Chapter 2

STATEMENT OF THE PROBLEM

Chapter two introduces the problem this ELP seeks to improve. It starts by introducing the organizational context in which the problem occurs, namely the Center for Global Programs and Services (CGPS) at the University of Delaware (UD). It also describes my roles and responsibilities within CGPS and how they are relevant in influencing and addressing the problem. It continues with a description of the context of international students at UD. Finally, the chapter examines the problem that is addressed in this ELP by outlining the limitations of the current practice at UD. It concludes with a statement of the problem and a statement of the improvement goal and strategies.

Organizational Context

The organizational context in which this ELP is situated is the Center for Global Programs and Services (CGPS) at the University of Delaware. The mission of CGPS is “to inspire and facilitate the pursuit of global understanding by developing innovative and inclusive programs of study for every member of the UD community and beyond,” (CGPS, 2023). In 2021, the Center for Global Programs and Services was formed as a result of a merger of two offices, the Office for International Students and Scholars and the Institute for Global Studies. The Office for International Students and Scholars served as the office for immigration advising and programming support for international students, scholars, and foreign employees at UD. The Institute for

Global Studies was the office that oversaw study abroad programs, the World Scholar Programs, Global Outreach, and Global Partnerships and Agreements. Currently, CGPS is the umbrella department of four units: (a) Global Outreach and Partnerships; (b) International Student and Scholar Services; (c) Study Abroad; and (d) Student Engagement and Success. This ELP takes place specifically within the Student Engagement and Success unit at CGPS.

The Student Engagement and Success unit provides programming and engagement events for international students, which include support to address international students' needs and challenges in living, studying, and working in a new culture. In collaboration with other offices on campus, this team holds and coordinates over 100 programs each year, including international student orientation, weekly International Coffee Hour, the International Student Essay Contest, Thanksgiving Dinner, and student wellness discussions (CGPS, 2022). This unit also oversees a peer mentoring program called the iBuddy Mentoring Program, which matches current UD students with incoming international students to assist them with their preparation to arrive in the U.S. and transition to UD and Newark, DE.

Additionally, this unit also provides special programs advising, the latter which includes immigration advising for international students enrolled in the English Language Institute, sponsored students (i.e., students who receive scholarships from their home governments or other organizations), inbound exchange students, and students enrolled in non-degree programs.

Organizational Role

At the start of this ELP, I served as Assistant Director for Special Programs, which used to be under the International Student and Scholar Services unit. In this

position, I provided immigration advising and support to international students enrolled at the English Language Institute, sponsored students, inbound exchange students, and international students enrolled in short-term, non-degree programs. In addition to my immigration advising duties, I was also actively involved in the planning and implementation of the international student orientation program, which was led by the Assistant Director for Student Engagement. It was during this period that I became more involved and invested in improving the transition experience of international students through orientation programming.

In 2022, I was appointed Interim Assistant Director for Student Engagement, while also retaining my duties as Assistant Director for Special Programs. With this new position, not only was I responsible for the planning and implementation of international student orientation, but I was also responsible for overseeing all international student engagement programs at CGPS.

In early 2023, as part of an office reorganization, I was promoted to Associate Director for International Student Engagement and Success. I continued my responsibilities in overseeing the international student engagement programs and immigration advising in special programs. Including myself, the international student engagement team currently consists of one full-time staff, one part-time staff, and two graduate student assistants.

International Student Context at the University of Delaware

For the purposes of this ELP, international students are defined as degree-seeking students who are studying in a higher education program in the U.S. with an F-1 student visa or a J-1 exchange visitor student visa (OECD, 2021; IIE, n.d.). Both of these two visa categories are considered non-immigrant visas. There are other non-

immigrant and immigrant visa categories that permit study in the U.S. as well as the Deferred Action for Childhood Arrivals status. However, the other visa categories and statuses are beyond the purview of CGPS' scope and context. As such, students in these other visa categories and status were not included in the description and analyses of international students in this ELP. Additionally, international students studying at the English Language Institute were also not included in the description and analyses of this ELP since their orientation is organized by the English Language Institute.

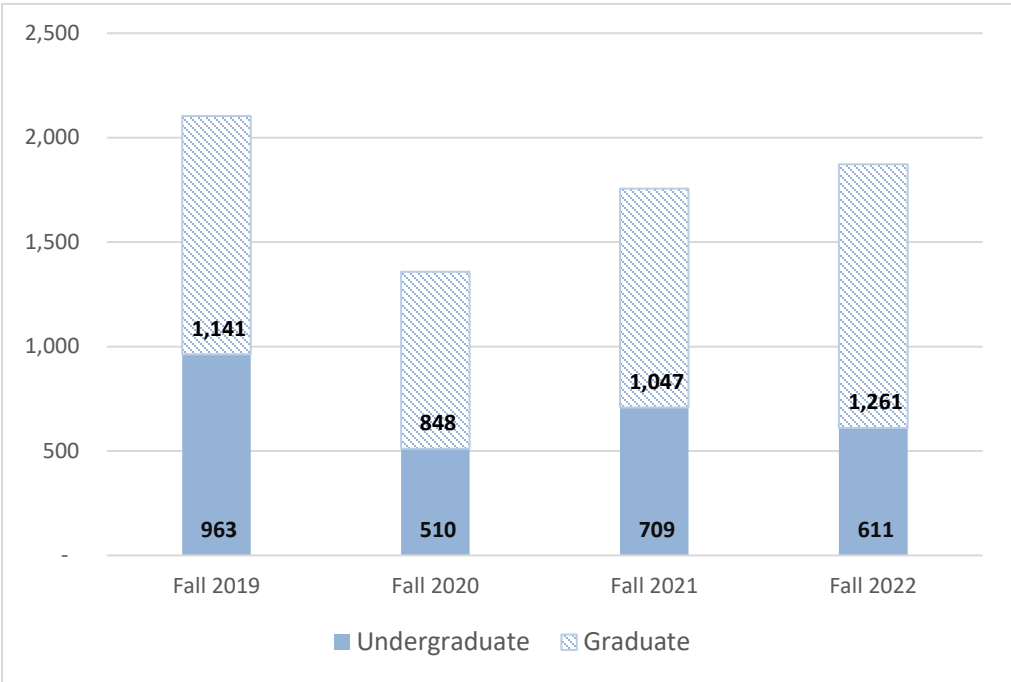
The international student enrollment at UD has been relatively steady from academic year 2016-2017 through 2018-2019. The average enrollment was approximately 2,000 students per year on campus, excluding students who were on Optional Practical Training¹ (Office for International Students and Scholars, 2017; 2018; 2019). The published data from Fall 2019 (i.e., a snapshot of data gathered between August 27 and December 31, 2019) indicated that CGPS served a total of 2,104 international undergraduate and graduate students on campus excluding students on OPT (CGPS, 2022). This number consisted of 963 (46%) international undergraduate students and 1,141 (54%) international graduate students (CGPS, 2022).

However, in 2020, this number decreased as a result of the COVID-19 pandemic, which brought about restrictions on international travel and a shift to online

¹ Optional Practical Training (OPT) is an employment authorization benefit provided to international students on an F-1 visa. This employment benefit allows international students to work in the United States, typically upon graduation, for between one to three years. International students on OPT continue to have F-1 visa status, whereby their host institution maintains the visa records. Enrollment data of international students nationally (with IIE) and at UD typically include students on OPT. For purposes of this ELP, students on OPT are not included in the calculation or analysis.

learning at higher education institutions, including at UD. In 2020, there were 1358 international students enrolled on the UD campus.

Fortunately, in the two years since then, with some travel restrictions reduced, the proliferation of the COVID-19 vaccination, and the return to in-person instruction, the enrollment level of international students at UD has gradually increased, as shown in Figure 1.



Note. Chart created from data from CGPS Impact Report, 2021-2022, by CGPS, 2022 and unpublished CGPS Impact Report, 2022-2023, by CGPS.

Figure 1 International Student Enrollment at UD by Education Level, Fall 2019 - 2022

In terms of the countries of origin of international students at UD, based on the enrollment from Fall 2019 to Fall 2022, the top five countries have included China, India, Bangladesh, South Korea, and Iran, as shown in Table 1.

Table 1 Top Five Countries of Origin of International Undergraduate and Graduate Students at UD (excluding Optional Practical Training), Fall 2019 – Fall 2022

Year	First top country	Second top country	Third top country	Fourth top country	Fifth top country
Fall 2019 (<i>n</i> = 2,104)	China, 1,323 (62.9%)	India, 162 (7.7%)	Saudi Arabia, 47 (2.23%)	Bangladesh, 41 (1.95%)	South Korea, 40 (1.90%)
Fall 2020 (<i>n</i> = 1,358)	China, 674 (49.6%)	India, 134 (9.9%)	Iran, 38 (2.8%)	South Korea, 38 (2.8%)	Bangladesh, 37 (2.72%)
Fall 2021 (<i>n</i> = 1,756)	China, 830 (47.3%)	India, 187 (10.6%)	Bangladesh, 51 (2.9%)	South Korea, 47 (2.68%)	Saudi Arabia, 45(2.56%)
Fall 2022 (<i>n</i> = 1,872)	China, 665 (35.5%)	India, 309 (16.5%)	Bangladesh, 84 (4.49%)	Nigeria, 75 (4.01%)	Iran, 59 (3.15%)

Note. Table created from data from Snapshot Statistics: 2019 Fall, 2020 Fall by CGPS, 2021 and unpublished data.

Statement of the Problem

Supporting international students' experience at their host institutions is important to the students as well as the institution (Ammigan, 2019; Ammigan & Jones, 2018). A positive experience at the host institution leads to student satisfaction, which in turn, is linked to academic success and a propensity to recommend the host institution to others (Ammigan & Jones, 2018). In particular, the transition and

adjustment experience can play a significant role in the overall student experience (Ammigan & Jones, 2018; Koo et al., 2021).

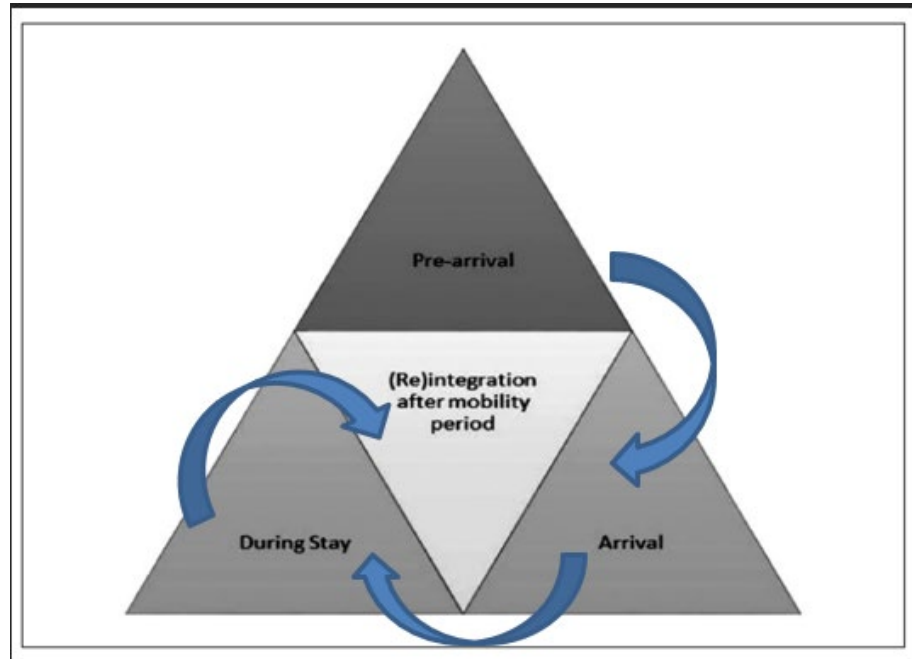
There are many studies and theories that have discussed the importance of supporting international students' transition and adjustment in the U.S., including through providing recommendations for host institutions (e.g., Andrade, 2006b; Andrade, 2008; Brittin & Obeidat, 2011; Brunsting, et al., 2018a; Gómez et al., 2014; Khanal & Gaulee, 2019; Li et al., 2018; Mesidor & Sly, 2016a; Mori, 2000; Rajapaksa & Dundes, 2002; Smith & Khawaja, 2011; Vakkai et al., 2020; Zhang & Goodson, 2011). One of these recommendations focuses on providing orientation programming.

Pascarella, Terenzini, and Wolfe (1986) asserted that students who attend orientation are more successful in integrating into the host institutions academic and social system compared to those who did not. In terms of specific orientation programs for international students, the literature generally touts the importance of a new international student orientation to assist international students in learning about their new environment and culture (Althen, 1990; Güvendir, 2018). Other studies assert that orientation programs are a critical part of student retention (Tas, 2013), and therefore should be comprehensive to include before students arrive at the host institution, upon arriving at the host institution, during their stay at the host institution, and after departing the host institution (Schartner & Young, 2016; Tas, 2013).

The literature generally recognizes three types of orientations for international students: pre-arrival, upon-arrival, and extended orientation (Madden-Dent et al., 2019; Schartner & Young, 2016). The most common type of orientation programming for international students is upon-arrival orientation (Madden-Dent et al., 2019), which is an orientation program that host institutions hold for newly arrived international

students. On the other hand, pre-arrival orientation, which is a program provided to students before they arrive in the U.S., is not as commonly provided by host institutions in the U.S. (Madden-Dent et al., 2019). Similarly, extended orientation, which is typically implemented in the form of a first-year seminar (FYS) in the first semester, is also a type of orientation that few host institutions in the U.S. provide for international students (Barton & Donahue, 2009).

Each of these orientation programs are aligned to meet the specific transition needs of the different phases of the international student lifecycle (Perez-Encinas & Rodriguez-Pomeda, 2018) as illustrated in Figure 2. Pre-arrival orientation takes place during the pre-arrival phase of the lifecycle; upon-arrival orientation takes place in the arrival phase; and extended orientation takes place in the during stay phase of the lifecycle.



Note. This model was adopted from “International students’ perceptions of their needs when going abroad: Services on demand,” by A. Perez-Encinas and J. Rodriguez-Pomeda, 2018, *Journal of Studies in International Education*, 22(1), p. 24.

Figure 2 International Student Lifecycle

At the University of Delaware, orientation programming was not aligned to the research and best practices recommended by the literature. Although upon-arrival orientation, or international student orientation, was conducted consistently before the start of each major semester at UD (Nassim, 2011), there were aspects of the program with which students were dissatisfied. The committee for organizing international student orientation also recognized a number of limitations of the past international student orientation model. Anecdotally, some of these limitations included that the content of the international student orientation sessions duplicated other orientation programs. Many students left the orientation in the middle of the program because they felt the program was too long and boring.

Until recently, there had been only one pre-arrival orientation, which was limited in terms of the extent to which it could optimally meet the information needs of new international students. Finally, with more budgetary resources and staffing provided to CGPS to support additional programming, an extended orientation in the form of a first-year seminar for new international students was very new (started in 2021) and did not support the specific transition and adjustment needs of international students.

The following section further describes the gaps between what is outlined in the literature and the past practices at the University of Delaware. Supporting evidence based on the Student Needs Assessment (See Appendix B) and the International Student Orientation Satisfaction Surveys (See Appendix C) are also included in the description. Each section ends with a summary of the improvements.

The upon-arrival orientation, or international student orientation, is presented first since it is the type of program that CGPS has provided most extensively. The upon-arrival orientation is also typically considered the main orientation program for international students; pre-arrival orientation and extended orientation are considered complementary to it.

Limitation 1: Upon-Arrival Orientation

Literature

The literature indicates that upon-arrival orientation, or international student orientation, is one of the most common types of programming that supports international student transition (Althen, 1990; Güvendir, 2018; Koo et al., 2021; Schartner & Young, 2016; Young & Althen, 2013). The literature defines upon-arrival orientation as the orientation program that is provided after students arrive in the

country. Furthermore, many host institutions typically hold upon-arrival orientation using a half-day model, approximately three or four hours (Koo et al., 2021; Puntene, 2019; Yu et al., 2016). Other host institutions might implement multiple-day orientation programs; however, these can be costly and are not as common. One of the most common critiques of the half-day model is students often feel overwhelmed with the large amount of information in a short period of time (Forbes-Mewett & Sawyer, 2016; Jean-Francois, 2019; Yu et al., 2016). International students are often jetlagged (Hoekje & Stevens, 2018; Puntene, 2019; Young & Althen, 2013) and overwhelmed with other priorities, which makes it difficult for them to absorb all of the information presented at international student orientation. Due to information overload, international students may not reap the full benefits of the upon-arrival orientation program.

Organizational Context

The critiques of upon-arrival orientation also apply to the international student orientation program at the University of Delaware. The international student orientation satisfaction surveys (See Appendix C) indicated that a small number of students (2.5%) felt like they had received too much information. The students' perceptions are supported by the fact that previous orientation programs relied heavily on PowerPoint presentations that conveyed too much information.

In addition to receiving too much information, the International Student Orientation Satisfaction Surveys also indicated that students felt like there were information topics that they needed but not covered during the orientation program. For example, approximately 10% of the respondents indicated that they wanted to learn more about employment, obtaining a Social Security Number, and career

readiness. These results are also in line with the results of the Student Needs Assessment survey (See Appendix B), whereby students indicated that there were questions and concerns that were unresolved after having attended upon-arrival orientation. For example, 48% of respondents indicated that they still had questions and concerns about finances. Specifically, they had questions about getting a Social Security Number (26.6%), finding on-campus employment (16%), and getting a credit card (14.9%).

The International Student Orientation Satisfaction Surveys also alluded to other limitations. First, international students reported wanting to have more socialization and ice-breaker activities during the program (5%). Second, they also reported that a virtual orientation program, which took place in 2020 and 2021 during the pandemic, was challenging to follow (7.5%). Third, they reported that the duration of the program was too long (2.5%). The issue of the length of the program was not a new one, because anecdotal data from previous upon-arrival orientation surveys (not included in this ELP) suggested that a three-hour program was considered too long.

Improvement(s) Needed

Therefore, based on the literature and data, the international student orientation program at UD required two improvements related to the quality of the program. The first improvement was to ensure that students received information that was aligned with what they needed during the program. The second improvement had to do with the design of the program, which involved five weaknesses. The first design issue was the need to attend to potential information overload. The second was to ensure that students received enough information. The third area of improvement was to return to an in-person program. The fourth was to create more socialization opportunities.

Finally, the fifth improvement was to shorten the duration of the program.

Limitation 2: Pre-Arrival Orientation

Literature

A pre-arrival orientation is an orientation program that is conducted prior to international students' arrival in the U.S. (Madden-Dent et al., 2019). However, it is a type of orientation that is not commonly offered or conducted by host institutions in the U.S. (Madden-Dent et al., 2019). It is also a type of orientation that is not well-examined in the literature.

Nonetheless, current scholars (Garza, 2015; Kambouropoulos, 2014; Madden-Dent et al., 2019; Mohamed et al., 2021) have highlighted the importance of providing pre-arrival orientation programs. A number of studies have touted the benefits of pre-arrival orientation programs, which include preparing students on what to expect after they have arrived in the U.S., providing students with additional time to make preparations for their arrival, and including opportunities for students to create connections with other students, faculty and staff before arriving in the U.S. (Garza, 2015; Hagar, 2014; Jeon-Huh, 2015; Mohamed et al., 2021).

One of the aspects of pre-arrival orientation that is most relevant is the significance of timing. In studying how international students access information, Chang, Gomes, and McKay (2021) argued that the timing of information delivery needs to be considered. For instance, new international students may benefit from learning about some topics prior to their arrival in the U.S., such as packing tips, finding off-campus housing, and making travel arrangements. These topics would be best conveyed in a pre-arrival orientation program.

Organizational Context

In 2021, the University of Delaware offered one pre-arrival webinar. The pre-arrival information session was an hour-long webinar that covered packing tips as well as travel preparations. It was a half-hour presentation with a half-hour question-and-answer session. In Winter 2022, CGPS added one more pre-arrival webinar, which was a webinar on understanding healthcare and health insurance in the U.S.

The Student Needs Assessment survey (Appendix B) indicated that international students felt they had not received sufficient information on specific topics during their first few days in the U.S. These top three concerns included finances (86%), transportation (81%), and academic preparation (69%).

Improvement(s) Needed

Therefore, based on the literature and organizational context, the pre-arrival orientation program at UD required two improvements related to the quantity and quality of the program. Although CGPS started to offer one pre-arrival webinar, it was not sufficient to address the additional information topics that international students were concerned about. Some of the information are more appropriately learned before arriving in the U.S., such as off-campus housing, opening a bank account, local transportation, and others. Additionally, there were information topics that international students wanted to learn about, such as the Social Security Number application process, healthcare and health insurance in the U.S. To avoid information overload, it was not feasible to include these topics in the upon-arrival orientation program. Therefore, additional pre-arrival webinars were needed to address the additional information needs.

Offering more pre-arrival webinars addressed the issue of potentially overloading students with too much information during the upon-arrival orientation.

Instead of including all information into a two-hour program, these topics can be spread out prior to their arrival (Chang & Gomes, 2021).

Limitation 3: Extended Orientation

Literature

The literature indicated that one shortcoming of many upon-arrival orientation programs was there was little follow up after upon-arrival orientation (Helms & Brajkovic, 2017; Puntene, 2019; Yu et al., 2016). Additional support services beyond the initial upon-arrival orientation are needed to address international students' transition needs during the first semester or even the first year (Montgomery, 2017). Therefore, a follow-up mechanism could take place in the form of extended orientation, whereby a First-Year Seminar (FYS) is commonly held for first-year students.

First-Year Seminars can provide additional information to new international students after the initial new student orientation (Hunter & Linder, 2005; Skipper et al., 2010). These courses were designed to (a) extend orientation programming to strengthen students' transition; (b) support student development and active participation in the learning process; and (c) familiarize students with campus services and resources (Hunter & Linder, 2005; National Resource Center for First-Year Experience and Students in Transition, 2013).

First-Year Seminars have continued to develop in scope, in that students in specialized majors and programs are enrolled in specialized sections. For example, students in engineering, business, and music majors are enrolled in FYS courses that are tailored specifically for those majors. Moreover, student athletes, those in Honors programs, and students in pre-professional programs (e.g., nursing) are enrolled in

specialized FYS courses that are tailored for their specific needs. A number of host U.S. institutions have begun to offer FYS courses that are tailored specifically for international students.

As a form of extended international student orientation, FYS courses typically include topics that address international students' specific needs. Some examples include cross-cultural understanding (Andrade, 2006a; Brunsting et al., 2018; Cox et al., 2006; Senyshyn, 2019), understanding the American education system and classroom (Dorsett, 2017; Kovtun, 2011; Yan & Sendall, 2016), and understanding campus support services (Andrade, 2008b; Fletcher-Anthony & Efthymiou, 2017). The benefit of an extended orientation is that the weekly course meetings allows for a slower pace and additional time for new international students to process the information compared to the short duration of an upon-arrival orientation (Snyder & Chesire, 2002).

International students have found topics covered in these tailored FYS courses, such as understanding American culture, academic policies and procedures, and support services useful in their transition (Andrade, 2008b). Furthermore, as a result of enrolling in a specialized FYS course, international students have a positive perception of mental health and support services (Fletcher-Anthony & Efthymiou, 2017; Kovtun, 2010).

Organizational Context

At the University of Delaware, an extended orientation for international students began in the fall semester of 2021, which I co-instructed with a peer mentor. Since it was the first instance of an extended orientation program for international

students, there were several improvements needed because many of the class sessions were not focused on meeting international students' specific transition needs.

Improvement(s) Needed

Based on the literature and organizational context, the extended orientation program at UD required an improvement related to the quality of the program. To better meet the transition needs of first-year international students, the FYS course syllabus needs to be designed to meet the following objectives:

- (a) Strengthen students' academic preparation, expectations, and skills (Andrade, 2006; Cox et al., 2006; Dorsett, 2017; Kovtun, 2011; Snyder & Chesire, 2002; Yan & Sendall, 2016);
- (b) Increase students' knowledge and familiarity with campus support services (Andrade, 2006; Fletcher-Anthony & Efthymiou, 2017); and
- (c) Facilitate students' inter-cultural communication (Brunsting et al., 2018; Senyshyn, 2019; Snyder & Chesire, 2002).

Summary

Given that pre-arrival, upon-arrival, and extended orientations are beneficial for new international students, and due to the limitations of the current orientation programming at UD, it is important to address these limitations. Therefore, the present ELP addresses the following problem: *The current orientation programming is not optimally meeting the transition and adjustment needs of new international students.*

Overall Improvement Goal and Strategies

To improve the orientation programming, the improvement goal focuses on increasing the quantity and quality of orientation programming at the University of Delaware to better meet the needs of new international students. Three improvement

strategies were implemented to address the improvement goal. The first improvement strategy was to add more pre-arrival orientation programs and ensure that the added programs addressed the specific information needs or concerns. The second improvement strategy was to increase the quality of upon-arrival orientation. The third improvement strategy was to improve the quality of the extended orientation program with a focus on meeting specific transition needs of new international students during the first semester.

Chapter 3

IMPROVEMENT GOAL AND STRATEGIES

To improve international students' transition experiences at UD, the current ELP aims to address the improvement goal of improving the quantity and quality of orientation programming. To achieve this goal, I implemented three strategies. First, I added pre-arrival webinars that addressed the information needs of international students. Second, I improved the quality of the upon-arrival orientation program. Third, I improved the quality of the extended orientation that took place during the first semester.

Chapter three describes each of the improvement strategies, which includes how local planning and data as well as the literature informed the decisions about each improvement strategy. Moreover, I also discuss the improvements that were made and the implementation of each strategy.

Improvement Strategies

The three improvement strategies were designed and implemented to focus on orientation programming. Each improvement strategy was designed to meet the specific transition and adjustment needs of three phases of the student lifecycle: pre-arrival, arrival, and during stay (Perez-Encinas & Rodriguez-Pomeda, 2018) (See Figure 2). The improvement strategies addressed the distinct needs that students experience in each phase. All improvements strategies were completed in 2022: (a) The Before Your Arrive Pre-Arrival Webinar Series was delivered in the summer; (b)

the improved international student orientation took place the week before the start of the fall semester; and (c) the FYS course was offered during the fall semester.

The following section includes recommendations based on the literature, a summary of the improvements, and a description of the implementation of the improvement strategy.

Improvement Strategy 1: Pre-Arrival Orientation - Before You Arrive Webinar Series

Literature

The goals of pre-arrival orientation can range from preparing students for their visa interview to preparing them for the new academic and social environments (Madden-Dent et al., 2019; Punteney, 2019). Although it is less commonly offered than upon-arrival orientation, pre-arrival orientation has been shown to support international students in connecting with their peers, faculty, and staff after arriving at their host institutions (Jeon-Huh, 2015). Pre-arrival orientation also supported academic performance (Tsang, 2001) and facilitated inter-cultural learning (Hagar, 2014). Garza (2015) advocated for more comprehensive pre-arrival information particularly in addressing some of the needs that international students deemed pressing and practical, including finding accommodations, transportation, and food, as well as navigating the healthcare system.

Summary of Improvements

The improvements occurred on two fronts. The first one was to add pre-arrival orientation webinars. Prior to the Pre-Arrival Webinar series in Summer 2022, there were only two webinars offered to new international students, namely a pre-arrival information session that covered immigration and travel preparation and a webinar on

understanding healthcare and health insurance in the U.S. In the improved pre-arrival orientation, a total of ten unique webinars and pre-recorded videos were designed and implemented.

The second improvement was to ensure the live webinars and pre-recorded videos met the information needs of new international students in the pre-arrival phase. They also addressed other information topics that international students indicated in the Student Needs Assessment (See Appendix B). The Student Needs Assessment suggested that international students did not receive enough information on a number of topics, including information about obtaining a Social Security Number (26.6%), applying for a credit card (14.9%), getting a driver's license (26.4%), and buying a car (21.5%). These topics were covered in the Before You Arrive Webinar Series.

Including these topics in the pre-arrival phase prevented the issue of information overload during the upon-arrival orientation program. With a two-hour upon-arrival orientation program, it was not feasible to include all the information topics that students wanted to know about without overwhelming students with too much information.

Description of the Before You Arrive Webinar Series

The Before You Arrive Webinar Series was designed to address the information needs of new international students who were attending UD in Fall 2022 (See Appendix D). The webinar series consisted of ten live webinars and pre-recorded videos. The live webinars were broadcasted on Zoom every Thursday at 9:00 a.m. in June and July 2022. Some topics were not broadcasted live on Zoom due to scheduling conflicts and were pre-recorded and posted on the CGPS website. Table 2 describes

the schedule of the Before You Arrive Webinar Series as well as information about the purpose of each topic, the medium in which the topic was delivered (live webinar or pre-recorded videos), collaborators, and any other additional resources that were posted on the website.

Table 2 Detailed Description of Each Session of the Before You Arrive Pre-Arrival Webinar Series, Summer 2022

No.	Date	Title	Purpose and Content	Information Channel	Presenters	Supplemental Resources Posted on the Website
1	Thursday, June 2, 2022	Welcome to UD and CGPS	Introduce UD campus (through virtual tour); introduction to what a Blue Hen is; introduce CGPS; introduce immigration documents; and an overview of the webinar series.	Live Zoom webinar; recording of presentation posted to website	CGPS staff	None
2	Thursday, June 9, 2022	Understanding Healthcare in the U.S.	Provide an overview of services provided by Student Health Services; introduction to local healthcare providers; and introduction to how health insurance interacts with healthcare providers.	Pre-recorded video	Interim Director of Student Health Services at UD	Link to required immunization forms; link to UD's COVID-19 dashboard; link to CGPS webpage on healthcare and health insurance
3	Thursday, June 16, 2022	Understanding Health Insurance in the U.S.	Introduce health insurance terms; case samples of how health insurance works; summary of benefits of the UD health insurance plan; and how to contact health insurance provider.	Pre-recorded video	Representative of University Student Health Plan	Link to the UD health insurance plan; glossary of health insurance terms; link to CGPS webpage on healthcare and health insurance

Table 2 Continued

No.	Date	Title	Purpose and Content	Information Channel	Presenters	Supplemental Resources Posted on the Website
4	Thursday, June 23, 2022	Housing (for graduate students)	Introduce tools and resources for searching off-campus housing; considerations to make when conducting search; case samples of how to assess housing options; understanding the lease; and suggested next steps.	Live Zoom webinar; recording of presentation posted to website	CGPS staff; iBuddy Council Members	PDF of resources and links mentioned in the webinar; link to CGPS webpage on housing
5	Thursday, June 30, 2022	Social Security Number part 1	Introduce the concept of Social Security Number; an overview of when an SSN might be needed; how to obtain an SSN; how it's related to a driver's license; and future SSN webinar in the fall semester.	Live Zoom webinar; recording of presentation posted to website	CGPS staff	Link to a CGPS webpage on the Social Security Number

Table 2 Continued

No.	Date	Title	Purpose and Content	Information Channel	Presenters	Supplemental Resources Posted on the Website
6	Thursday, July 7, 2022	Academics in the U.S.: Understanding Professors' Expectations (graduate students)	Introduce the relationship with faculty, advisors, and mentors for graduate students. Graduate student iBuddy Council members talk about their experiences.	Live Zoom webinar; recording of presentation posted to website	CGPS staff; iBuddy Council members	None
7	Thursday, July 7, 2022	Academics in the U.S.: Understanding the U.S. Classroom (undergraduate students)	Introduce some expectations for the American classroom, including class schedules, etiquette in addressing professors, and understanding the syllabus; introduce academic honesty policies; and introduce services of Office of Academic Enrichment.	Live Zoom webinar; recording of presentation posted to website	Staff from the Office of Academic Enrichment at UD	None
8	Thursday, July 14, 2022	Managing Your Finances in the U.S.	Provide information on how to open a bank account; how to create a budget; how to manage finances; how to apply for a credit card; and how to protect accounts from fraud.	Pre-recorded videos, link to PNC Bank website and other articles	PNC Bank	None

Table 2 Continued

No.	Date	Title	Purpose and Content	Information Channel	Presenters	Supplemental Resources Posted on the Website
9	Thursday, July 21, 2022	Living in the U.S.	Introduce transportation options and how to access them; local grocery and general shopping options; tips on communication options and electronics (universal adaptor); and engagement opportunities. Current international students shared their experiences during the Q&A session.	Live Zoom webinar; recording of presentation posted to website	CGPS staff; iBuddy Council members	Resource documents and links mentioned in the webinar; link to CGPS webpage on Living in the U.S.
10	Thursday, July 28, 2022	Pre-arrival Information Session	Explain immigration document to prepare and carry for travel to the U.S.; explain COVID-19 regulations for travel to the U.S.; prepare a contingency plan in case of delay; provide packing tips and clothing needed for the four seasons in the U.S.; and prepare for international student orientation.	Live Zoom webinar; recording of presentation posted to website	CGPS Staff	Resource documents and links mentioned in the webinar

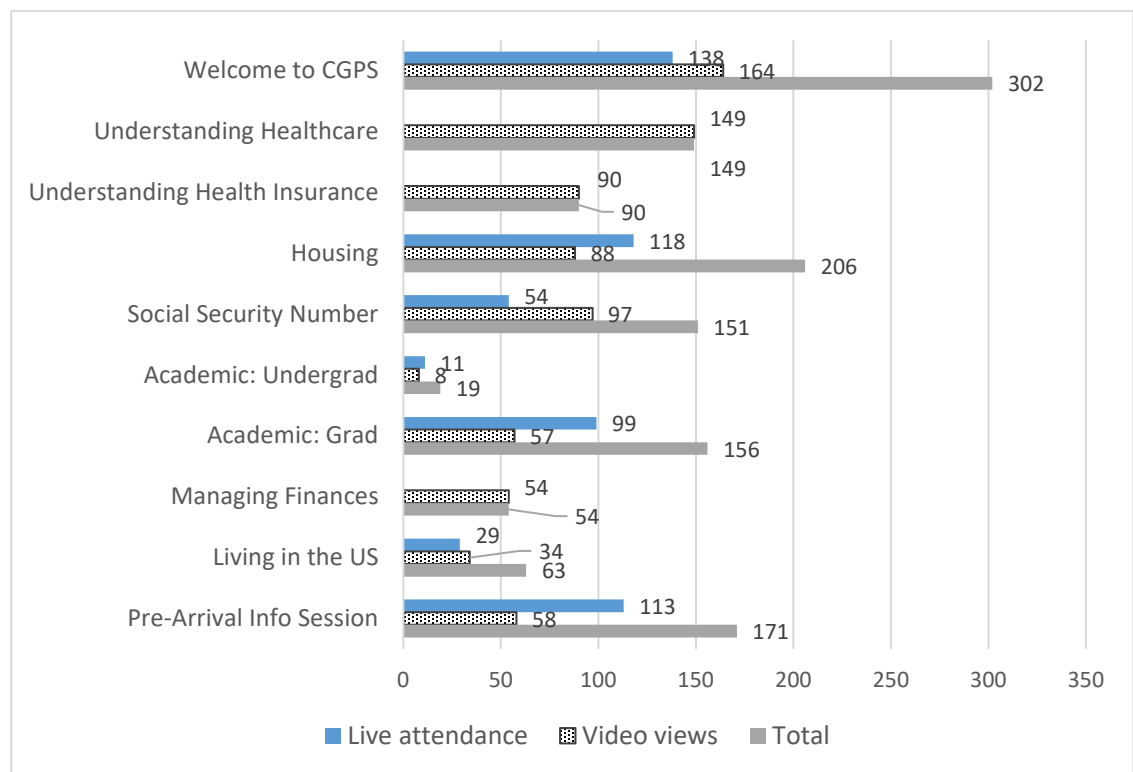
Each live webinar included a 30-minute presentation, followed by a 30-minute question-and-answer session. The presentation was recorded and posted on the CGPS website the next day. Some of the topics of the webinars and prerecorded videos were selected based on the results of the Student Needs Assessment survey (See Appendix B). These topics included the application process for a Social Security Number, driver's license, and a credit card, as well as information about local transportation. Other topics were included based on the International Student Orientation Satisfaction Surveys (See Appendix C), such as finding off-campus housing, opening a bank account, and understanding healthcare and health insurance in the U.S.

Current international students and staff from other offices were invited to present at some of the webinars. For example, on the topic of understanding healthcare in the U.S., CGPS invited the Interim Director of Student Health Services to present. Additionally, for the webinar on housing for graduate students, CGPS staff invited current international students to provide some of their tips and advice on how to find off-campus housing. Collaborating with other partners was necessary to ensure that students received accurate information from subject matter experts.

In terms of the selected information channels, or media, there were two reasons why the live Zoom webinar and video format were chosen over written material or information on a website. The first reason was that the live Zoom webinar format allowed for the presenters to verbally explain and present the topic in more detail. Students could also ask questions and receive real-time answers during the question-and-answer session. The second reason was that having the presentations recorded allowed for students to view the presentation at their leisure, either because they

missed the live version due to the time difference or other commitments, or so that they could view the video again.

Figure 3 displays the level of attendance and/or number of views of the videos of each webinar. The three most attended and/or viewed videos of the webinar were the Welcome to UD & CGPS webinar ($n = 302$), the Housing webinar for graduate students ($n = 206$), and the Pre-Arrival Preparation webinar ($n = 171$).



Note. There were no live Zoom webinars for Understanding Healthcare, Understanding Health Insurance, and Managing Finances.

Figure 3 Attendance of Webinars and Video Views of Before You Arrive Pre-Arrival Webinar Series, Summer 2022

Improvement Strategy 2: Upon-Arrival Orientation - Improved International Student Orientation

Literature

Upon-arrival orientation, also known as international student orientation, is the most commonly provided orientation programming at U.S. host institutions (Madden-Dent et al., 2019; Martirosyan et al., 2019). This type of orientation program provides information that is unique to international students, such as an overview of immigration regulations that govern their student visa. There are three general goals of international student orientation: (a) to accelerate international students' adjustment to the U.S. culture and academic culture; (b) to help students learn to gather information about campus resources on their own; and (c) to facilitate new international students' interactions with domestic students, faculty, and staff, who include international student advisors (Althen, 1990).

Although the literature examined the importance of upon-arrival orientation programs to support international students' transition, there are few studies that examine the specific design factors and components that make an effective orientation program. Nonetheless, there are a number of guidance principles that are useful to design an effective orientation program. These include that: (a) it should meet international students' needs; (b), it should involve collaboration with other partners on campus and in the community, and (c) it should include assessment (Meyer, 2001). An international student orientation program should also be mindful of students' capacity to absorb information, as students might be influenced by jetlag, unfamiliarity with the American accent, and anxiety around navigating their new environments and

other pressing priorities (Young & Althen, 2013). These guiding principles were incorporated into the design of the improved international student orientation.

Summary of Improvements

Based on the data from International Student Orientation Satisfaction Surveys (See Appendix C) and guiding principles found in the literature review (See Appendix A), I incorporated multiple improvements in the design of the upon-arrival orientation program (See Appendix E).

In terms of the information topics, the international student orientation program included a session on career readiness, which was presented by the Career Center. In this session, I ensured that the topic of finding on-campus employment was included in the presentation, as it was a topic that international students indicated that they wanted to learn more about in the International Student Orientation Satisfaction Surveys (Appendix C).

The next improvement was a strategy to address the issue that students felt like they did not get enough information during the upon-arrival orientation. For example, five percent of students wanted to learn more about optional practical training (OPT) and curricular practical training (CPT), two immigration-related employment authorizations. Although both OPT and CPT were referenced during previous upon-arrival orientation programs, they were not discussed in depth during the session on immigration regulations. This limitation was addressed by referring students to other information sources. For example, a calendar of future OPT and CPT workshops was distributed to students during international student orientation, where more detail on the application process would be explained.

The third improvement was to address information overload. Research revealed that many upon-arrival orientation programs tend to overwhelm new international students by providing them with too much information in a short period of time (Forbes-Mewett & Sawyer, 2016; Jean-Francois, 2019; Snyder & Chesire, 2002; Yu et al., 2016). Therefore, to mitigate this common problem, the Fall 2022 international student orientation program involved conveying information in a more targeted, precise, and interactive way. In other words, presenters gave just enough information about the topic or the services of their office.

Moreover, information about offices or services conveyed at other orientation programs, such as graduate student orientation, was not repeated at international student orientation.

Presenters also used more interactive methods of conveying information to the audience. For example, CGPS staff and a student volunteer presented the session on immigration regulations and responsibilities by using a mix of dialogue, role-playing, and lectures.

The fourth improvement involved a return to an in-person program, which was a shift from the virtual international student orientation programs that were held throughout 2020, 2021, and early 2022. Nine students (7.5%) had indicated on the International Student Orientation Satisfaction Surveys that they desired a return to an in-person orientation program (See Appendix C). Because UD lifted its restriction on holding large in-person gatherings, we were able to conduct the Fall 2022 international student orientation in person.

The fifth improvement involved providing more socialization opportunities throughout the program. Seven students (5.8%) had indicated on the previous

orientation satisfaction surveys that they desired more socialization opportunities and icebreakers during orientation (See Appendix C). A pre-orientation networking event was included before the start of the international student orientation program. Thirty minutes before the orientation program began, new international students met with other new students, CGPS staff, and current international student volunteers. Interactive games were added throughout the program, potentially encouraging students to meet others sitting near them.

The final improvement involved shortening the duration of the orientation program from 3 hours to 2 hours. Guiding principles outlined in the literature encourage orientation planners to be mindful of international students' ability to absorb information at orientation (Young & Althen, 2013). A long orientation program that is filled with too much information might not be the most appropriate model for an upon-arrival orientation program.

Overall, all five improvements were implemented in the Fall 2022 international student orientation. Some of these improvements were major, such as shifting the program to in-person, but others involved smaller tweaks in the program execution, such as providing printed materials as reference sources for other information.

Description of Improved International Student Orientation

The improved international student orientation in Fall 2022 was attended by approximately 350 new international students. A pre-orientation networking program took place before the start of orientation to provide an opportunity for students to socialize with each other and with current international student volunteers.

There were four major sessions at the orientation: (a) immigration regulations and CGPS services; (b) academic preparedness and support services, which was

presented by Office of Academic Enrichment; (c) a health and wellness panel, which was presented by Student Health Services, the Center for Counseling and Student Development, and Student Wellness and Health Promotion; and (d) career readiness, which was presented by the Career Center.

Each session was designed specifically to ensure that the information was targeted to avoid information overload. The presenters did not rely on PowerPoint presentations. Instead, they included interactive methods of communicating information. For example, the CGPS staff conveyed information about immigration responsibilities by doing a short role play skit with an international student volunteer. The health and wellness panel as well as the academic preparedness included a short question-and-answer session, where an international student asked the panelists some questions. The session on career readiness also included an interactive activity with the students.

During the program, students received two pieces of printed material during the program. The first one was a resource sheet that included contact information of other resources on campus that were not presented at the orientation, such as the UD Police Department. The second piece of paper was a list of the fall program calendar, which included dates of employment workshops and other programs. The International Student Orientation Satisfaction Surveys (Artifact C) indicated that although information about employment authorization (i.e., Optional Practical Training) was introduced at the orientation, students felt like they did not receive enough information. It was not feasible to go into detail about this topic at international student orientation. It was important to provide students with relevant resources to

obtain information at a later date. Therefore, the two printed materials served as ways of conveying more information without necessarily adding more sessions.

The orientation program added interactive Mentimeter games to encourage socialization and add energy to the program. Students used their smartphones, laptops or tablets and a wi-fi connection to participate in these games. This part of the program was quite popular and well-received by the students.

In terms of designing the room, I used the lecture-style seating arrangement to accommodate nearly 400 attendees. However, instead of long rows of seats, I arranged the seats so that students were seated in groups of eight. This grouping of students was designed to facilitate better interaction and socialization amongst the students.

Finally, the duration of the program was shortened to two hours and concluded with a lunch. Almost all the attendees stayed throughout the entire program.

Table 3 describes the improved upon-arrival orientation, including information on how the sections were improved.

Table 3 Improved International Student Orientation Schedule and Improvements, Fall 2022

Time	Agenda	Description	Limitation or Gap that was Addressed
8:30 - 9:00 am	Arrival at Trabant, informal networking	Students are given the opportunity to socialize and network amongst each other before the program began.	Socialization opportunities
9:00 - 9:05 am	Welcome	Initial welcome by emcee	
	Connecting to UD Wi-Fi (eduroam)	Time provided to connect with the UD Wi-Fi in order to participate in the pre-session survey and online games	
	Overview of International Student Orientation Program	Emcee drawing attention to the printed agenda of the program provided on each chair. The agenda also included contact information of presenting offices and other resource offices, such as UD Police Department and UD transportation.	Too little information: Providing additional information not presented at orientation, such as UD security and transportation.
	Pre-session Survey	A QR code was displayed on the screen, which attendees were asked to scan with their mobile phones. The QR code would bring them to the Google pre-session survey. The pre-session survey to measure level of preparedness and understanding of information topics.	

Table 3 Continued

Time	Agenda	Description	Limitation or Gap that was Addressed
9:05 - 9:10 am	Welcome by Associate Provost for International Programs, Dr. Ravi Ammigan	A pre-recorded video of Associate Provost conveying a welcome speech was played.	
9:10 - 9:20 am	Ice breaker: Get to know your neighbors	CGPS staff facilitated a brief ice-breaker game using Mentimeter. Attendees were asked to introduce themselves with other attendees sitting next, in front, and/or behind them and asked them whether they preferred cats or dogs. The answer was entered on the Mentimeter platform using their mobile phones. The results of the poll were displayed on the screen.	Socialization opportunities
9:20 - 9:50 am	Understanding CGPS Services and Maintaining Visa Status	The services provided by CGPS and students' responsibilities in maintaining their visa status were presented in a role-playing skit. A student volunteer acted as a new international student at UD and experienced or asked various questions about immigration that was answered by different CGPS staff.	Mixed media to avoid information overload and balance too little information: role-playing, referring to future workshops.

Table 3 Continued

Time	Agenda	Description	Limitation or Gap that was Addressed
9:50 - 9:55 am	CGPS Programming Events and Engagement Opportunities	CGPS staff presented different events and programs scheduled for the fall semester, such as Coffee Hour, immigration workshops, and a transition discussion series. Coffee Hour stickers were distributed to all attendees to invite them to the Welcome Event Coffee Hour later in the day.	Mixed media to avoid information overload and balance too little information: referring to future workshops. Printed fall programming calendar (see Appendix) provided at orientation. Coffee Hour stickers as an additional medium of information.
9:55 - 9:56 am	Transition	Transition time between speakers	
9:56 - 10:06 am	Session on Academic Preparedness	A question-and-answer style session presented by a staff from the Office of Academic Enrichment and two international student volunteers addressed different academic preparedness questions. Guiding questions can be found in the Appendix E.	Mixed media to avoid information overload and balance too little information: interaction with students, referring to future academic-related workshops
10:06 - 10:07 am	Transition	Transition time between speakers	

Table 3 Continued

Time	Agenda	Description	Limitation or Gap that was Addressed
10:07 - 10:27 am	Panel on Health and Wellness Services	Content panel involved representatives from Student Health Services, Student Wellness and Health Promotion, and Counseling Center and Student Development. Each panelist addressed pre-submitted questions that are relevant for international students, as well as updated policies and regulations around COVID-19 and Monkey Pox. The panel also involved a question-and-answer style session with a student volunteer.	Mixed media to avoid information overload and balance too little information: dialog, interaction with students by soliciting questions, referring to Before You Arrive webinar series, referring future workshops and events.
10:27 - 10:30 am	Buffer time	Time provided in case extra time is needed due to delays.	
10:30 - 10:40 am	Game	CGPS staff facilitated a brief game using Mentimeter as a break from the multiple sessions conveying information. The Mentimeter featured trivia around Delaware and University of Delaware.	
10:40 - 10:50 am	Session on Career Readiness	Presentation by representative from Career Center on career readiness resources, addressing specific concerns and questions of international student (see Appendix E for guiding questions).	Mixed media to avoid information overload and balance too little information: dialog, interaction with students by soliciting questions, referring future workshops, and other printed material provided at orientation

Table 3 Continued

Time	Agenda	Description	Limitation or Gap that was Addressed
10:50 - 10:55 am	Post-survey	A QR code was displayed on the screen, which attendees were asked to scan with their mobile phones. The QR code would bring them to the Google post-session survey. The post-session survey to measure level of preparedness and understanding of information topics. It also asked for feedback and comments on the execution of the program. Results of the surveys were analyzed and discussed in Artifact 8 (Appendix H).	
10:55 - 11:00 am	Closing	Closing remarks by emcee.	
	Announcement: Lunch		
	Announcement: Welcome Coffee Hour at 4 pm	Announcement about the Welcome Coffee Hour later in the day at 4 pm was made to invite attendees to the event.	Facilitating socialization

Improvement Strategy 3: Extended Orientation - First-Year Seminar for International Students

Literature

The literature indicates that many upon-arrival orientation programs typically lack follow up (Le et al., 2016; Madden-Dent et al., 2019; Punteney, 2019). Furthermore, the needs of international students after upon-arrival orientation differ from those before they arrived and after they arrived at their host institutions. Some of these transition needs include those related to academic adjustment (Bastien et al., 2018), social adjustment (Rajapaksa & Dundes, 2002), and psychological adjustment (Brunsting et al., 2018b; Mesidor & Sly, 2016b). Therefore, in order to provide continued support after the upon-arrival orientation and address these specific needs, I designed and co-instructed an FYS class to meet these needs.

A synthesis of studies on first-year seminar courses for international students suggested that there are three main objectives of a first-year seminar for international students:

- a) to strengthen students' academic preparation, expectations, and skills (Andrade, 2006a; Cox et al., 2006; Dorsett, 2017; Kovtun, 2011; Snyder & Chesire, 2002; Yan & Sendall, 2016);
- b) to convey information on campus support services (Andrade, 2006a, 2008; Fletcher-Anthony & Efthymiou, 2017); and
- c) to facilitate inter-cultural communication (Brunsting et al., 2018; Senyshyn, 2019; Snyder & Chesire, 2002).

Summary of Improvements

The first iteration of the FYS course followed the prescribed format recommended by the University with few modifications to customize the syllabus to international students' needs. Additionally, the Passport Activity assignment was not

geared towards supporting students with getting familiarized with campus locations and resources. Instead, it asked students to work with students from other FYS sections to create a video on environmental and sustainability efforts on campus.

The improvements I made in the second iteration of the FYS course were informed by the literature. Therefore, I customized the course even further to ensure that it included sessions aimed at strengthening their academic skills, increased their familiarity with support services, and facilitated inter-cultural communication skills. Furthermore, I designed course assessments that could assess the progress of these improvements. Finally, I designed a Passport Activity allowed students to become more familiar with campus support services and to facilitate inter-cultural communication skills.

Description of First-Year Seminar

The third improvement strategy was the First-Year Seminar (FYS) for international students, which served as extended orientation (See Appendix F). I co-instructed the FYS course with a peer mentor during the Fall 2022 semester. The course was eight weeks long (August 30, 2022 to October 20, 2022). Nine undergraduate international students and three non-international students were enrolled in the course. The FYS course was designed to meet the three objectives cited in the literature: (a) to strengthen students' academic skills (Andrade, 2006a; Cox et al., 2006; Dorsett, 2017; Kovtun, 2011; Snyder & Chesire, 2002; Yan & Sendall, 2016); (b) to get students familiarized with campus support services (Andrade, 2006; Fletcher-Anthony & Efthymiou, 2017); and c) to facilitate inter-cultural communication skills (Brunsting et al., 2018; Senyshyn, 2019; Snyder & Chesire, 2002).

To address the first objective of strengthening students' academic skills, the course included three class sessions that focused on introducing students to academic policies and procedures, as well as the academic honesty policy. Additionally, other class sessions required students to explore campus support services, including those that would support their academic success.

As for addressing the second objective, the course included at least six class sessions where students explored and discussed various campus resources and support systems. These resources included academic resources, mental and physical wellness resources, social resources, social media and career resources, and cross-cultural resources. A course assignment that required students to work in groups to explore different events and locations on campus also served as a mechanism of introducing students to the different resources on campus.

Finally, the third objective, facilitating inter-cultural communication skills, was addressed in the three class sessions on cross-cultural encounters and cross-cultural communication skills. Albeit unintentionally, the fact the course included three non-international students also facilitated inter-cultural discussions amongst the students.

Chapter 4

IMPROVEMENT STRATEGY RESULTS

In chapter four, I present the results of the three improvement strategies: 1) Before You Arrive Webinar Series; 2) Improved International Student Orientation; and 3) First-Year Seminar course. The findings are organized by improvement strategy, each of which includes a summary of the improvement strategy, the data analysis and results, a discussion of the data, and a summary of the evaluation.

Improvement Strategy 1: Before You Arrive Webinar Series

The first improvement strategy involved adding pre-arrival webinars that addressed information topics based on the Student Needs Assessment (Appendix B) and International Student Orientation Satisfaction Surveys (Appendix C). The result was the Before You Arrive Webinar Series. It was implemented by broadcasting seven live Zoom webinars and posting three pre-recorded videos on the CGPS website on ten unique topics throughout Summer 2022 (See Table 2 for detailed description of each topic):

- (a) Welcome to UD & CGPS
- (b) Understanding Healthcare in the U.S.
- (c) Understanding Health Insurance in the U.S.
- (d) Housing for Graduate Students
- (e) Social Security Number

- (f) Academics in the U.S.: Understanding the U.S. Classroom for Undergraduate Students
- (g) Academics in the U.S.: Understanding Professors' Expectations for Graduate Students
- (h) Managing your Finances in the U.S.
- (i) Living in the U.S.
- (j) Pre-Arrival Information Session

I conducted an evaluation of the program to measure whether new international students found the Pre-Arrival Webinar Series prepared international students for their arrival and transition to the U.S. The evaluation also asked about international students' preferred information channels (e.g., live Zoom webinars, videos). More details of this evaluation can be found in Appendix H.

After obtaining IRB approval, I distributed a survey to 549 new international students that had checked in with CGPS in Fall 2022 semester. Of those new students, 219 students responded to the survey, resulting in a response rate of 39.8%. However, there were some survey items that were not answered by the entire sample. The *n* of each survey item is noted in the table or figure.

Of the 219 respondents, only 168 respondents provided an answer to their country of origin, resulting in 38 countries of origin. Of these 168 respondents, 26.7% were from India, 15.4% were from China, 7.1% from Nigeria, and 5.9% were from Bangladesh. In terms of level of education, 20.5% (*n* = 45) respondents were undergraduate students, 32.8% (*n* = 72) respondents were Masters students, and 46.5% (*n* = 102) respondents were doctoral students.

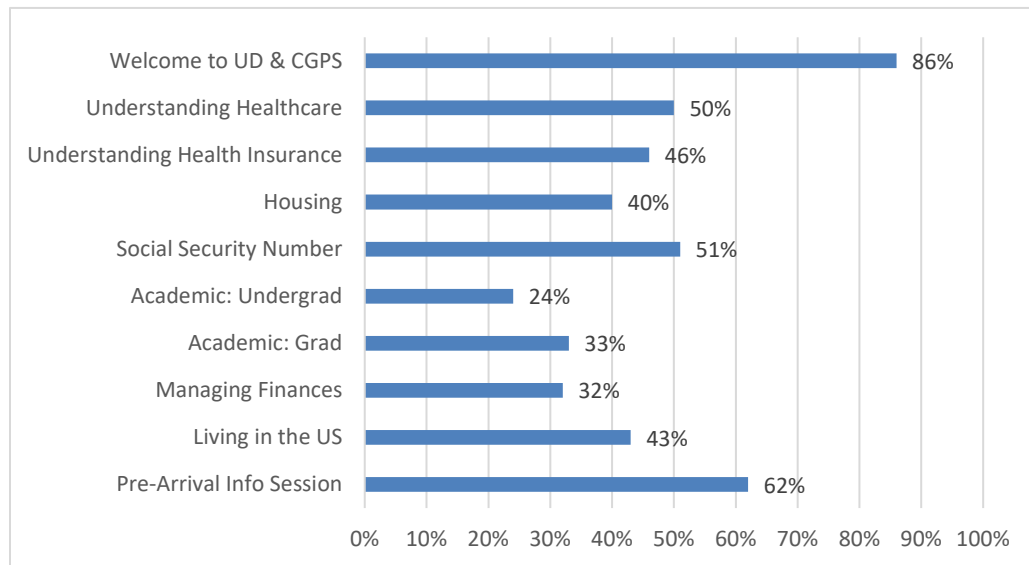
In this evaluation, I posed four questions:

1. To what extent did the new international students find the Pre-Arrival Webinar series prepared them for their arrival to the U.S.?
2. To what extent did new international students find the Pre-Arrival Webinar series helpful for their transition and adjustment to the U.S. and UD?
3. Were new international students satisfied with the Pre-Arrival Webinar series?
4. Which information channels did new international students prefer to obtain information?

Data Analysis and Results

Before evaluating the effectiveness of the webinars and videos, data about the level of participation in each webinar are provided. Participation is defined as attending a live Zoom webinar and/or watching a webinar recording or pre-recorded video.

The survey asked students to indicate the webinars and pre-recorded videos they attended and/or watched. The results of the surveys indicated that the more well-attended/viewed webinars included Welcome to UD & CGPS (86%), Pre-Arrival Information Session (62%), and Social Security Number (51%). The average participation rate across all ten webinars was 46%. Figure 4 shows the participation rate of each webinar. This participation rate includes respondents who reported having accessed the webinar on Zoom and/or watched the videos.



Note. $N = 219$. There were no live Zoom webinars for Understanding Healthcare, Understanding Health Insurance, and Managing Finances.

Figure 4 Participation Levels of Webinars (%)

The following sections describe the results of the data analysis based on the four questions.

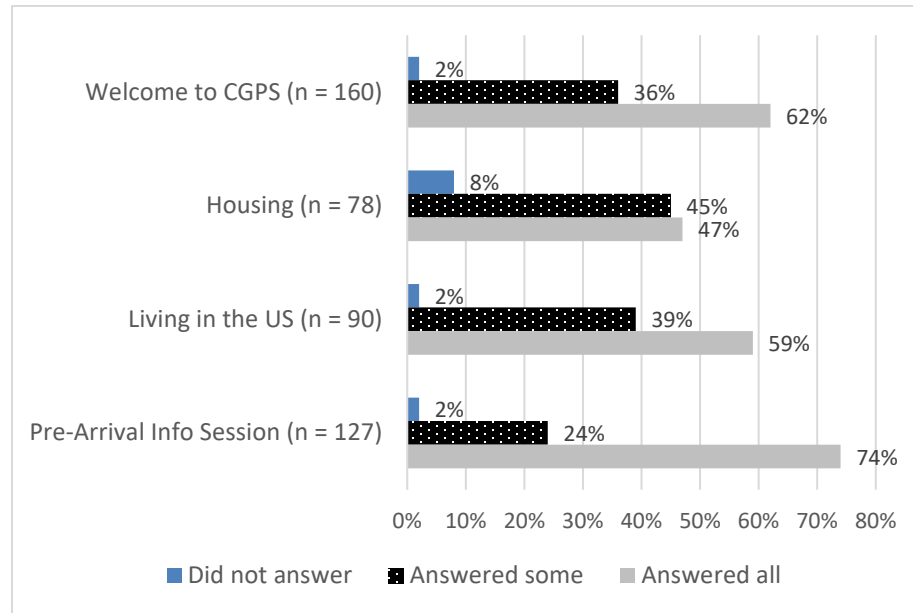
Question 1: To what extent did the new international students find the Pre-Arrival Webinar Series prepared them for their arrival to the U.S.?

Four webinars were focused specifically on preparing new international students for their arrival to the U.S.: (a) Welcome to UD & CGPS; (b) Housing (for graduate students); (c) Living in the U.S.; and (d) Pre-Arrival Information Session.

The participants were asked to evaluate the extent they felt attending the webinars and/or watching the videos answered their questions and concerns. More than fifty percent of respondents reported that three of these four webinars answered

all of their questions: a) Welcome to UD & CGPS, b) Living in the U.S., and c) Pre-Arrival Information Session. Forty-seven (47) percent of the respondents reported that the Housing webinar answered *all* of their questions, and another forty-five (45) percent of the respondents who participated in the Housing webinar stated that the webinar answered *some* of their questions. Figure 5 shows the extent to which the webinars and/or videos answered respondents' questions around arrival preparation to the U.S.

The results on the question related to Housing warrants further explanation. Forty-five (45) percent of the respondents indicated that the webinar answered some of their questions on housing. One possible explanation for these results is that there was a misalignment of expectations of the participants with what was presented in the webinar. Due to the challenges in securing off-housing that is affordable and near campus, participants might have expected that the webinar would have been able to guarantee participants' off-campus housing.



Note. N = 219

Figure 5 Extent to which Attending Webinars and/or Watching Videos Answered Questions Related to Arrival Preparation (%)

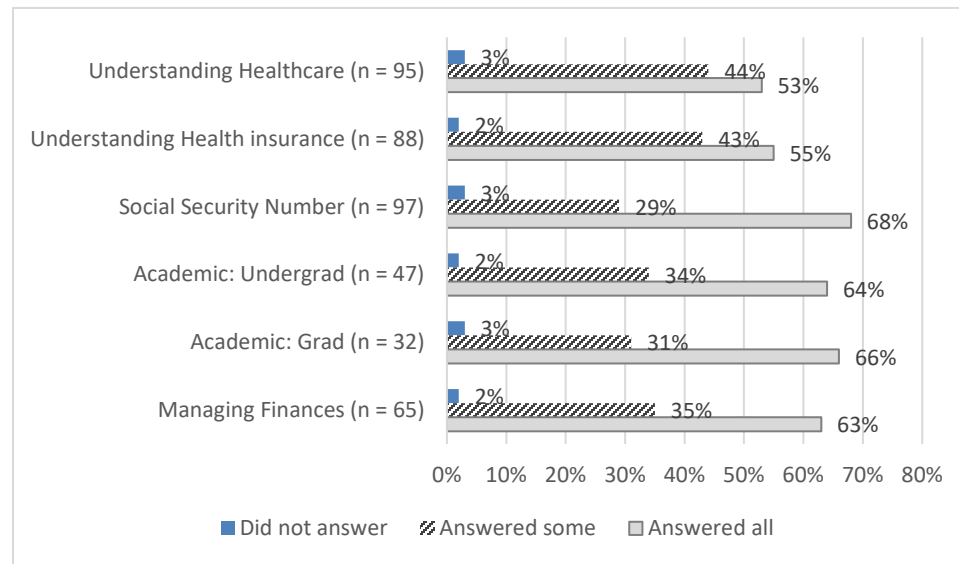
Question 2: To what extent did new international students find the Pre-Arrival Webinar series helpful for their transition and adjustment to the U.S. and UD?

Three webinars and three pre-recorded videos focused on preparing new international students for their transition and adjustment after arriving in the U.S., namely: (a) Understanding Healthcare in the U.S.; (b) Understanding Health Insurance in the U.S.; (c) Social Security Number; (d) Academics in the U.S. (for undergraduate students); (e) Academics in the U.S. (for graduate students); and (f) Managing Finances in the U.S.

The participants were asked to evaluate the extent they felt attending the webinars and/or watching the videos answered their questions and concerns. For each of these webinars and videos in which respondents participated, more than fifty

percent of respondents reported that the webinar answered all of their questions.

Figure 6 shows the extent to which attending the webinars and/or watching the videos answered respondents' questions around preparation for transition in the U.S.



Note. N = 219

Figure 6 Extent to which Attending Webinars and/or Watching Videos Answered Questions Related to Transition Preparation (%)

Another survey item asked about the extent to which the six webinars were helpful in the respondents' transition and adjustment to life in the U.S. The data, as shown in Figure 7, showed that the majority of respondents expressed that the webinars were very helpful. The two webinars that respondents found the most helpful were the webinars on Social Security Number (83%) and Managing Your Finances in the U.S. (70%).

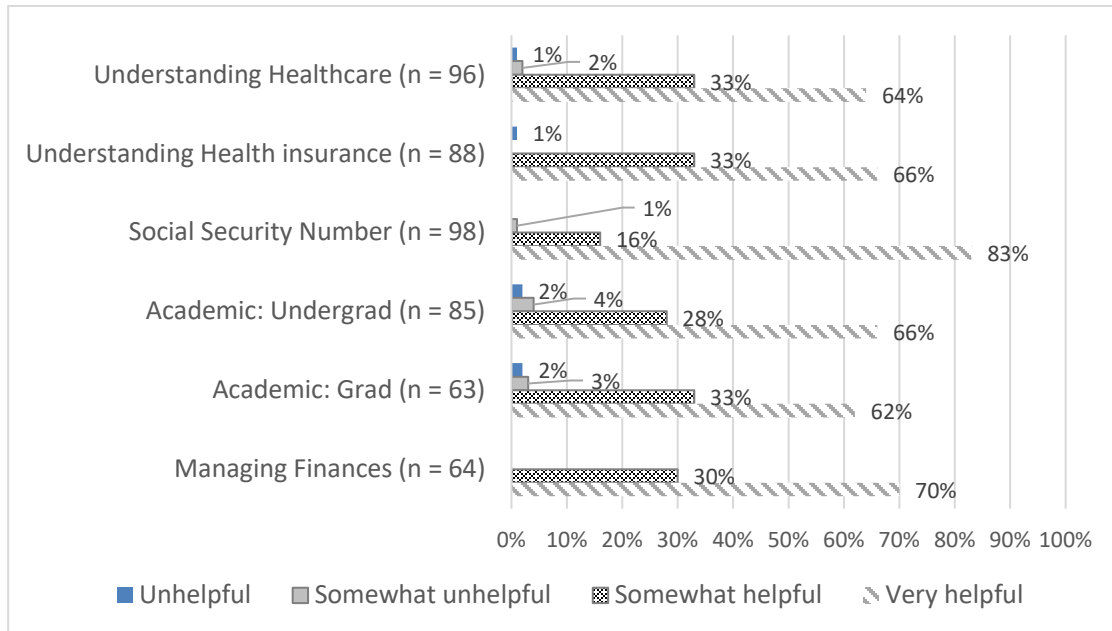


Figure 7 Helpfulness of Webinars in Transition and Adjustment in the U.S. (%)

The survey also asked the respondents two questions about the usefulness of the Pre-Arrival Webinar Series. One survey item asked about whether the respondents had used information in the Pre-Arrival Webinar Series in their daily lives in the U.S. The data showed that 45% of the respondents *strongly* agreed that they had used information from the Pre-Arrival Webinar series in their daily lives in the U.S., another 39% of respondents *somewhat* agreed that they had used the information in their lives.

Finally, another survey item asked respondents about the extent to which participating in all the webinars prepared them for expectations of life in the U.S. Forty-four (44) percent *strongly* agreed and another thirty-nine (39) percent *somewhat* agreed that the Pre-Arrival Webinar Series prepared them for life in the U.S.

In summary, the results indicated that many students found that the Pre-Arrival Webinar Series prepared them for their transition to the U.S. as well as provided useful information they were using in their daily lives.

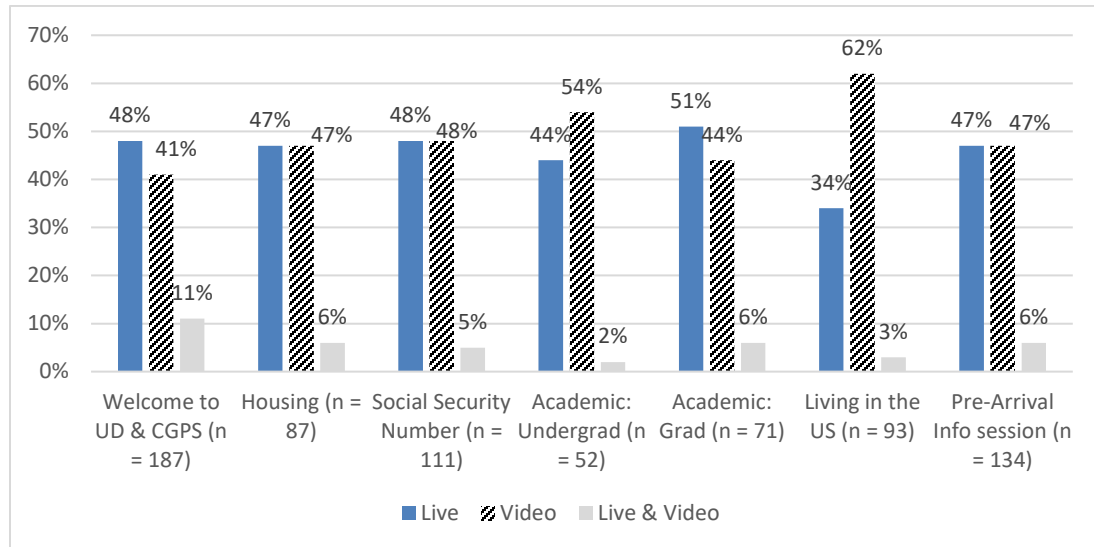
Question 3: Were new international students satisfied with the Pre-Arrival Webinar series?

The survey asked about the respondents' level of satisfaction with the Pre-Arrival Webinar series. Approximately 60 percent of the respondents indicated that they were *very* satisfied with the Pre-Arrival Webinar series. Additionally, 32.3% of the respondents were *somewhat* satisfied with the webinar series. Few students (5%) were very dissatisfied with the webinar series. When respondents were asked to evaluate the clarity of the presentations in the webinars and videos, 54% strongly agreed and 33% somewhat agreed that the information was clearly presented. Approximately 55% of participants strongly agree and 32% somewhat agreed that the length of the webinars and videos were appropriate. Across multiple measures, participants indicated they were satisfied with the quality of the webinars and videos.

Question 4: Which information channels did new international students prefer to obtain information?

In understanding how international students use information to better support them, Chang, Gomes, and McKay (2021) suggested that it is not enough to provide information to international students. They argued that other considerations are necessary, such as the information channels, or the media, with which students use to access information (Chang et al., 2021). Therefore, the evaluation also sought to discover whether the information channels of live Zoom webinars and videos were sufficient in conveying the information to new international students.

In the Before You Arrive Webinar series, seven of the topics were broadcasted via Zoom, where the presentation portion of the webinar was recorded and posted on the CGPS website. Three of the topics (Understanding Healthcare in the U.S., Understanding Health Insurance in the U.S., and Managing Finances in the U.S.) were not broadcasted live on Zoom, but were posted as pre-recorded videos. The decision to record these three topics as a video was due to scheduling conflicts of the presenters and CGPS staff, who could not present live. For the seven topics that were broadcasted live, the evaluation asked respondents to indicate whether they attended the live Zoom webinars, watched the recording of the webinar, or both. The data indicated that, generally, respondents attended the live webinars and watched the recordings almost at equal rates, as shown in Figure 8.



Note. Understanding Healthcare, Understanding Health Insurance, and Managing Finances were presented only as videos and are not included in the figure.

Figure 8 Information Channels that Respondents Used to Participate in the Pre-Arrival Webinar Series (%)

Furthermore, respondents were asked why they accessed one information channel (live Zoom webinar) compared to the other (videos of the webinar). I performed qualitative coding of the data in two rounds: initial coding and axial coding. Responses that appeared to be unrelated or unclear were dropped from analysis. For example, one response to the question of why they watched a video was “It is funny.”

The results indicated that respondents who attended the live Zoom webinar ($n = 107$) did so mainly to get answers to their questions in real time during the question-and-answer session (26.16%) and because they had the time to attend the live webinar (26.16%). For the respondents who watched the recording of the webinars ($n = 106$), the main reason for doing so was related to time. They had a scheduling conflict with the live webinar (49.05%), missed the live webinar (20.75%), or found the time

difference inconvenient (14.15%). See Table 4 for a description of the themes and quotes of comments.

Respondents also were asked about their information channel preferences, which included reading articles, watching long videos (15-30 minutes), watching short videos (5-10 minutes), live Zoom webinars, talking with peers, accessing via social media, and reading information on a website. The data indicated that respondents' top three choices were short videos (76.5%), live Zoom webinars (75%), and reading information on a website (47%).

Table 4 Reasons for Attending a Live Webinar vs. Watching a Video

Information channel	Theme	Sub-theme	Frequency (%)	Sample of quotes
Live Zoom webinar (<i>n</i> = 107)	Live answers		28 (26.16%)	Because it is easier to ask questions and obtain answers at the time of the webinar
	Better quality		4 (4.73%)	Because it is easier to stay focused
	Interactive		8 (7.47%)	It feels good to see and interact with people in a live webinar
	Time	Had time	28 (26.16%)	Webinar had fit perfectly within my schedule
	Motivation*		39 (36.44%)	To receive critical information before coming to the US; Housing was the major blockage I faced in transitioning to UD. Since I couldn't find suitable resources by myself, I attended the webinar to help me get more information.
Video (<i>n</i> = 106)	Convenience		5 (4.71%)	It was more convenient and I could skip parts I felt were not important.
	In depth understanding		3 (2.83%)	I attended the live webinar and watched the recorded videos again to have better understanding.
	Time	Time conflict	52 (49.05%)	It was an important topic for me and i could see the information as many times i want. Besides, i was working and i was not able to attend the webinars
		Missed live	22 (20.75%)	I wasn't able to attend the live one or I have forgotten it.
		Time difference	15 (14.15%)	I decided to watch the recordings due to the time difference and due to the fact that I could decide when to watch them and take more thorough notes.
	Motivation*		9 (8.49%)	Wanted to know specific information.

Summary of Improvement Strategy 1 Results

The evaluation of the Before You Arrive Webinar Series indicated that new international students found the webinar series useful in terms of preparing them for their arrival in the U.S. as well as during their transition and adjustment in the U.S. Moreover, students reported that they were able to use the information in their daily lives in the U.S. Approximately 92 percent of students indicated that they were satisfied with the webinar series.

Students also indicated that the live Zoom webinars were one of their top three preferred information channels to receive information. However, instead of long videos, students preferred short videos.

Improvement Strategy 2: Improved International Student Orientation

The second improvement strategy involved improving the quality of the upon-arrival orientation, or international student orientation, based on the International Student Orientation Satisfaction Surveys (Appendix B). These improvements were:

- (a) including sessions that met students' information needs;
- (b) referring to additional sources of information outside of the sessions;
- (c) providing targeted information to avoid information overload;
- (d) adding socialization opportunities during the orientation;
- (e) shifting to in-person orientation program; and
- (f) shortening the duration of the program.

During the orientation program, I conducted an evaluation to measure whether the improved program met the needs of new international students. I used a pre-session and post-session survey that was distributed before the start of the program and at the end of the program.

Participants

Participants included first-year international students enrolled in undergraduate and graduate degree programs at the University of Delaware who attended international student orientation program in Fall 2022. A total of 350 students attended the program. Among the attendees, a total of 228 students completed the pre-session survey, resulting in a response rate of 64%. Not all attendees were able to access the survey, perhaps due to issues related to getting connected to the university internet.

Unfortunately, many attendees did not include their ID number. Therefore, survey respondents whose data could not be matched between pre-session and post-session were excluded from the analysis of students' perceptions of their preparedness and understanding of the information. The final matched sample was 144 attendees, with 35 undergraduate (24.3%) and 109 graduate students (75.7%) and a final response rate of 41.1%.

Data Analysis and Results

Excel was used to analyze both quantitative and qualitative data. To answer the questions about attendees' changes in perception of their preparedness and understanding of the information between the beginning and end of the program, Excel was used to calculate the descriptive statistics, including mean and standard deviations, as well as to perform a t-test and calculate the effect sizes. An a priori power analysis was completed for the dependent-samples *t*-test using the GPower 3.0 program (Faul et al., 2007). Excel was also used to perform qualitative data coding.

In this evaluation, I sought to answer three questions:

1. Was there a change in attendees' perceptions of their preparedness and understanding of the information between the beginning and end of the program?
2. Did attendees have opportunities to meet other people during international student orientation?
3. Were attendees satisfied with the improved international student orientation?

Question 1: Was there a change in attendees' perceptions of their preparedness and understanding of the information between the beginning and end of the program?

In answering the first question, students were asked to rate their level of understanding of the services provided by Student Health Services, Center for Counseling, Student Wellness and Health Promotion, and their understanding of immigration regulations as presented by CGPS at the beginning of the orientation program and at the end of the program. Students were also asked to rate their level of preparedness to start their academic program and career journey at the start of the program and at the end of the program.

I calculated the mean score of the matched responses for each survey item between the pre-session and post-session and subtracted the post-session score by the pre-session score. This resulted in a score change, which is shown in Table 5 as a percentage change. I conducted a paired sample *t*-test to determine whether perceptions of preparedness and understanding at the beginning of the orientation were statistically different from their perceptions at the end of the orientation program ($p < 0.001$).

Table 5 T-Test from Pre- and Post-Session Results

Measure	Sample (<i>n</i> = 144)	<i>M</i>	<i>SD</i>	Mean difference	Change (%)	<i>p</i>	<i>d</i>
Perception of being prepared to start academic journey	Pre-session Post-session	7.56 8.88	1.76 1.21	1.31	17%	<.001*	0.87
Perception of understanding of the services provided by Student Health Services	Pre-session Post-session	6.57 8.96	2.23 1.24	2.39	36%	<.001*	1.32
Perception of understanding of the services provided by Center for Counseling and Student Development	Pre-session Post-session	6.29 8.83	2.15 1.30	2.53	40%	<.001*	1.43
Perception of understanding of the services provided by Student Wellness and Health Promotion	Pre-session Post-session	6.33 8.95	2.21 1.22	2.62	41%	<.001*	1.5
Perception of being prepared to start career journey	Pre-session Post-session	7.17 8.78	2.15 1.22	1.61	22%	<.001*	0.92
Perception of understanding of immigration responsibilities	Pre-session Post-session	7.45 9.06	2.06 1.13	1.60	22%	<.001*	0.96

Note. *n* = 144, * = *p* < .001

The data indicated that students' perception of their understanding of the services provided by the health and wellness offices, as well as their immigration responsibilities, increased between the beginning and end of the international student orientation. Their perception of their readiness to begin their academic journey and career also increased. These results suggest that students' perception of their understanding of the information topics were increased as a result of the presentations.

Question 2: Did attendees have opportunities to meet other people during international student orientation?

Socialization with other new international students, current international students, and Center for Global Programs and Services staff members was measured through one question on the survey: "Select all statements that apply: At International Student Orientation: a) I met new people; b) I met other students who I can go to for help; and c) I met staff from the Center for Global Programs and Services."

The data indicated that attendees met different people during the orientation program, including new people, other students they could go to for help, as well as CGPS staff. Fifty-four percent of the respondents reported that they met new people, other students, and CGPS staff at orientation. Other respondents experienced a combination of other interactions, such as having met new people and CGPS staff (13.89%), only people (11.58%), and only other students (2.7%).

Question 3: Were attendees satisfied with the improved international student orientation?

Satisfaction with the program was measured by asking students what they liked and disliked about the program. The qualitative data were coded to construct themes

based on what the participants considered satisfactory about the program as well as what they considered unsatisfactory about the program.

The data indicated that there were different aspects of the program that attendees liked and disliked. For this analysis, I did not match the pre-session and post-session data since only post-session results were needed. Therefore, the results of 252 responses were included in the analysis. Approximately ninety percent of the respondents reported that they liked at least one thing.

To examine the specific aspects that the respondents liked, I conducted both initial and axial coding of the qualitative data. A total of 305 codes were generated for aspects that attendees liked, since some respondents provided more than one answer to the things they liked. After four rounds of axial coding, I categorized the data into four major themes: a) components of the orientation; b) quality of the orientation; c) other; and d) overall perception. See Table 6.

The first major theme, components of the program, or “the what” of the program, refers to the individual parts that were presented at the orientation program, including a) content (e.g., session on health services, session on immigration regulations, etc.), b) games, c) socialization opportunities, and d) miscellaneous components. The sub-theme of content is divided into several secondary sub-themes, including sessions on immigration regulations (5.2%), health and wellness (2.6%), and career Services (2.3%). When attendees said they liked “information” or “presentation,” these responses were categorized into the secondary sub-theme of general information (13.1%). The sub-theme of games referred to the Mentimeter games and icebreakers that were presented during orientation program, which resulted in 17.4% of the liked comments. Socialization opportunities refer to the informal

networking before the program began as well as one of the games that asked attendees to introduce themselves and with other new students during the orientation, for which there were 3.9% of the liked comments. Finally, the miscellaneous components refer to smaller parts of the program, such as the welcome speech, the pre- and post-session survey, and information about Coffee Hour, which generated 2.3% of the liked comments.

The second major theme “quality of orientation” or “the how” of the orientation program refers to how attendees qualified the things they liked about the program. The sub-themes include a) the quality of the information that was conveyed during orientation, b) the method of conveying information, and c) the organization of the program. Within the sub-theme of quality of information, two secondary sub-themes emerged: a) information that was useful, helpful, and/or informative (11.8%) and b) information that was clear and/or detailed (3.9%). The method of conveying information was another sub-theme that emerged from the responses. Specifically, attendees remarked that they liked how the program was engaging, interactive, and/or fun (11.1%). The organization of the orientation program refers to how the program overall was managed, where some responses included remarks such as, “[it] was prepared very well for international students,” for which there were 3.3% of the liked comments.

The third major theme of other included a mix of different responses that could not be categorized in the other two themes (3.3%). Some examples included that attendees, “[liked] cultural diversity,” or that “everyone is so happy.”

The final major theme, overall perception, included 28 (9.2%) responses who liked everything about the orientation program while 24 responses (7.9%) indicated that attendees liked nothing about the orientation program.

When asked if there were aspects that they did not like, 218 students responded. Of these respondents, 84.4% reported that there was nothing that they disliked. Few students (15.5%) disliked something about the orientation, which included the lack of food and beverages during the program (excluding lunch) (4.1%), the duration of the program (2.8%), and that there was a lack of breaks in between the sessions (1.4%).

In summary, participants had diverse reasons for being satisfied with the upon-arrival program. Few students (15.5%) found something they disliked about the program, and even fewer participants said they liked nothing about the program.

Table 6 Categories of Aspects that were Liked and Examples of Comments

Theme	Sub theme	Secondary sub-theme	Number of comments (%)	Examples of comment: "I liked..."
Components of the Orientation	Content	Information, General	40 (13.1%)	Learning about the different student services at UD.
		Session on Immigration Regulations	16 (5.2%)	The resources available that was explained and also what I need to do to maintain my status as an F-1.
		Session on Health Services	8 (2.6%)	The health awareness portion of the orientation was informative.
		Session on Career Services	7 (2.3%)	The career information provided was very much interesting.
	Games		53 (17.4%)	I like the game section most; Games, icebreaker.
	Socialization Opportunities		12 (3.9%)	I got to meet other international students; Making new friends; It was good the meet the staff.
	Miscellaneous Comments		7 (2.3%)	I learned how to fill some forms on the website.

Table 6 Continued

Theme	Sub theme	Secondary sub-theme	Number of comments (%)	Examples of comment: "I liked..."
Quality of Orientation	Quality of Information	Informative/ helpful /useful information	36 (11.8%)	It was very informative; It was really helpful; A lot of useful information is provided.
		Clear/detailed information	12 (3.9%)	The clarity and detail with which everything was explained; Every explanation was so clear to understand.
	Method of Conveying Information		34 (11.1%)	It was delivered through a fun, engaging approach; I liked how it was made interactively and it was very informative; I liked the roleplay format to introduce the immigration status and responsibilities.
	Organization of the Orientation		10 (3.3%)	Well organized and cleared my queries.
Other			13 (4.3%)	I feel prepared to start my graduate journey at UD; My expectations were met; The nice staffs; Everyone is so happy
Overall Perception	Everything		28 (9.2%)	Everything!!!!
	Nothing		24 (7.9%)	Nothing.

Summary of Improvement Strategy 2 Results

Compared to their perceptions at the beginning of the program, their perceptions of knowledge of the information topics increased by the end of the program. Similarly, compared to the beginning of the program, they felt better prepared to start their academic and career journey at the end of the program. Students also indicated that they had socialization opportunities to meet other new students, current international students, and CGPS staff. Finally, students were satisfied with the improved international student orientation program. There were very few aspects of the program that students disliked.

Improvement Strategy 3: First-Year Seminar Course

The third improvement strategy involved improving the quality of the extended orientation, namely the First-Year Seminar (FYS) course for international students. I co-instructed this course with a peer mentor over eight weeks in the Fall 2022 semester. Nine international undergraduate students enrolled in this course, along with three non-international students. The evaluation focused only on the international students. The description of the course instruction and the syllabus are detailed in Appendix F.

I conducted an evaluation of this course to measure whether the course was helpful in supporting students' transition to UD. I posed three questions, which were based on the three objectives of an FYS course for international students:

1. Did the FYS course contribute towards strengthening students' academic preparation, expectations, and skills?
2. Did the FYS course contribute towards increasing students' knowledge and familiarity with campus support services?

3. Did the FYS course facilitate students' inter-cultural communication skills?

I used various course assessments, namely weekly exit tickets and a reflection paper, as data sources to answer these three questions. Table 7 summarizes the selected prompts from the exit tickets and reflection paper that were used to evaluate this course.

Table 7 Data Sources and Prompts for Evaluating FYS Objectives

Data Sources	Objective 1: Contribute towards strengthening students' academic preparation, expectations, and skills	Objective 2: Contribute towards increasing students' knowledge and familiarity with campus support services	Objective 3: Facilitate students' inter-cultural communication skills
Exit Ticket 1: Exploring campus resources.		You worked on finding on-campus resources that will support the different wellness dimensions. What are three of the resources you think you will access during this semester?	
Exit Ticket 2: Identifying academic resources, identifying which resources will be used, identifying academic advisor's name, and comprehension of academic regulations.	Name three academic resources available at UD. UNIV 101 is a Pass/Fail course. Getting a fail in this class will not impact your GPA. True or false?	Name three academic resources available at UD.	

Table 7 Continued

Data Sources	Objective 1: Contribute towards strengthening students' academic preparation, expectations, and skills	Objective 2: Contribute towards increasing students' knowledge and familiarity with campus support services	Objective 3: Facilitate students' inter-cultural communication skills
Exit Ticket 3: Comprehension of academic regulations, identifying academic strategies to support academic success.	Students need to earn a semester GPA of 3.5 to be on the Dean's list. Is this true or false?		
	What are the criteria to be on academic probation?		
		Name two resources that you will use this semester to support your academic success. These resources do not have to be academic.	
	What is the date for dropping or changing classes without academic penalty?		

Table 7 Continued

Data Sources	Objective 1: Contribute towards strengthening students' academic preparation, expectations, and skills	Objective 2: Contribute towards increasing students' knowledge and familiarity with campus support services	Objective 3: Facilitate students' inter-cultural communication skills
Exit Ticket 4: Comprehension of Code of Conduct and academic honesty policies and identifying strategies to avoid violation of academic honesty policies.	Type in the link to the UD Student Code of Conduct.		
	Choose one of the policies under the Code of Conduct. Mention two prohibited activities of that policy.		
	What is one of the sanctions for an academic dishonesty conduct case?		
	Name two strategies you will use this semester to avoid issues with academic dishonesty in your courses.		

Table 7 Continued

Data Sources	Objective 1: Contribute towards strengthening students' academic preparation, expectations, and skills	Objective 2: Contribute towards increasing students' knowledge and familiarity with campus support services	Objective 3: Facilitate students' inter-cultural communication skills
Exit Ticket 5: Identifying familiarity with campus resources, ranking those that have been most useful, and providing feedback on additional campus resources.		Thinking about the different types of resources that you might need in your first semester at UD, which of the following resources are you familiar with? Select all that apply.	
Exit Ticket 6: Identifying social resources, reflecting on inter-cultural encounter, and improving inter-cultural communication skills.		Think about your social wellness at UD thus far. In the space below, please mention up to three resources that you have found helpful to support your social wellness.	Think about your social wellness dimension and your new awareness of cross-culture communication. Which aspect of cross-culture communication would you consider MOST USEFUL for you?

Table 7 Continued

Data sources	Objective 1: Contribute towards strengthening students' academic preparation, expectations, and skills	Objective 2: Contribute towards increasing students' knowledge and familiarity with campus support services	Objective 3: Facilitate students' inter-cultural communication skills
Exit Ticket 6: Identifying social resources, reflecting on inter-cultural encounter, and improving inter-cultural communication skills.			This week, we have been talking about cross-cultural communication. In three to four sentences, please describe any recent cross-cultural experience you have encountered. What was the encounter? How did you react? How did it make you feel? What cross-cultural communication skill did you use, if any?
Reflection Paper 3: End of course.	How has this FYS class helped you with accomplishing your goals this semester, if any? Please be specific.	How has this FYS class helped you with accomplishing your goals this semester, if any? Please be specific.	

Data Analysis and Results

Question 1: Did the FYS course contribute towards strengthening students' academic preparation, expectations, and skills?

Academic preparation and expectations were defined as students' ability to identify academic resources that they believe would support their transition, their understanding of academic rules and regulations, and the extent to which students demonstrated their use of the academic resources. Three class sessions were dedicated specifically to introducing students to UD academic policies and procedures related to the grade point average (GPA) system, academic resources, and the academic honesty policy.

I used data from select prompts of the exit tickets to assess students' ability to identify academic resources and understand academic rules and regulations. I used data from one prompt in Reflection Paper 3 to assess the extent to which students used the academic resources they learned during the FYS class.

After the first class session on UD academic policies and procedures, students were asked to complete Exit Ticket 2. Two prompts were used in this analysis. The first one asked students to name three academic resources available at UD. All nine students responded to this exit ticket. Eight students were able to name three academic resources, while one student named only two. The second prompt from Exit Ticket 2 tested students' knowledge of the UD grading system. This prompt asked: "UNIV 101 is a Pass/Fail course. Getting a fail in this class will not impact your GPA. True or false?" Six students answered this prompt correctly (the correct answer is False), while three did not.

After the second class session on UD academic policies and procedures, students were asked to complete Exit Ticket 3. Three prompts were used in this analysis. The first prompt assessed students' knowledge about the GPA system. Specifically, it asked: "Students need to earn a semester GPA of 3.5 to be on the Dean's list. Is this true or false?" Four students answered this question correctly (the correct answer is True) while five of them did not. The second prompt assessed students' understanding of academic probation. Specifically, it asked: "What are the criteria to be on academic probation?" Seven students answered this question correctly (the correct answer is having a cumulative GPA of 2.0) while two of them did not. The third prompt assessed students' understanding of the free drop/add and academic penalty deadline. Specifically, this prompt asked: "What is the date of dropping or changing classes without academic penalty?" Eight students answered this question correctly; while one student gave a slightly incorrect date (September 12, 2022). These results suggest that there was a mixed result of students' understanding of some of the academic policies, particularly that related to the GPA.

One possible explanation for the mixed result is that there were some underlying concepts or definitions that students did not understand. For example, the concept of Dean's List might have been a concept that students were not familiar with and needed a better explanation about.

After the class session on academic honesty policies, students were asked to complete Exit Ticket 4. Four prompts were included in the analysis. Eight students completed this exit ticket. The first prompt asked students to type in the link to the UD Student Code of Conduct, which assessed whether students were able to find it. Seven students were able to insert the correct link to the UD Student Code of Conduct while

one student did not cite the correct link. The second prompt asked students to identify one policy under the Code of Conduct and select two prohibited activities of that policy. All eight respondents selected the Academic Honesty policy, and all respondents were able to identify two prohibited activities with Academic Honesty. The third prompt of Exit Ticket 4 assessed respondents on their understanding of the sanction for an academic dishonesty conduct case. Seven out of the eight respondents were able to cite a correct example of a sanction, which included repeating any of the work, receiving an X on the transcript for the course, and a suspension. The fourth prompt of Exit Ticket 4 asked students to identify two strategies that they would use during the semester to avoid issues with academic dishonesty in their classes. All eight respondents answered this prompt, each with two strategies. These results suggest that students had a generally good understanding of the academic honesty policies.

In addition to the exit tickets, one of the prompts of Reflection Paper 3 asked student how “this FYS class helped you with accomplishing your goals this semester, if any?” Six out of the nine students submitted Reflection Paper 3. However, only one student stated specifically how the FYS course was helpful for them academically. The other five students stated that the FYS helped them understand the available campus resources and how those resources were helpful, however, they did not specify that those resources were academic resources.

Summary

In terms of understanding the academic honesty policy, students demonstrated a solid understanding. Almost all students were able to answer all prompts related to the academic honesty policy correctly.

However, in terms of academic policies related to grading and the grade point average (GPA), some students demonstrated that they did not completely understand these policies. For example, in answering an exit ticket prompt about the minimum GPA to be on the Dean's list, only half of the students were able to answer this question correctly. These results suggested that there might have been concepts or vocabulary within the lecture on academic policies and procedures that students did not understand.

Question 2: Did the FYS course contribute towards increasing students' knowledge and familiarity with campus support services?

Knowledge and familiarity with campus support services refer to students' ability to identify resources on campus that they believe would support their transition and adjustment at UD and in the U.S. Throughout the course, I dedicated six class sessions to introduce and explore campus support services and resources to students, as well as encourage them to access them throughout the semester.

As illustrated in Table 5, one prompt from Exit Ticket 1 asked students to identify three resources they planned to access during the semester. All nine students were able to name three resources that they believed they would access during the semester. The prompt from Exit Ticket 2 asked students to name three academic resources at UD. Eight students were able to name three academic resources while one student named only two. A prompt from Exit Ticket 3 asked students to name two resources that they plan to use to support their academic success. All nine students were able to mention two resources that they thought they would use during the semester. Exit Ticket 6 included a prompt that asked students to mention three resources that they found helpful to support their social wellness. Five of the six

students responded with three resources while one student responded with one social resource. These results suggest that students generally were able to identify various campus support services and resources.

There was also a prompt on Reflection Paper 3 that asked students how the FYS class helped them accomplish their goals during the semester. All six students outlined how the FYS class helped them in terms of introducing them to resources, as shown in Table 8.

Table 8 Resources Students Learned from the FYS Course

Student Code	Responses
Student A	This FYS class has help me accomplish my goals because if it wasn't for this class I don't [think] I would've known about all the resources that we have on campus that early in the semester. And for that I am very grateful because it helped me a lot and it bettered my experience a little this semester.
Student B	This FYS class has helped me learn what resources are available, and how I can get help if needed. There are resources for mental health that I have learned about via this class, and will turn to if needed.
Student D	I can know what resources are available to me and what are available to me and what will help me. For example, library, shuttle bus, and the canteen.
Student E	This class has helped me reach my goals in some ways since I learned many valuable things like intercultural communication, diversity, plagiarism etc. I've learned many important things that will help me in the future.
Student H	I also learned a lot about the academic side of UD, vital information and tips that have helped me succeed in my journey so far, especially regarding understanding my GPA.
Student I	This class has helped me navigate my life as an international student in UD. I've left the classroom with many resources and responsibilities. Learning about the resources available to UD students has been the most helpful.

Summary

Data from the exit tickets suggested that students were able to identify these campus resources, including academic resources, social resources, and mental health resources. Additionally, data from the third reflection paper suggested that not only were students familiar with the resources, but that they found that the FYS course was helpful in introducing them to these resources. In turn, knowing these resources was helpful for them in achieving the goals that they set out at the beginning of the semester. Anecdotally, one of the students also mentioned that she was using one of the resources introduced in class: “I already go to tutoring sometimes for math help, which was advice I got from my first-year experience instructor. So, I am very grateful for that tip I got because it helped me a lot.” (Student H, Reflection Paper 2, p.2).

Question 3: Did the FYS course facilitate students’ inter-cultural communication skills?

Two class sessions were designed to introduce inter-cultural communication skills. In terms of assessing the extent to which students gained inter-cultural communication skills through the class, students’ responses to two prompts of Exit Ticket 6 were analyzed. The first prompt in this exit ticket asked students to describe recent cross-cultural experience and whether they used inter-cultural communication skills. Four out of six students indicated that they were able to use inter-cultural communications skills. For example, Student G demonstrated that he used listening skills in encountering a cross-cultural moment with his roommate:

A cross cultural experience I have encountered is with my roommate and seeing his habits. Sometimes I get discomforted because I feel he is too focused on the United States and doesn’t know much about the world. He also loves American football too much and I sometimes feel it is unnecessary, but I try to understand how he grew up differently

and I usually try to be open minded. Sometimes I ask him about football or things about his life to be more understanding. A skill I used was active listening and trying to understand his culture more. (Exit Ticket 6)

Another prompt in Exit Ticket 6 asked students to describe the aspect of cross-culture communication they considered most useful. Two out of six students mentioned that they found the skill of understanding verbal communication in their cross-cultural situations most useful. For example, Student E mentioned that it “helps me understand the way the people [in the US] speak, so it helps me speak in a way that would make them understand me better, but without completely changing the way I communicate.” Another skill that was mentioned was time culture. Student A stated that “time culture is really important since it can be highly disrespectful to get somewhere late and sometimes knowing how time works in a country is really useful to get things done appropriately.”

Summary

The data from Exit Ticket 6 revealed that six students were able to describe at least one inter-cultural communication skill, and they provided details on how they found those skills to be useful in their daily social interactions.

Summary of Improvement Strategy 3 Results

The First-Year Seminar course was designed to meet three objectives. The evaluation of the First-Year Seminar course revealed that the course mostly met the three objectives. First, the course contributed to strengthening students’ academic preparation, expectations, and skills. Specifically, the majority of the students were familiar with the academic honesty policies, free add/drop policy, and the concept of academic probation. Based on the results of the exit tickets, the students appeared to not understand procedures and policies pertaining to grading and GPA. Second, almost

all students demonstrated an understanding of the various resources on campus and how to access them. Third, with respect to inter-cultural communication skills, many students were able to identify at least one inter-cultural communication skill, as well as explain how they used inter-cultural communication skills it in their lives.

Chapter 5

REFLECTIONS ON IMPROVEMENT STRATEGY EFFORTS

In chapter five, I reflect on the improvement results. I address my reflections in terms of the three improvement strategies: 1) Before You Arrive Webinar Series; 2) Improved International Student Orientation; and 3) First-Year Seminar course. For each improvement strategy, I reflect on what was successful and what needs further improvements. Then, I reflect across the three improvement strategies to evaluate the extent the improvement strategies achieved the improvement goal. At the end of the chapter, I provide some recommendations for future programs.

Improvement Strategy 1: Before You Arrive Webinar Series

The first improvement strategy of this ELP is aligned with the pre-arrival stage of a student's lifecycle (Perez-Encinas & Rodriguez-Pomeda, 2018). In this stage, students are preparing to travel to the U.S. and are looking for information to prepare them for their arrival in the U.S.

Based on the literature, pre-arrival orientations prepare international students to understand the expectations at their host institution before they arrive (Schartner & Young, 2016). Data from the Student Needs Assessment (Appendix B) indicated that there were information topics that international students wanted to know about, but it was not possible to include these topics in the upon-arrival orientation program due to time constraints. At CGPS, there was a pre-arrival program, which started in 2021, but there were only two webinars. These two webinars were not sufficient to address the

information needs of international students. Therefore, Improvement Strategy 1 focused on adding pre-arrival webinars that addressed international students' information needs.

The results of the evaluation of the Before You Arrive Webinar Series indicated that the majority of the students (92.5%) were very or somewhat satisfied with the webinar series. More than fifty percent of the students indicated that the pre-arrival webinars on Welcome to UD and CGPS, Living in the U.S., and Pre-Arrival Information Session answered all of their arrival-related questions. However, in terms of the webinar on Housing for graduate students, less than fifty percent of the students indicated that it answered all of their questions. Moreover, eighty-four percent of the students indicated that they have been able to use the information that they learned through the webinar series in their daily lives in the months after their arrival in the U.S.

The evaluation results suggested that while the Zoom webinars were indeed among the top three most preferred (75%), the long videos were not as highly ranked. Instead, students preferred shorter videos (75.6%) as well as reading information on a website (47%).

What Worked Well

Adding pre-arrival webinars that addressed students' specific information needs enhanced students' preparation for their arrival in the United States. One reason this was effective is that introducing various topics during the pre-arrival phase ensured that the information was spread throughout several weeks. This allowed students to process the information at their leisure, instead of requiring them to make sense of all of the information during a half-day upon-arrival orientation. This strategy

mitigated the common issue of information overload that occur during an upon-arrival orientation program for new international students (Forbes-Mewett & Sawyer, 2016; Jean-Francois, 2019; Yu et al., 2016). In that way, the pre-arrival webinar also indirectly contributed towards improving the upon-arrival orientation program.

One of the factors that contributed to the success of implementing the Pre-Arrival Webinar Series is strong collaboration with campus partners, including Student Health Services, University Health Plans, and the Office of Academic Enrichment, as well as with student leaders. Without the subject matter experts, it would not have been possible to create videos discussing healthcare and health insurance in the U.S. that are accessible and accurate.

Including current international students in the webinars to provide the peer perspective on a number of topics added a different perspective to the information shared in the webinars. Current international students shared their experiences and perspectives on some of topics, such as tips on finding housing and tips on navigating a relationship with their academic advisors. The decision to include current students in a number of the webinars was supported by research asserting that peers could provide more contextualized information to new students compared to guidance provided by administrators (Gamlath, 2022; Outhred & Chester, 2013; Pekerti et al., 2021; Topping, 2005).

Although some current students were invited to provide some input during some of the webinars, **their participation was minimal**. In the qualitative feedback from the Before You Arrive Webinar Series survey (Appendix G) (n = 43), 14% of respondents indicated that they would have liked to have seen a webinar that was presented by current international students. This feedback suggests that future

webinars might ask current international students to play a more central role in sharing their experiences.

What Could Be Further Improved

The evaluation and feedback on this program suggested that the Pre-Arrival Webinar Series was well-attended, and many students were satisfied with the program. That said, there are four improvements that could be made.

First, it is important to consider who were not served by the pre-arrival webinar series. Although the Before You Arrive Webinar Series was offered as an optional orientation program for those who were interested and wanted to learn more, there might have been a group of students who did want to access the webinars but were unable to due to a variety of challenges. The Before You Arrive Webinar Series operated primarily on the assumption that explaining the information topics through a live Zoom webinar would be one of the best ways to do so. However, despite the increased use of online learning that was brought about by the COVID-19 pandemic, it cannot be assumed that all incoming international students would have been able to access the webinars, due to limitations in terms of access to video conferencing technology (e.g., Zoom, Google Meet up, and Skype), a reliable internet connection, and a conducive learning environment that is free from distraction.

To improve on this limitation, CGPS could do two things. First, CGPS could further assess who were not able to access the webinars and/or videos and why. This recommendation is aligned with the guiding principle that orientation programming should include assessment (Meyer, 2001). CGPS could take advantage of alternative information channels or media to provide information, such as short videos and centralized information on a website.

Second, the result of the evaluation indicated that one of the most preferred information channels was short videos. Therefore, CGPS may consider incorporating more short videos in its pre-arrival information. Although not all topics can be captured in short videos, there might be some information topics that can be presented in a series of short videos. For example, instead of presenting the topic of applying for a Social Security Number in one 30-minute-long webinar, this topic could be broken down into three 10-minute short videos. In alignment with the first recommendation mentioned previously, it is important to ensure that incoming international students are able to access these videos in their home countries.

Third, the evaluation results indicated that there were still some unmet information needs. Across the ten webinars, there were still on average 33.6% of students who mentioned that some of their questions were answered through the Before You Arrive Webinar Series (See Figures 2 and 3). To address these unmet information needs, CGPS could send follow up surveys to inquire if there were other questions that students had about certain topics. Some of these questions might be able to be addressed immediately, such as through follow-up emails and supplemental materials. This recommendation is aligned with the guiding principle of orientation programming should include assessment (Meyer, 2001).

Fourth, future pre-arrival orientation programs could ensure that current international students play a more active and central role in the webinars. Current international students could be asked to co-present in some of the webinars, where they present the content alongside CGPS staff, instead of only providing additional comments to the presentation or answering a few questions throughout. This

recommendation is supported by the literature on the value of peer advice (Outhred & Chester, 2013; Pekerti et al., 2021; Topping, 2005).

Alternatively, in future pre-arrival webinar series, CGPS could invite the iBuddy Mentors to host a few live Zoom question-and-answer sessions with incoming new international students, where new international students could ask current international students questions. In this way, new students can ask questions beyond what is offered in the webinar series and can have a more open and direct channel of communication with current students.

In the case that Zoom technology or internet connectivity is not accessible for many students, the live Zoom Q&A session could be offered using a different method. For example, CGPS could solicit questions from incoming international students that they would like to ask their peers. After a few weeks, then CGPS could record a video that features current UD students answering these questions, which would then be posted on the CGPS website.

Improvement Strategy 2: Improved International Student Orientation

The second improvement strategy of this ELP is aligned with the arrival stage of a student's lifecycle (Perez-Encinas & Rodriguez-Pomeda, 2018). During this stage, students arrive in the U.S. and at the host institution. On the one hand, they are encountering their new environment and typically are making multiple arrangements, such as finding off-campus housing, learning about local transportation, and navigating campus. On the other hand, students are also preparing to begin their academic program and trying to make new friends.

Based on the literature, upon-arrival orientation programs support the transition of new international students once they arrive in the U.S. (Koo et al., 2021).

Data from the Student Needs Assessment (Appendix B) and International Student Orientation Satisfaction Surveys (Appendix C) indicated that students wanted more information on topics that were not conveyed well enough. The previous international student orientation needed other improvement in terms of the design of the upon-arrival orientation: These improvements were: a) including sessions that met students' information needs; (b) referring to additional sources of information outside of the sessions; (c) providing targeted information to avoid information overload; (d) providing socialization opportunities during the orientation; (e) shifting to in-person orientation program; and (f) shortening the duration of the program. All of these improvements were made to the Fall 2022 international student orientation program.

The results of the evaluation of the international student orientation program indicated that compared to the beginning of the orientation, students reported greater understanding of support services and information topics at the end of the program. In addition, their perception of their academic and career readiness also increased from the beginning to the end of the international student orientation. Furthermore, the data also suggested that students were generally satisfied with the improved international student orientation program.

What Worked Well

Not only were the students generally satisfied with the program, but there were also few aspects with which students were dissatisfied. When asked about aspects that they disliked, 84.4% of the comments indicated that there was nothing that the students disliked. In fact, some of the aspects that students expressed dissatisfaction about in previous orientation programs were not present in the improved international student orientation program. For example, there were no comments that indicated that

students felt like they were overwhelmed with too much information or did not receive the information that they wanted to learn about.

One possible explanation on why students did not report feeling overwhelmed with the information and reported stronger understanding is that the information was conveyed interactively and succinctly. The qualitative data in the evaluation indicated that 11.1% of the comments pointed to the method of conveying information that was interactive and engaging as an aspect that students liked. Additionally, including games and icebreakers in between the sessions might have also created a positive atmosphere, which might have created a conducive learning atmosphere. This assumption is based on the data indicating that 17.4% of the comments pointed to games as one of the aspects that they liked about the program.

Another factor that contributed to the program's effectiveness is that it was an in-person event, which was a shift from a virtual program that started in Fall 2020 as a result of the COVID-19 pandemic. Feedback in the International Student Orientation Satisfaction Surveys (Appendix C) suggest that students valued in-person events (7.5%). Although information can be conveyed virtually through Zoom, 5% of the students in previous orientation programs also wanted socialization during the orientation, which can be challenging to do virtually. This finding suggests that socialization opportunities at upon-arrival orientation are necessary and important to continue to include in the program.

What Could Be Further Improved

Despite the overall high satisfaction level of the improved international student orientation, there are two improvements that can be made. First, it is important to consider who were not served by the upon-arrival orientation. The in-person

international student orientation in the Fall 2022 semester was attended by 350 new international students. However, 549 new international students checked in with CGPS for the Fall 2022 semester. This means that approximately 200 new international students did not attend the in-person international student orientation. One possible reason is they did not arrive in the U.S. in time for international student orientation due to delays in travel or obtaining a visa.

To address this shortcoming, I had arranged for a virtual make-up international student orientation at the end of September 2022. This virtual make-up international student orientation program covered only the immigration session. Data from Zoom indicated that it was attended by 41 international students. Therefore, there were still approximately 158 international students who did not attend international student orientation.

To ensure that these students receive upon-arrival information, CGPS could better track students' attendance at international student orientation to find out who is not attending. These students could then receive communications to attend the make-up international student orientation to ensure that they receive the necessary upon-arrival information. Then, CGPS might follow up to find out who among the late-comers did not attend the make-up orientation program and why they did not attend. CGPS could take advantage of different information channels to ensure that these students also receive the necessary upon-arrival information, such as providing them with links to the website containing this information.

The second recommendation is that CGPS should improve students' initial access to Wi-Fi before upon-arrival orientation. New international students might not have immediate access to a U.S. phone or the Internet when they first arrive in the

U.S. Providing access to the Internet may improve students' experiences at the orientation. Without internet, the students were not able to participate in the online games.

Improvement Strategy 3: First-Year Seminar Course

The third improvement strategy of this ELP is aligned with the during stay stage of a student's lifecycle (Perez-Encinas & Rodriguez-Pomeda, 2018). During this stage, students are in the first few weeks of their semester and are beginning their academic program. Students are learning about academic policies and procedures as well as navigating the social environment.

Based on the literature on extended orientation programs, namely First-Year Seminar, these courses provide follow-up information to new international students after attending an upon-arrival orientation (Skipper et al., 2010). These courses, which generally are aimed at supporting students' academic adjustment, familiarizing students with resources, and facilitating inter-cultural communication skills, contribute towards supporting international students' transition and adjustment (Andrade, 2008b; Krsmanovic, 2019). Although an FYS course for international students was offered at UD in 2021, the design of the course was not structured to meet the three objectives connected to international students' transition needs, namely:

- a) To strengthen students' academic preparation, expectations, and skills (Andrade, 2006a; Cox et al., 2006; Dorsett, 2017; Kovtun, 2011; Snyder & Chesire, 2002; Yan & Sendall, 2016);
- b) To increase students' knowledge and familiarity with campus support services (Andrade, 2006a; Fletcher-Anthony & Efthymiou, 2017); and

- c) To facilitate students' inter-cultural communication (Brunsting, Smith, et al., 2018; Senyshyn, 2019; Snyder & Chesire, 2002).

Therefore, Improvement Strategy 3 was focused on improving the quality of the FYS course by designing a course that specifically addressed these three objectives.

The results of the evaluation of the FYS course revealed that the FYS course supported students to navigate academic policies and procedures, with the possible exception of grading topics. Students also developed an understanding of the many campus support services and how to access them. The evaluation also suggested that the course facilitated inter-cultural communication skills. However, more data points would have been beneficial to assess the extent to which students were able to use these inter-cultural communication skills.

In summary, the FYS course was an improvement from the first version in 2021. The evaluation results indicated that the FYS course contributed towards meeting the objectives the literature prescribes for international students (Andrade, 2006a; Brunsting, Smith, et al., 2018; Cox et al., 2006; Dorsett, 2017; Fletcher-Anthony & Efthymiou, 2017; Kovtun, 2011; Senyshyn, 2019; Snyder & Chesire, 2002; Yan & Sendall, 2016).

What Worked Well

In addition to the improved course design, a part of the course that worked well was that the peer mentor was from India. Anecdotally, in the reflection papers, some students had expressed ease of knowing that there was another international student as a peer mentor. Cox and colleagues (2006) noted the importance of having an

international peer mentor in the FYS class, as students felt like they could relate better with an international peer mentor.

An additional aspect of what worked well in the current iteration of the FYS course was that it embedded more assessment measures to better assess students' learning and comprehension of the class materials. The exit tickets served as a way for me to know which parts of the class sessions students understood and which materials students still needed further support with. Furthermore, the three reflection papers that were assigned to students allowed me to better understand their specific transition needs, which will further inform future FYS courses. Finally, the Passport Video Activity, which required students to visit places, support service offices, and events on campus increased their familiarity with the resources that were discussed during class. This format of the Passport Activity was not done in 2021.

What Could Be Further Improved

Despite the improvement made to the course design, there are five further improvements that can be made. The first recommendation is related to understanding the American education system. The evaluation results indicated that on questions related to grading policies and understanding academic GPA, almost half of the class were not able to correctly answer the exit ticket prompt. For example, on the prompt of the minimum GPA required to be on the Dean's List, only 44.44% of students did not answer this question correctly. This result suggests that students either might not have understood the concept of a Dean's List, which might be a uniquely American concept, or they simply could not recall the information.

In the case of the former, then it might be important to review some concepts and terms related to the American education system and academic policies that might

not be familiar to international students. For example, for lectures that discuss the Dean's List, breadth requirements, and academic honesty policies, the FYS instructor could first unpack the underlying cultural assumption of those concepts before discussing more in depth.

The second recommendation is to include course components to support students' social adjustment. An analysis of students' reflection papers suggested that the social needs and concerns appeared to be more salient compared to their academic needs. These needs were reflected in the goals that the students set at the beginning of the semester. In their first reflection papers, the students reported that they were particularly keen to find a community of friends that shared a common interest, including joining a student organization. These findings are consistent with the literature on the specific socio-cultural needs of new undergraduate international students during their transition in the U.S. (Bowser et al., 2007; Jones et al., 2023; Koo et al., 2021; Van Horne et al., 2018).

Furthermore, in their reflection papers, many students described feeling out of place and unable to find their community, which caused feelings of depression and anxiety. Students also expressed that they felt like they could only rely on themselves to get through these challenges, which could further exacerbate their sense of isolation.

Therefore, future FYS courses might consider including additional sessions to address these social integration and isolation issues. For example, the FYS course might make more connections with existing events and programs on campus. It might not be enough to simply inform or announce these events to students, hoping that they would avail themselves of it. The FYS syllabus might include sessions where the

students attend the event together as a class or include attendance at an event as an assignment. These activities may increase students' exposure to social environments and opportunities to build relational skills, which is aligned with recommendations from the literature (Oyeniyi et al., 2021). Examples of activities include attending Coffee Hour, International Student Discussions (hosted by CGPS and Student Wellness and Health Promotion), the Involvement Fair, and others. Furthermore, to ensure that attending these events is meaningful, students may also be required to write a reflection paper on what they learned, how they felt, and what other programs or events they might be interested in.

The third recommendation relates to the inter-cultural communication sessions in the course. The current FYS course included two class sessions on inter-cultural communication skills. Embedding an engagement component in the FYS course supported international students' transition as well as developed their inter-cultural communication competence (Senyshyn, 2019). For example, students might be asked to participate in a weekly meeting with a conversation partner, who is a domestic student.

Furthermore, the evaluation results suggested that although the class sessions introduced inter-cultural skills to students, it was difficult to measure the extent to which students found these skills helpful in their transition and adjustment, particularly socially. Therefore, future evaluations of the FYS course could also use more robust measurement tools, such as tools used in other studies done by Andrade (2008) and Senyshyn (2019).

The fourth focuses on the scale of the FYS course. One of the main limitations of this FYS course is that this course enrolled only nine international students. Initial

enrollment at the end of summer was twenty-six students. However, at the end of free drop add, this number dwindled to twelve students (nine international and three non-international students) due to students switching to other sections. Meanwhile, the literature has indicated the many benefits of an FYS course for international students (Andrade, 2008b; Brunsting, Smith, et al., 2018; Senyshyn, 2019). Therefore, CGPS should attempt to enroll more international students into this FYS course, so that more international students could benefit from this class. CGPS could promote the class to new international students in pre-arrival communications, as well as work with academic advisors who assist in placing new students in their first semester courses.

The fifth recommendation focuses on improving the instructor. As an instructor, I too, also need to improve so that I can design a better curriculum and convey the information more effectively. As an administrator, I am not professionally trained to be an instructor or teacher. Therefore, I could seek more professional development in teaching and curriculum design by seeking mentorship from other instructors and seeking more support from the Center for Teaching and Assessment of Learning at UD. In that way, I am able to design more engaging course materials, include more interactive activities, and design better assessment tools for future FYS courses that I teach.

Summary of Reflections

Overall, based on the evaluation of the three improvement strategies, I believe that they have been able to meet the improvement goal, which was to increase the quantity and quality of orientation programming. Table 9 summarizes the changes that have occurred as a result of this ELP and ideas for future improvements.

The first improvement strategy was to improve the quantity and quality of pre-arrival orientation programs. This strategy met the improvement goal because it increased the number of webinars from two webinars to ten webinars. The previous iteration only covered topics on preparing to arrive to the U.S. and healthcare in the U.S. The improved pre-arrival webinar series covered more topics based on the results of the Student Needs Assessment (Appendix B) and the International Student Orientation Satisfaction Surveys (Appendix C), including academic readiness, the Social Security Number application process, managing finances in the U.S., and finding off-campus housing.

The second improvement strategy was to improve the quality of the upon-arrival orientation. This strategy was met by addressing the limitations of previous upon-arrival orientation programs. The previous upon-arrival orientation programs included sessions that both provided students with too much information and not enough information. Additionally, it also did not include enough socialization opportunities, as they were conducted virtually. Finally, students stated that a three-hour long program was too long. The improved international student orientation program addressed these limitations by striking a balance on the amount of information that was relayed to students. This was done by conveying the information in interactive way and adding other media to convey information, such as a calendar of future workshops. The program included more socialization opportunities through a networking event and interactive games throughout the program. Finally, the improved international student orientation program was held in person and shortened to two hours.

The third improvement strategy was to improve the quality of the extended orientation, namely the FYS course for international students. The FYS course for international students that was offered in 2021 was the very first one that I instructed. The course design was not adequately guided by best practices in the literature. In the second iteration of the FYS course, I designed the course to be more closely aligned with best practices in the literature and included more assessment tools to better assess students' understanding of the material.

Further reflecting on the results of the improvement goal and strategies, I also recognized three cross-cutting themes that are worth noting. The first one is the value of collaborating with other partners, both on campus and in the community, to provide a quality orientation program for international students. Although CGPS may be the main office to provide support to international students, it is not the expert in all of the topics that international students need or want to know about. Furthermore, CGPS might also have limited capacity in terms of human resources and other materials. Therefore, in order to be able to continue to support new international students, CGPS must maintain a good collaborative relationship with relevant stakeholders and collaborators. This theme is consistent with recommendations in the literature (Briggs & Ammigan, 2017) and the programming philosophy at CGPS.

The second cross-cutting theme is recognizing those who are not being served to ensure equity in access to information. The Before You Arrive Webinar Series was offered in the form of live Zoom webinars and pre-recorded videos. It is important to understand whether all incoming international students who wanted to access the webinars and videos were able to do so, why they were not able to, and what alternatives can be provided. The upon-arrival orientation program was also not

attended by all incoming international students, both in the in-person format and the make-up program. CGPS should invest in a better tracking system to find out who were not able to attend the programs and reach out to those who missed the program to ensure that they receive the information. Finally, the FYS course enrolled only nine undergraduate international students. CGPS could improve on ways to ensure that more international students can be enrolled in this course.

The third cross-cutting theme is recognizing the value of evaluation and evaluation tools (Giancola, 2021; Meyer, 2001). In this ELP, I evaluated each improvement strategy to measure the extent to which each of them contributed to meeting the improvement goal. One of the shortcomings that I came across during this process was that some of the evaluation tools were limited in what it could measure. For example, for the FYS course, I did not have baseline data on students' academic preparedness or understanding of campus support services. Therefore, it was difficult to conclude whether the FYS course had strengthened students' academic skills or increased their familiarity with campus resources.

In developing future orientation programming, it is important to embed evaluation as part of the process and being intention about using the data to continue to improve them. Having done a needs assessment at the start of the ELP allowed me to understand what information topics were salient for new international students. Conducting an evaluation of the FYS course has helped me better understand the gaps of the course, which will inform how I design the next FYS course.

Table 9 Summary of Changes in Orientation Programming and Future Programming

Orientation type	Before the ELP	After the ELP	Recommendations beyond the ELP	Cross cutting recommendations
Pre-arrival orientation	<ol style="list-style-type: none"> Two webinars Limited scope of topics 	<ol style="list-style-type: none"> 10 webinars and videos Wider scope of topics 	<ol style="list-style-type: none"> Assess accessibility of webinars Use short videos to convey pre-arrival information Address unmet information needs Involve peer students more proactively 	<ol style="list-style-type: none"> Maintain and strengthen collaboration with campus partners to sustain orientation programming for international students
Upon-arrival orientation	<ol style="list-style-type: none"> Too much information Too little information Too long Virtual program Too little socialization 	<ol style="list-style-type: none"> Balanced amount of information Shorter program In person program More socialization 	<ol style="list-style-type: none"> Find out who is being left out Connect students to Wi-Fi before the start of the program 	<ol style="list-style-type: none"> Ensure equity to information by finding out who are not being served by orientation programming Improve assessment and evaluation of orientation programming

Table 9 Continued

Orientation type	Before the ELP	After the ELP	Recommendations beyond the ELP	Cross cutting recommendations
Extended orientation	1. Not tailored enough to transition needs	1. Better tailored to transition needs	1. Include more sessions on understanding the American education system 2. Focus on supporting social adjustment and addressing isolation of students through social integration activities 3. Improving inter-cultural communication sessions through inter-cultural activities and improving assessment on inter-cultural communication skills 4. Scale up FYS courses for international students 5. Professional development for FYS instructor	

Next Steps Beyond the ELP

There are two next steps that I plan to take beyond this ELP. The first one is to consider conducting an overall evaluation of international students' transition experience. This step could be in the form of conducting a survey at the end of international students' first year to assess the impact of pre-arrival orientation, upon-arrival orientation, and extended orientation on their academic, social, and psychological adjustment. Focus groups and interviews with first-year international students can also be conducted to get rich data on how the programs have supported them.

The second next step is to devise assessment tools to be able to identify, reach out, and meet the information needs of students who did not and/or could not attend the orientation programs. This strategy could include requiring a check-in at upon-arrival orientation programs and surveying those who did not access the pre-arrival orientation webinars. Then, I would reach out to those students with targeted communication to ensure that they receive the needed information through information channels that are accessible.

Chapter 6

REFLECTIONS ON LEADERSHIP DEVELOPMENT

In chapter six, I present my reflection on my leadership development throughout the Education Leadership program at the University of Delaware. Specifically, I outline changes that I have experienced throughout the program as a scholar, problem-solver, and a partner. I conclude this chapter with my final thoughts.

Development as a Scholar

In the process of this ELP, I reflect on how I have developed as a scholar. I began the Education Leadership program as an emerging leader in my organization with a desire to improve the international student orientation program. The coursework in the program provided me with new skills and new perspectives to engage in better sense-making of the problem.

However, it was in the ELP phases (ELP 1, ELP 2, and ELP 3) where my scholarly skills and identity as a scholar began to grow, which started with conducting the literature review. In this stage, I learned to critically read and analyze the literature. I learned how to search for, read, and synthesize the literature. More importantly, as I progressed in writing the artifacts and the ELP reflection essay, I was able to gradually interact with the literature to form my stance and argument on the literature. For example, in conducting a review of the literature on international student transitions, I recognized that while many scholars wrote about the benefits of orientation (Althen, 1990; Meyer, 2001; Young & Althen, 2013), not many wrote empirically about the

impacts of orientation programming for international students' transition or how practitioners might design effective orientation programs based on the evidence.

I believe my growth as a scholar was reflected in the changes in my scholarly writing between my ELP proposal and first five artifacts compared to the ELP reflection and my last three artifacts. Instead of confining the research only within the literature review, I was able to work and embed literature all the way through the different artifacts and in the ELP reflection.

In addition, I believe that my skills in collecting and analyzing data also began to grow. These skills included knowing the right questions to ask, understanding the appropriate data collection tools to use in order to collect the data, and knowing how to analyze the data. I found that in evaluating my improvement strategies, there were other survey items that might have been better or more targeted to answer the questions. Knowing the limitations of the tools that I used in my artifacts has taught me what not to do and what to do in future evaluations and assessments.

Most importantly, however, one of the main things that I have learned throughout this process was that the research is linked with the writing. In other words, it is not enough to just 'do the work' and implement the improvements, but I must also be able to 'communicate the work.' It is important to be able to communicate the underlying research and best practices in the literature as well as use the data to substantiate and justify claims and reasoning for the actions.

Moreover, it is essential to communicate the story clearly and persuasively. And with writing comes re-writing, and more re-writing, and more refining and tweaking to ensure that 'the work' is articulated and understood well. Just like it is important to convey information to new international students, it is also important how

this information is conveyed to different audiences and what means are used to communicate the information (Chang et al., 2021).

Overall, my identity is no longer only as an emerging expert in the field, but it has grown to embody a beginning scholar in the academy as well as a leader in the field with improved skills and new credentials. I no longer only *feel* that the orientation programming could be improved, but I *know* that it needed improvement, and now I *know* that it has improved. I also know that it can continue to be improved by continuously engaging in inquiry, reflection, and informed problem solving.

Development as a Problem Solver

In implementing the improvement strategies described in this ELP, I am cognizant of the fact that it is but one type of support that CGPS can provide to new international students. As I mentioned briefly in chapter 2, there are other programs and ways in which CGPS provides transition support to international students, such as the iBuddy Mentoring Program.

As such, I could see ways in which the data-driven mindset and skills that I learned in this program could also be applied to other programs. For example, in the past, the iBuddy Mentoring Program matched approximately 70 iBuddy mentors with one to two incoming international students for the fall semester cohort. Meanwhile, there had been up to 500 new international students who arrived in the fall semester. That means, there were about 340 new students who were not paired with a mentor. Some reasons could include that they were not aware of the program, or they do not want to join the program, or because they do not feel like they would need the support of a mentor. However, how can we find out the reason why? And once we do know, what strategies might we use to meet the gap? Through the Ed.D. experience, I felt

more able to tackle these types of questions through the skills that I have gained. I also feel like I can use a similar data-driven mindset to further advance other types of services and programs that CGPS can offer to international students.

Development as a Partner

The development that I experienced as a partner happened on two fronts. The first one was in the partnership with other offices on campus in being able to implement and strengthen orientation programming for international students. As I mentioned in chapter 5, neither one of the improvement strategies would have been possible without collaboration with other offices on campus.

The second one was collaboration within my team and other colleagues at CGPS. For example, the communications team at CGPS was instrumental in communicating the existence of the BYA webinars, creating the BYA website, and even inspiring the name of the webinar series itself. The original name for the BYA was the Pre-Arrival Summer Series, or PASS—which for the incoming spring cohort would have needed to be changed to Pre-Arrival Winter Series, or PAWS. In a discussion with the communications specialist at CGPS, she suggested the name be aligned with a similar pre-departure series that the Study Abroad team at CGPS had started, called the Before You Explore series. Hence, the webinar series was named Before You Arrive webinars, which could be used both in the summer and in the winter without needing to change its name.

This program and the process of implementing and evaluating the strategies have also inspired me to become a more active partner within the field of international education. The lessons learned from the improvement strategies should be documented and the future improvements of the program should be implemented to further

advance the model. Exchange of ideas with other colleagues and scholars could also help improve it. Then, this model of orientation programming that includes pre-arrival, upon-arrival, and extended orientation could be shared with colleagues of other international student support offices.

Final Thoughts

International students indeed are important to the communities and host institutions in which they reside. Providing adequate support services for them is important to improve their experience while at UD (Ammigan, 2019; Koo et al., 2021). But beyond that, I am personally driven to continue to improve the transition and overall student experience for international students at UD. Being a former international student myself, I understand the experiences of entering a new environment and not knowing where to begin. The support that I received from the international office at the university where I pursued my master's degree helped ease the anxiety I felt of not knowing how things worked or finding a group of friends. I hope to be able to continuously advance this support system so that other international students can also experience the same type of support—if not more.

REFERENCES

- Althen, G. (1990). *Orientation of foreign students*. NAFSA Field Service Working Paper #13.
- Ammigan, R. (2019). Institutional satisfaction and recommendation: What really matters to international students? *Journal of International Students*, 9(1), 262–281. <https://doi.org/10.32674/jis.v9i1.260>
- Ammigan, R., & Jones, E. (2018). Improving the student experience: Learning from a comparative study of international student satisfaction. *Journal of Studies in International Education*, 22(4), 283–301. <https://doi.org/10.1177/1028315318773137>
- Andrade, M. S. (2006a). A first-year seminar for international students. *Journal of the First-Year Experience & Students in Transition*, 18(1), 85–103.
- Andrade, M. S. (2006b). International students in English-speaking universities: Adjustment factors. *Journal of Research in International Education*, 5(2), 131–154. <https://doi.org/10.1177/1475240906065589>
- Andrade, M. S. (2008a). International graduate students: Adjusting to study in the United States. In K. A. Tokuno (Ed.), *Graduate students in transition: Assisting students through the first year (Monograph No. 50)* (pp. 71–88). University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- Andrade, M. S. (2008b). The value of a first-year seminar: International students' insights in retrospect. *Journal of College Student Retention: Research, Theory and Practice*, 10(4), 483–506. <https://doi.org/10.2190/CS.10.4.e>
- Arambewela, R., & Hall, J. (2013). The interactional effects of the internal and external university environment, and the influence of personal values, on satisfaction among international postgraduate students. *Studies in Higher Education*, 38(7), 972–988. <https://doi.org/10.1080/03075079.2011.615916>
- Barton, A., & Donahue, C. (2009). Multiple assessments of a first-year seminar pilot. *The Journal of General Education*, 58(4), 259–278. <https://doi.org/10.1353/jge.0.0051>

- Bastien, G., Seifen-Adkins, T., & Johnson, L. R. (2018). Striving for success: Academic adjustment of international students in the U.S. *Journal of International Students*, 8(2), 1198–1219. <https://doi.org/10.5281/zenodo.1250421>
- Briggs, P., & Ammigan, R. (2017). A collaborative programming and outreach model for international student support offices. *Journal of International Students*, 7(4), 1080–1095. <https://doi.org/10.5281/zenodo.1035969>
- Brittin, H. C., & Obeidat, B. A. (2011). Food practices, changes, preferences and acculturation of Arab students in US universities. *International Journal of Consumer Studies*, 35(5), 552–559. <https://doi.org/10.1111/j.1470-6431.2011.01023.x>
- Brunsting, N. C., Smith, A. C., & Zachry, C. (2018). An academic and cultural transition course for international students: Efficacy and socio-emotional outcomes. *Journal of International Students*, 8(4), 1497–1521. <https://doi.org/10.5281/zenodo.1467805>
- Brunsting, N. C., Zachry, C., & Takeuchi, R. (2018). Predictors of undergraduate international student psychosocial adjustment to US universities: A systematic review from 2009-2018. *International Journal of Intercultural Relations*, 66, 22–33.
- Center for Global Programs and Services (2022). *2021-22 impact report*. CGPS.
- Chang, S., & Gomes, C. (Eds.). (2021). *Digital experiences of international students: Challenging assumptions and rethinking engagement* (1st ed.). Taylor & Francis.
- Chang, S., Gomes, C., & McKay, D. (2021). The digital information ecology of international students: Understanding the complexity of communication. In S. Chang & C. Gomes (Eds.), *Digital experiences of international students: Challenging assumptions and rethinking engagement*. Routledge.
- Cox, M. F., Diefes-Dux, H., & Lee, J. (2006). Development and assessment of an undergraduate curriculum for first-year international engineering students. *Proceedings - Frontiers in Education Conference, FIE*, 15–18. <https://doi.org/10.1109/FIE.2006.322558>
- Dorsett, J. (2017). Exploring international student adaptation through a first-year experience course at Iowa State University. (Publication No. 15296) In *Graduate Theses and Dissertations*. <https://lib.dr.iastate.edu/etd/15296>
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical

- sciences. *Behavior Research Methods*, 39(2), 175–191.
<https://doi.org/10.3758/BF03193146>
- Fletcher-Anthony, W., & Efthymiou, L. (2017). Assessment of a college orientation course for international students. *Journal of College Orientation, Transition, and Retention*, 24(1), 84–89. <https://doi.org/10.24926/jcotr.v24i1.2911>
- Forbes-Mewett, H., & Sawyer, A. M. (2016). International students and mental health. *Journal of International Students*, 6(3), 661–677.
<https://doi.org/10.32674/jis.v6i3.348>
- Gamlath, S. (2022). Peer learning and the undergraduate journey: a framework for student success. *Higher Education Research and Development*, 41(3), 699–713.
<https://doi.org/10.1080/07294360.2021.1877625>
- Garza, D. D. (2015). *The acculturation needs of international students at U.S. universities: A call for online anticipatory orientation*. (Publication No. 3713522) [Doctoral dissertation, University of Kansas]. ProQuest Dissertations Publishing.
- Giancola, S. P. (2021). *Program evaluation: Embedding evaluation into program design and development*. SAGE Publications Inc.
- Glass, C. R., Buus, S., & Braskamp, L. A. (2013). *Uneven experiences: What's missing and what matters for today's international students* (Issue October).
- Glass, C. R., Gesing, P., Hales, A., & Cong, C. (2017). Faculty as bridges to co-curricular engagement and community for first-generation international students. *Studies in Higher Education*, 42(5), 895–910.
<https://doi.org/10.1080/03075079.2017.1293877>
- Glass, C. R., Godwin, K. A., & Helms, R. M. (2021). *Toward greater inclusion and success: A new compact for international students*.
<https://www.acenet.edu/Documents/Intl-Students-Monograph.pdf>
- Gómez, E., Alfredo, U., & Glass, C. R. (2014). International student adjustment to college: Social networks, acculturation, and leisure. *Journal of Park and Recreation Administration*, 32(1), 7–25.
- Güvendir, M. A. (2018). The relation of an international student center's orientation training sessions with international students' achievement and integration to university. *Journal of International Students*, 8(2), 843–860.
<https://doi.org/10.5281/zenodo.1250385>
- Hagar, L. D. (2014). Intercultural learning for international students: Designing a pre-

- departure orientation. (Publication No. 1553137) [Master's thesis, University of the Pacific]. ProQuest Dissertations Publishing.
- Helms, R. M., & Brajkovic, L. (2017). Mapping internationalization on US campuses: 2017 edition. In *American Council on Education*.
<https://doi.org/10.6017/ihe.2018.92.10277>
- Hoekje, B. J., & Stevens, S. G. (2018). *Creating a culturally inclusive campus: A guide to supporting international students*. Routledge.
- Hunter, M. S., & Linder, C. W. (2005). First year seminars. In M. L. Upcraft, J. N. Gardner, & B. O. Barefoot (Eds.), *Challenging & supporting the first-year student: A handbook for improving the first year of college* (pp. 275–291). Jossey-Bass.
- Institute of International Education. (n.d.) *Project Atlas: Glossary*. Retrieved December 7, 2021, from
<https://web.archive.org/web/20180920151349/https://www.iie.org/en/Research-and-Insights/Project-Atlas/Glossary>
- Institute of International Education. (2022). International student enrollment trends, 1948/49-2021/22. *Open doors report on international educational exchange*. Retrieved from <http://www.opendoorsdata.org>.
- Jean-Francois, E. (2019). Exploring the perceptions of campus climate and integration strategies used by international students in a US university campus. *Studies in Higher Education*, 44(6), 1069–1085.
<https://doi.org/10.1080/03075079.2017.1416461>
- Jeon-Huh, A. (2015). *Exploring the influence of the pre-departure orientation on the undergraduate international students' cultural and academic adjustment at Drexel University: The example of students from China*. (Publication No. 3706900) (Doctoral dissertation, Drexel University]. ProQuest Dissertations Publishing.
- Kambouropoulos, A. (2014). An examination of the adjustment journey of international students studying in Australia. *Australian Educational Researcher*, 41(3), 349–363. <https://doi.org/10.1007/s13384-013-0130-z>
- Khanal, J., & Gaulee, U. (2019). Challenges of international students from pre-departure to post-study: A literature review. *Journal of International Students*, 9(2), 560–581. <https://doi.org/10.32674/jis.v9i2.673>
- Koo, K., Baker, I., & Yoon, J. (2021). The first year acculturation: A longitudinal

study on acculturative stress and adjustment among the first year international college students. *Journal of International Students*, 11(2), 278–298.
<https://doi.org/10.32674/jis.v11i2.1726>

- Kovtun, O. (2010). *International student adaptation to a U.S. college: A mixed methods exploration of the impact of a specialized first-year foundations course at a large midwestern institution*. (Publication No. 3432051) [Doctoral dissertation, The University of Nebraska - Lincoln]. ProQuest Dissertations Publishing.
- Kovtun, O. (2011). International student adaptation to a U.S. college: A mixed methods exploration of the impact of a specialized first-year course at a large Midwestern institution. *Journal of Student Affairs Research and Practice*, 48(3), 349–366. <https://doi.org/10.2202/1949-6605.6336>
- Krsmanovic, M. (2019). *The stories of transition: A qualitative exploration of international undergraduate students' academic experiences in first-year seminar courses in the United States*. (Publication No. 6519) [Doctoral dissertation, University of Central Florida]. Electronic Theses and Dissertations.
- Le, A. T., LaCost, B. Y., & Wismer, M. (2016). International female graduate students' experience at a Midwestern university: Sense of belonging and identity development. *Journal of International Students*, 6(1), 128–152.
- Li, J., Wang, Y., Liu, X., Xu, Y., & Cui, T. (2018). Academic adaptation among international students from East Asian countries: A consensual qualitative research. *Journal of International Students*, 8(1), 194–214.
<https://doi.org/10.5281/zenodo.1134289>
- Madden-Dent, T., Wood, D., & Roskina, K. (2019). An inventory of international student services at 200 U.S. universities and colleges: Descriptive data of pre-departure and post-arrival supports. *Journal of International Students*, 9(4), 993–1008. <https://doi.org/10.32674/jis.v9i4.346>
- Martirosyan, N. M., Bustamante, R. M., & Saxon, D. P. (2019). Academic and social support services for international students: Current practices. *Journal of International Students*, 9(1), 172–191. <https://doi.org/10.32674/jis.v9i1.275>
- Mesidor, J. K., & Sly, K. F. (2016a). Factors that contribute to the adjustment of international students. *Journal of International Students*, 6(1).
- Mesidor, J. K., & Sly, K. F. (2016b). Factors that contribute to the adjustment of international students. *Journal of International Students*, 6(1), 262–282.
<https://doi.org/10.32674/JIS.V6I1.569>

- Meyer, J. D. (2001). A conceptual framework for comprehensive international student orientation programs. *International Education*, 31(1), 56–79.
- Mohamed, N., Schoen, S., Yu, X., & Kappler, B. (2021). Creating an online orientation course: The journey to internationalizing the campus. In S. Chang & C. Gomes (Eds.), *Digital expeperiences of international students* (pp. 174–192). Routledge.
- Montgomery, K. A. (2017). Supporting Chinese undergraduate students in transition at U.S. colleges and universities. *Journal of International Students*, 7(4), 963–989. <https://doi.org/10.5281/zenodo.1029727>
- Mori, S. (2000). Addressing the mental health concerns of international students. *Journal of Counseling and Development*, 78(2), 137–144. <https://doi.org/10.1002/j.1556-6676.2000.tb02571.x>
- Nassim, S. Z. (2011). *The world is knocking on our doors: Examination of the experience of first-year undergraduate international students and support services programs available to them at the University of Delaware*. (Publication No. 3465811) [Doctoral dissertation, The University of Delaware]. ProQuest Dissertations Publishing.
- National Resource Center for First-Year Experience and Students in Transition. (2013). *2012-2013 national survey of first-year seminars*.
- Office for International Students and Scholars. (2017). *Snapshot statistics: 2017 fall & 2016-2017 academic year*. OISS.
- Office for International Students and Scholars. (2018). *Snapshot statistics: 2018 fall & 2017-2018 academic year*. OISS.
- Office for International Students and Scholars. (2019). *Snapshot statistics: 2019 fall & 2018-2019 academic year*. OISS.
- Organization for Economic Co-operation and Development. (2021). *Education at a glance 2021: OECD indicators*. OECD Publishing. <https://doi.org/10.1787/b35a14e5-en>.
- Outhred, T., & Chester, A. (2013). Improving the international student experience in Australia through embedded peer mentoring. *Mentoring and Tutoring: Partnership in Learning*, 21(3), 312–332. <https://doi.org/10.1080/13611267.2013.851499>
- Oyeniya, O., Smith, R. L., Watson, J. C., & Nelson, K. (2021). A comparison of first-

- year international students' adjustment to college at the undergraduate and graduate level. *Journal of Comparative & International Higher Education*, 13(2), 112–131. <https://doi.org/10.32674/jcihe.v13i2.2450>
- Pekerti, A. A., Vijver, F. J. R. Van De, & Moeller, M. (2021). A peer mentoring social learning perspective of cross-cultural adjustment: The rapid-acculturation mateship program. *International Journal of Intercultural Relations*, 84, 276–299. <https://doi.org/https://doi.org/10.1016/j.ijintrel.2021.08.010>
- Perez-Encinas, A., & Rodriguez-Pomeda, J. (2018). International students' perceptions of their needs when going abroad: Services on demand. *Journal of Studies in International Education*, 22(1), 20–36. <https://doi.org/10.1177/1028315317724556>
- Punteney, K. (2019). *The international education handbook: Principles and practices of the field*. NAFSA: Association of International Educators.
- Rajapaksa, S., & Dundes, L. (2002). It's a long way home: International student adjustment to living in the United States. *College Student Retention*, 4(1), 15–28.
- Schartner, A., & Young, T. J. (2016). Towards an integrated conceptual model of international student adjustment and adaptation. *European Journal of Higher Education*, 6(4), 372–386. <https://doi.org/10.1080/21568235.2016.1201775>
- Senyshyn, R. M. (2019). A first-year seminar course that supports the transition of international students to higher education and fosters the development of intercultural communication competence. *Journal of Intercultural Communication Research*, 48(2), 150–170. <https://doi.org/10.1080/17475759.2019.1575892>
- Skipper, T. L., Latino, J. A., Rideout, B. M., & Weigel, D. (2010). Extensions of traditional orientation programs. In J. A. Ward-Roof (Ed.), *Designing successful transitions: A guide for orienting students to college* (pp. 95–115). University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- Smith, R. A., & Khawaja, N. G. (2011). A review of the acculturation experiences of international students. *International Journal of Intercultural Relations*, 35(6), 699–713. <https://doi.org/10.1016/j.ijintrel.2011.08.004>
- Snyder, V., & Chesire, D. K. (2002). A training model for extended orientation and cross cultural training for international students. *The Journal of College Orientation and Transition*, 10(1), 73–75.

- Tas, M. (2013). Promoting diversity: Recruitment, selection, orientation, and retention of international students. *Journal of International Education and Leadership*, 3(2), 1–46.
- Topping, K. J. (2005). Trends in peer learning. *Educational Psychology*, 25(6), 631–645. <https://doi.org/10.1080/01443410500345172>
- Tsang, E. W. K. (2001). Adjustment of mainland Chinese academics and students to Singapore. *International Journal of Intercultural Relations*, 25(4), 347–372. [https://doi.org/10.1016/S0147-1767\(01\)00010-4](https://doi.org/10.1016/S0147-1767(01)00010-4)
- Vakkai, R. J. Y., Harris, K., Chaplin, K. S., Crabbe, J. J., & Reynolds, M. (2020). Sociocultural factors that impact the health status, quality of life, and academic achievement of international graduate students: A literature review. *Journal of International Students*, 10(3), 758–775. <https://doi.org/10.32674/jis.v10i3.1222>
- Yan, Z., & Sendall, P. (2016). First year experience: How we can better assist first-year international students in higher education. *Journal of International Students*, 6(1), 35–51.
- Young, N. E., & Althen, G. (2013). *The handbook of international student advising* (3rd ed.). Intercultural Interaction LLC.
- Yu, X., Isensee, E., & Kappler, B. (2016). Using data wisely to improve international student satisfaction: Insights gained from International Student Barometer. In K. Bista & C. Foster (Eds.), *Exploring the social and academic experiences of international students in higher education insitutions* (pp. 212–232). IGI Global. <https://doi.org/http://doi:10.4018/978-1-4666-9749-2.ch012>
- Zhang, J., & Goodson, P. (2011). Predictors of international students' psychosocial adjustment to life in the United States: A systematic review. *International Journal of Intercultural Relations*, 35, 139–162. <https://doi.org/10.1016/j.ijintrel.2010.11.011>.

Appendix A

ARTIFACT 1 – LITERATURE REVIEW

Introduction

This review will synthesize the current literature on transition and adjustment of international students in the United States (U.S.) as part of their student experience at their host institution. It seeks to explore the research on (a) factors that influence the transition and adjustment experience of new international students and current and (b) innovative institutional programming to facilitate transition and adjustment. Furthermore, it also looks at how orientation programs—as one of the main institutional programming for transition—fit into the overall structure of a transition and adjustment framework.

Three main sections make up this chapter:

1. **International students in the literature:** The first section introduces the international student context by defining the international student population, particularly in the U.S., and how the literature characterizes this student population. The U.S. context is most relevant here as the context of the present Education Leadership Portfolio (ELP) is a U.S. based institution, the University of Delaware. Different views of the international student lifecycle are briefly explored to conceptualize the transition and adjustment phases that international students experience in higher education.

2. Theoretical underpinnings of student transition and adjustment:

The second section reviews the theories of student transition and adjustment. This section zooms out of the international student context and explore a number of theories in student development that underpin student transition and adjustment. Although it explores general student development theories, these theories are still relevant for the international student context. Two main student development theories are then used to frame this section of the literature review: Tinto's (1993) student departure theory and Schlossberg, Waters, and Goodman's (1995) transition framework. The latter serves as the theoretical framework to examine in greater depth factors that influence international student transition and adjustment.

3. Orientation programming: Finally, the third section reviews how orientation programming facilitates transition and adjustment of new international students. It begins with an overview of pre-arrival orientation programming, which typically occurs before international students arrive in the U.S. The premise of this overview is that it applies to traditional international students who will study in the U.S., as opposed to those who are studying remotely from their home countries or engage in a hybrid program. The main focus of this section is upon-arrival orientation, or most commonly called international student orientation. This sub-section focuses on the goals and guiding principles of an effective international student orientation. The section describes the practical aspects of designing and implementing an

effective international student orientation program. Limitations of the current international student orientation model at the University of Delaware—the focus of my ELP—are discussed, which has led to the development of extended orientation programs, such as first-year seminars. The third section of the literature review concludes with a brief discussion on the current thinking and practices of first-year seminars for international students.

Method

Databases, such as Academic OneFile, Education Source, ERIC, Google Scholar, JSTOR, RER, Research Gate, and SpringerLink, were used to obtain peer-reviewed articles and dissertations related to literature on international student transition and adjustment. Additionally, books that included chapters and compilation of peer-reviewed articles on student transition to college, international student adjustment, and other transition strategies were also obtained to enrich the literature review. In this search for sources, I used the following search terms that included “international students” and transition, adjustment, acculturation, experience, success, sense of belonging, orientation, pre-arrival, pre-departure, needs, peer mentoring, and COVID-19. Relevant sources that were cited in these initial articles were also explored to gain either a broader or deeper understanding of the topic.

International Students in the Literature

The literature characterizes international students as a specific student population in higher education in many different ways. It is helpful to start with a definition. Although there are several variations of how international students are

defined,² a synthesized definition is as follows: They are defined as students who are enrolled in a higher education program in a country other than their home country, usually with a special visa (OECD, 2015; IIE, n.d.). Another useful definition that embodies the mobility nuance is one by UNESCO, whereby international students are defined as those “who have crossed a national or territorial border for the purpose of education and are now enrolled outside their country of origin.” (UNESCO, 2015). As such, for the purpose of this literature review and ELP, this definition refers to students enrolled in both degree-seeking and non-degree seeking programs (e.g., English language programs and short-term courses) who entered the U.S. with an F-1 student visa, M-1 vocational student visa, or a J-1 student visa.³ This definition does not include students who have other types of visas, are refugees, or have a deferred action for childhood arrivals (DACA) status.

In recent years, there have been rises and declines in terms of international student enrollment in the top hosting countries, such as the U.S., the United Kingdom, Australia, and Canada (e.g., Ammigan, 2019; Arambewela & Hall, 2009; Bastien et al., 2018; Chang & Gomes, 2017; Elturki et al., 2019; Lu et al., 2018; Marangell et al., 2018; Menzies et al., 2015; Schartner & Young, 2016; Smith & Khawaja, 2011). In the past twenty years, the U.S. has seen many rises and declines in international

² There are some scholars who advocate for eliminating the categorization of ‘international students’ as such, arguing that this categorization furthers negative stereotypes associated with international students, further differentiates and distances this student population compared to domestic students, and hinders student development and learning (E. Jones, 2017; Starr-Glass, 2019).

³ See Organizational Context and Role chapter for more details on the difference between the visa types.

students because of political shifts in the U.S. (Laws & Ammigan, 2020), among other factors. Changes in immigration policy and regulations, in turn, affect visa processing, such as long wait times, screening requirements, and probability of receiving a visa (Laws & Ammigan, 2020; Pierce & Bolter, 2020). Issues in obtaining a U.S. student visa affect international students' ability to travel to the U.S. and enroll at their host institutions. For instance, the recent decline in international student enrollment in higher education institutions in the U.S. was affected by the global COVID-19 pandemic (Institute of International Education, 2020). New student enrollment in U.S. higher education institutions decreased by 45 percent for the fall 2020 semester (Institute of International Education, 2020). With border closures and travel restrictions affecting global travel, many new international students were not able to travel to the U.S. to begin their programs at their host institutions. These declines affect the host institutions in more than one way, as international students bring multiple benefits to their host institutions.

One of the most cited benefits that international students bring to their host institutions, the local communities, and the host country is the financial benefit. The tuition dollars that international students bring to their host institutions, especially public universities, are significant, as international students typically must pay out-of-state tuition costs and are not eligible for federal loan programs. In fact, studies have shown that international students' out-of-state tuition dollars have subsidized public universities' budgets as a result of declining state contributions, which then enables universities to maintain low in-state tuition rates for domestic students (Bound et al., 2016). The significance of international students' financial power at higher education institutions in the U.S. was especially noticed and felt in 2020 when many

international students could not travel to the U.S. to begin or continue their program due to the global COVID-19 pandemic (NAFSA, 2021). In addition to tuition dollars, international students also inject financial contributions to the local communities in which they reside (NAFSA, 2020). For example, according to NAFSA (Association of International Educators), in 2020 international students contributed \$64 million and supported 755 jobs in Delaware (NAFSA, 2020). On a national scale, the enrollment of international students in higher education institutions represents a major service export of the U.S., which is estimated to match the size of total exports of “soybeans, corn, and textile combined” (Bureau of Economic Analysis, 2020, as cited in Bound et al., 2021, p. 2).

In addition to financial benefits, international students bring a wealth of cultural perspectives and experiences, which not only diversify the student body of the host institutions, but also contribute to cross-cultural understanding of host (or domestic) students to help them prepare for a global workplace (Andrade, 2009b; Bastien et al., 2018; Elturki et al., 2019; Ryan & Carroll, 2005; Smith & Khawaja, 2011). More importantly, international students’ presence in host institutions and communities also brings opportunities for international exchange, engagement, and citizen diplomacy. International graduate students also bring diverse expertise and skills into U.S. classrooms and research (Andrade, 2009b). Finally, international students also positively affect the host institutions’ campus internationalization⁴ initiatives through the intercultural competencies and experiences that they bring both

⁴ Campus internationalization is defined as “the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of postsecondary education.” (Knight, 2003, p.2).

in the classroom and outside of the classroom (Deardorff, 2006; Urban & Palmer, 2014).

Transitioning to a new educational and social environment can be challenging for all students. International students also bring with them unique transition and adjustment needs when they arrive in the U.S. (Mori, 2000; Vakkai et al., 2020). These include transition needs related to navigating the culture of their new environments, socializing, experiencing culture shock (Ward et al., 2001), adjusting to the local food (Alakaam et al., 2015; Brittin & Obeidat, 2011), and adjusting to the American classroom and educational system (de Araujo, 2011; Krsmanovic, 2019; Li et al., 2018). In an attempt to study these needs and challenges, as well as advocate institutional support to address the unique needs of U.S. international students, the literature unfortunately has painted a picture of international students as suffering from deficits in skills and capabilities that prevent them from being successful. Less attention, on the other hand, has been paid to adjustment of the dominant culture in responding to a diversity of cultures and perspectives that international students bring to the classroom and community. In the past few years, however, there have been more criticisms of the deficit characterizations of international students (Bittencourt et al., 2021; Heng, 2018; Leask, 2015; Starr-Glass, 2019). More recent literature also has emphasized international students' needs without generalizing this student population as one homogenous group (Schulte & Choudaha, 2014; Vakkai et al., 2020).

While the international student population as a whole is bound by the commonality that they typically originate from abroad and enter the U.S. on a student visa, there are several points of diversity among them that make them unique. This diversity includes country of origin (Brutt-Griffler et al., 2020; Chen & Zhou, 2019;

Dellinger, 2014), level of education (Elturki et al., 2019; Koo et al., 2021; Zhou et al., 2011), gender (Arafeh, 2020), language proficiency (of the host country) (Andrade, 2009a; Poyrazli et al., 2004), and marital status (Jiang et al., 2021; Lu et al., 2018). It is important to make these distinctions within the international student population, as different sub-populations may have unique needs, perceptions, sources of support, and cultures.

Furthermore, the literature has called for the need to better differentiate between the transition needs of undergraduates versus graduate students (Krsmanovic, 2021; Oyenyi et al., 2021). Most studies have examined transition and adjustment of international students as one group (Smith & Khawaja, 2011; Zhang & Goodson, 2011), but more studies have begun to differentiate transition needs based on education level (e.g., Brunsting et al., 2018b; Koo et al., 2021; Moglen, 2017; Sharma, 2019; Spencer, 2016). Research reveals that undergraduate and graduate international students have many of the same transition needs, which are generally divided into three categories: academic, socio-cultural, and psychological transition needs (Bastien et al., 2018; Martirosyan et al., 2019; Mesidor & Sly, 2016). For example, Li and colleagues (2018) and Khanal and Gaulee (2019) stated that one of the main academic transition needs was preparedness to understand the new academic conventions. This preparedness included understanding professors' teaching styles, the study loads, and writing assignments. Additionally, Rajapaksa and Dundes (2002) highlight the significance of social networks in mitigating adjustment issues of loneliness and homesickness amongst international students. Finally, in terms of psychological transition needs, several studies over the years have discussed the significance of psychological effects to international students' transition (Brunsting et al., 2018b;

Church, 1982; Mesidor & Sly, 2016), such as anxiety, loneliness, homesickness, depression, and culture shock. The combination of addressing and meeting these different transition needs would help to ease the transition process for international students.

However, it is the specific needs within these main categories that are different amongst the undergraduate and graduate international student population. For example, studies showed that both student groups have concerns about adjusting to the new academic environment. However, at the undergraduate level, the specific concerns revolved around challenges in participating in class, collaborating with others, and understanding degree requirements (Elturki et al., 2019; Perry et al., 2016); interacting with faculty and understanding the American academic system (Mori, 2000; Spencer, 2016). At the graduate level, international students' transition needs revolve around academic writing (Sharma, 2019), academic interactions with professors and colleagues (Zhou et al., 2011), academic advising (Le et al., 2016; Park, 2022; Perry et al., 2016; Rice et al., 2009), and creating social networks to support their academic success (Le et al., 2016; Moglen, 2017).

The socio-cultural transitional needs of undergraduate students are particularly focused on finding a sense of belonging (Bowser et al., 2007; Jones et al., 2023). Undergraduate students consider finding a community and social connectedness important and pertinent during their adjustment (Koo et al., 2021; Van Horne et al., 2018).

Graduate students also value a sense of belonging, but finding this community is more closely related to their academic success than for the social aspects of community itself (Le et al., 2016; Sharma, 2019). Graduate students seek to find

community within their academic community, including relating with faculty, advisors, and class or lab mates in service of achieving their academic goals.

In addition to the three general categories of transition needs, there is an additional category of logistical needs, such as opening a bank account, transportation, and finding off-campus housing (Trimpe, 2022). These logistical transition needs are often more felt by graduate international students, who are more likely to bring their family. Some of the logistical needs experienced by graduate international students include finding childcare and schools for their children, financial needs, getting a driver's license, transportation, and getting healthcare and health insurance (Yoon & Chung, 2017).

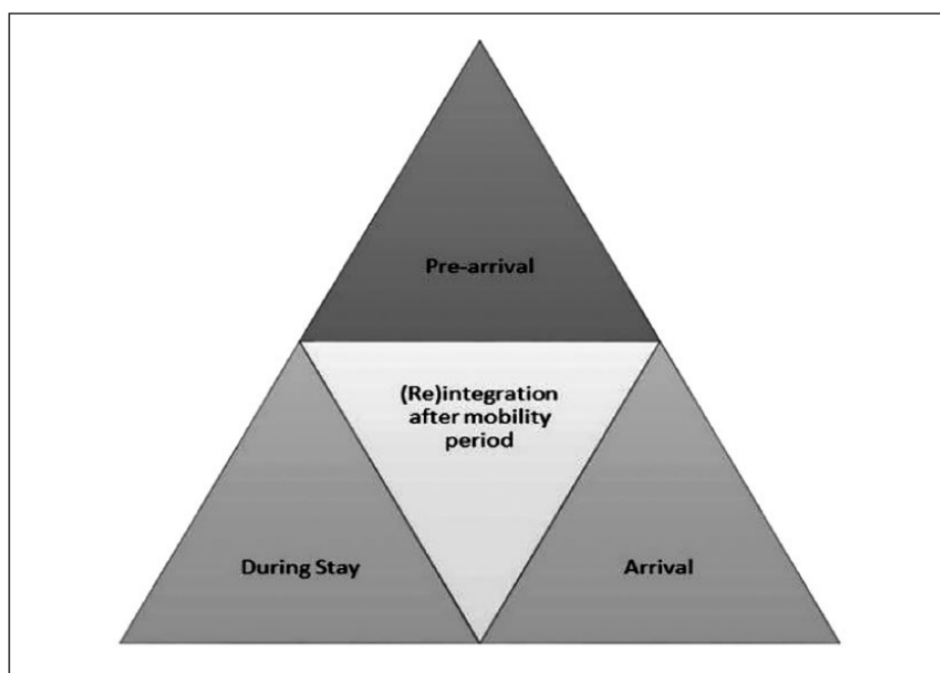
Understanding the transitional and demographic differences factor into understanding their experiences as international students in the U.S. and the institutional support services that are necessary to facilitate their success. As a result, host institutions must also be adaptable and flexible to meet these diverse needs. One way to begin understanding this experience is to examine the international student lifecycle, which is discussed in the following section.

International Student Lifecycles

To help frame the international student experience, a view of the international student lifecycle is helpful. There are a few ways in which the international student lifecycle can be described. Figure A1 illustrates a simplified and fairly straightforward lifecycle of international students with four major stages: pre-arrival, arrival, during stay, and (re) integration after mobility period (Perez-Encinas & Rodriguez-Pomeda,

2018⁵). The *pre-arrival* phase includes preparing to travel to another country, such as applying for a visa and purchasing a plane ticket. It also includes preparing to make the move to the new country, such as finding accommodations, packing, and completing administrative tasks for the academic program. The *arrival* phase may include arriving at the airport, buying furniture for a new apartment, and starting first few weeks of classes. While there may be slight overlap with the arrival phase, the *during stay* phase typically includes the time after students have settled into a daily routine and extends to the point where they graduate from the host institution. The *(re)integration after mobility period*, which does not receive as much attention in the literature (Perez-Encinas & Rodriguez-Pomeda, 2018), includes the student returning to their home country or the student integrating into the country, typically by way of employment.

⁵ While this lifecycle was developed with the specific population of international students in Europe that are typically engaged in short-term, credit seeking mobility programs (i.e., Erasmus Programme), it can also be applied to the degree-seeking international student population that makes up the majority of international students in the U.S.

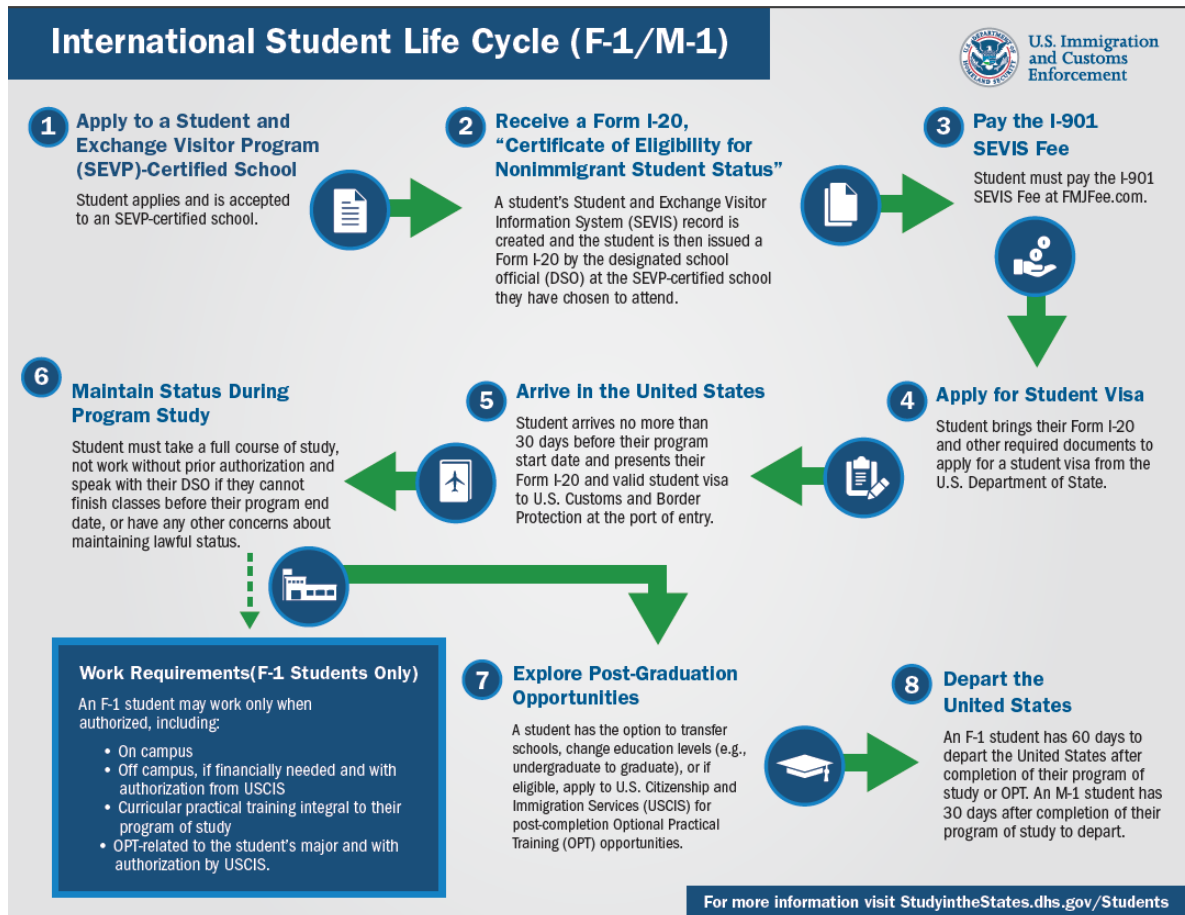


Note. This model was adopted from “International students’ perceptions of their needs when going abroad: Services on demand,” by A. Perez-Encinas and J. Rodriguez-Pomeda, 2018, *Journal of Studies in International Education*, 22(1), p. 24.

Figure A1 International Student Lifecycle

Using an immigration lens, the Department of Homeland Security (DHS) has also created a version of an international student lifecycle, which emphasizes the various immigration processes that international students must go through during their academic program in the U.S. (DHS, n.d.). This student life cycle (see Figure 2) informs much of the programming that many international student and scholar services offices, such as new student orientation and workshops about various immigration-related applications and regulations (Bista, 2015; Briggs & Ammigan, 2017). Phases 1 through 4 of DHS’s lifecycle corresponds to the pre-arrival stage in Figure A2; phase 5 of DHS’s lifecycle is the arrival stage in Figure 1; phase 6 is the

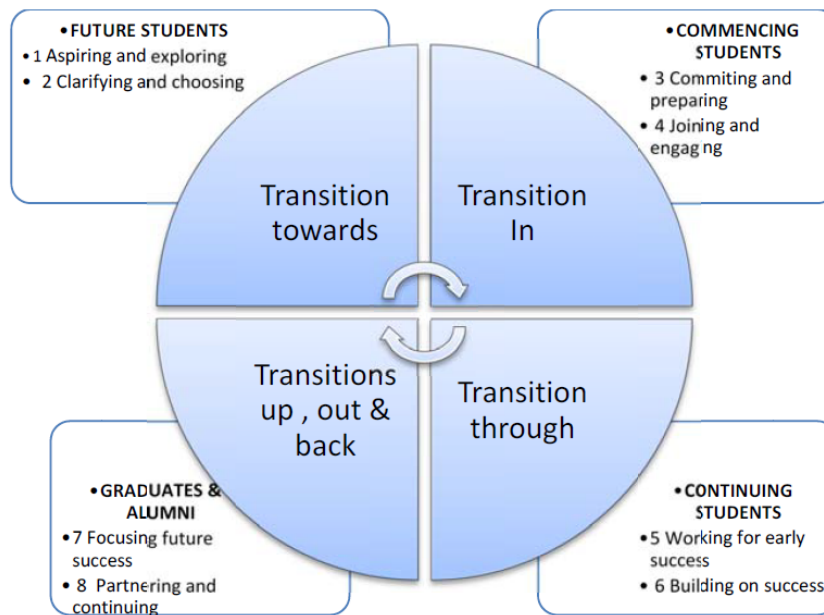
during-stay stage; and phases 7 and 8 are considered the (re)integration after the mobility period.



Note. Adopted from the Department of Homeland Security, Study in the States website (<https://studyintheStates.dhs.gov/resource-library?page=3>). Accessed October 23, 2021.

Figure A2 International Student Lifecycle according to Department of Homeland Security

Finally, a third way of conceptualizing the student lifecycle is through a transition lens: transitioning towards (future and new students); transitioning in (newly arrived students); transitioning through (continuing students); and transitioning, up, out and back (graduating students and alumni) (Lizzio, 2011) (see Figure A3). Lizzio's (2011) model implies that students' transition and adjustment do not end after the start of the semester but continue throughout their academic program. Much of the literature appears to assume that transition and adjustment programming for international students should or need only to occur at the beginning of their arrival, instead of a continuous series of transitions (Matheson, 2018). For example, even after a student has adjusted being a college student during their first month, they may continue to experience transition during the first year of their academic program. One critique of Lizzio's framework is that the model implies that students are constantly in transition; there are no clear demarcations of students having adjusted to the new academic and social environments.



Note. Adopted from “The student lifecycle: An integrative framework for guiding practice,” by Alf Lizzio, 2011, Griffith University, p. 1.

Figure A3 Student Lifecycle Framework according to Lizzio (2011)

For the purposes of this ELP, I use the student lifecycle described by Perez-Encinas and Rodriguez-Pomeda (2018), which is displayed in Figure A1. However, the international student lifecycle from the Department of Homeland Security (n.d.) informs the design of pre-arrival and upon arrival programming because of the need to include information on understanding immigration regulations and responsibilities. Additionally, Lizzio’s (2011) student lifecycle framework supports the need for incorporating a transition lens in each of the stages, including the *during stay* phase. A transitions lens in each stage strengthens the need to embed transition programming throughout the first year of new international students instead of only during the first few weeks prior to and after arrival to the U.S. The next section explores the transition

and adjustment phases and implications for students in general and international students in particular.

Theoretical Underpinning of Student Transition and Adjustment

With an established insight of the student lifecycle, this section briefly zooms out from the international student context to explore the concepts of student transition and adjustment in higher education, particularly as they are grounded in traditional student development theories. These theories are funneled to focus on two theories: Tinto's (1993) theory of student departure and Schlossberg, Waters, and Goodman's (1995) transition theory—the latter of which is used as the theoretical framework of this ELP.

Transition, as defined by NODA, the Association for Orientation, Transition, and Retention in Higher Education, is “the process students go through when entering and continuing through a particular institution of higher education and/or entering the same institution for a new purpose” (NODA, 2021, para. 4). In contrast, adjustment is defined as “the familiarization with the customs, places, social rules, and acceptable styles of interaction in the new environment (Bradley, 2000; Misra et al., 2003 as cited in Terrazas-Carrillo et al., 2014, p. 698). Whereas transition refers to the movement process from one stage to another, adjustment points to the outcome of that movement, whereby the individual has reached a point where they are familiar with the new environment. These two concepts are typically mentioned together to describe, understand, and address the processes and challenges that students experience entering higher education (e.g., Hadley, 2009; Hurtado et al., 2007).

There are a number of theories and models that contribute to a comprehensive understanding of (college) student development. Some noteworthy theories include

Sanford's (1962) theory of balance and support, Chickering's theory of identity development (1969; Chickering & Reisser, 1993), Schlossberg, Waters, and Goodman's (1995) transition theory, Tinto's (1993) theory of student departure, and Strange and Banning's (2015) campus environmental theory. Although most of these theories were developed with the undergraduate student experience in mind, some may also be relevant to graduate student experience, such as Schlossberg, Waters, and Goodman's (1995) transition theory for adults. These theories of student development have also been used to study how transition and adjustment influence student success. Concepts of transition and adjustment are discussed in more depth through Tinto's (1993) theory of student departure and Schlossberg, Waters, and Goodman's (1995) transition theory in the next sections.

Tinto's Theory of Student Departure

The concept of transition can be understood deeper by examining Tinto's (1993) theory of student departure from college. According to Tinto (1993), college students experience three transition phases, namely separation, transition, and incorporation. Students typically first experience a separation from their old community (e.g. family and high school) and/or location, then transition into the new community and/or location, and finally settles into the new community and/or location. However, not all students experience these three stages in the same way, as they come with differing degrees of preparation and backgrounds (Tinto, 1993). For example, a student who is entering higher education from high school may have a different transition experience than an adult who is entering higher education after years of being in the military. Tinto (1993) also noted that these stages do not always occur in a distinct sequence. Some students may experience overlap, such as an

overlap in transition to the higher education community while also incorporation into the local community. Others may experience repetition, such as transitioning to graduate school after transitioning at the undergraduate level. Finally, he noted that all students may experience some difficulty in transitioning to higher education, but those who are unable to cope with transition and adjustment challenges may withdraw from college (Tinto, 1993). On the other hand, he also stated that while assistance by higher education institutions can help ease this transition stage, students themselves must also have a willingness to see through their adjustment to the new environment (Tinto, 1993).

Schlossberg, Waters, and Goodman's Transition Theory

Another relevant student development theory on transition is that by Schlossberg, Waters, and Goodman (1995), which was originally conceptualized to examine coping with adult life transitions. However, it can also be used to describe the transition experience of students in higher education (Evans et al., 2009). Not only does Schlossberg and colleagues' (1995) transition theory focus on the transition process itself, but it also describes the resources available for individuals going through the transition. More importantly, they wrote the transition theory for counselors, so that they could understand the transition process and subsequently assist their clients. In the context of higher education, this transition theory is useful for administrators to support students more effectively. It is for these reasons that Schlossberg, Waters, and Goodman's (1995) transition theory is useful for understanding the transition and adjustment of international students as well as for highlighting the institutional supports needed to facilitate their transition and adjustment.

Schlossberg and colleagues defined a transition as “any event, or non-event, that results in changed relationships, routines, assumptions, and roles” (1995, p. 27). However, they also clarified that a transition is only such if it is defined by the person experiencing the change (Schlossberg et al, 1995). In other words, an event may affect an individual’s life that causes a change, but if they do not attach significance to the event, then it is not considered a transition. Schlossberg and colleagues (1995) further outlined three types of transitions: (a) anticipated, (b) unanticipated, and (c) non-event transitions. An anticipated transition is one that a person expects to happen, such as a planned graduation from college. An unanticipated transition is one that is not planned or predictable, such as the lockdown period during the COVID-19 pandemic. A non-event is a transition that was expected to happen but did not and yet it changed one’s life. An example of a non-event transition is an international student’s anticipated graduation from college that was delayed due to the COVID-19 pandemic, which delayed their return to their home country and forced them to prolong their stay in the U.S.

To describe the factors that influence how an individual faces a transition, Schlossberg, Waters, and Goodman (1995) created the transition model depicted in Figure 4 below. There are three main components to the transition model: (a) approaching transitions; (b) the transition process; and (c) potential resources. Approaching transitions refers to identifying the conditions and situations that shape the transition, as well as the perspective used to understand the transition. The transition process describes where an individual is in within the transition itself, as an individual’s reaction would change over time depending on whether they are moving in, moving through, or moving out of a transition. Finally, potential resources refer to

the various resources an individual has at their disposal to support them through the transition process.



Note. Adopted from Schlossberg, Waters, and Goodman (1995, p. 27)

Figure A4 Transition Model

Approaching Transitions

In approaching transitions, Schlossberg and colleagues (1995) identified three factors that influence how an individual reacts to a transition: (a) the type of transition; (b) the context in which it occurs; and (c) the impact it has on an individual. Types of transition may include an anticipated or unanticipated event, or a non-event, as described previously.

Context refers to the situation (e.g. cultural, social, or political) in which the transition occurs and the relationship between the individual and the transition (Schlossberg et al., 1995). For example, the onset of the global COVID-19 pandemic in 2020 brought about many different new measures, such as social distancing, masking, online learning, limitations on in-person gatherings, and international travel restrictions. For many new international students who had just arrived in early 2020, they were faced with not only the context of a new country and environment, but also the new contextual measures to curb the spread of COVID-19 and the cascading impacts of those measures (Koo, 2022).

The final aspect in approaching transitions is impact, which refers to the degree to which the change influences one's daily life (Schlossberg et al., 1995). There are several aspects of an individual's daily life that are impacted by a transition, such as their "relationships, routines, assumptions, and roles" (Anderson et al., 2012, p.47). In continuing with the example of the COVID-19 pandemic and the change to online classes, this transition created various impacts for international students' relationships, routines, and roles. For international students who were connecting to online classes remotely from different parts of the globe, this transition could have impacted their sleep routine, especially if the classes were conducted synchronously during late evening hours (Wang, 2022). Further, the isolation and limited opportunities for in-person interactions at the onset and height of the COVID-19 pandemic impacted international students' social relationships (Mbous et al., 2022).

The Transition Process

The second major component of the transition model is the transition process. Schlossberg, Waters, and Goodman (1995) recognize that while the start of a

transition may be triggered by an event or non-event, a transition is a process that occurs over a period of time. Using a variety of relevant case studies and theories, Schlossberg and colleagues (1995) created an integrative model of transition to describe how an individual moves through different stages of a transition: (a) moving in, (b) moving through (between), and (c) moving out. The cyclical nature of Schlossberg and colleagues' (1995) integrative model is similar to that of Lizzio's (2011) student lifecycle framework, whereby his framework incorporated continuous transition between each stage of a transition (i.e., transition towards, transition in, transition through, and transitions up, out, and back).

During the *moving in* stage, an individual needs to become familiar with the new environment, rules, norms, and expectations. For example, Cemalcilar and Falbo (2008) asserted that the first four months of an international student's arrival in a new country can be challenging as they get to know their new environments and learn how to interact with these new environments. Further, the *moving in* phase encompasses assuming new roles, such as becoming a teaching assistant at a university, entering into new relationships like making friends with American students, and establishing new routines, such as going to lectures, labs, and studying at the library at specific times during the week (Schlossberg et al., 1995).

When an individual has learned the ropes of their new environment, this marks the *moving through* phase of the transition. In this phase, individuals may need help in sustaining energy and commitment to get through a long transition period and may also question their decision to make this transition. An example of this phase is when new international students have settled into a routine of going to classes and getting through the challenges of the first year (Koo et al., 2021).

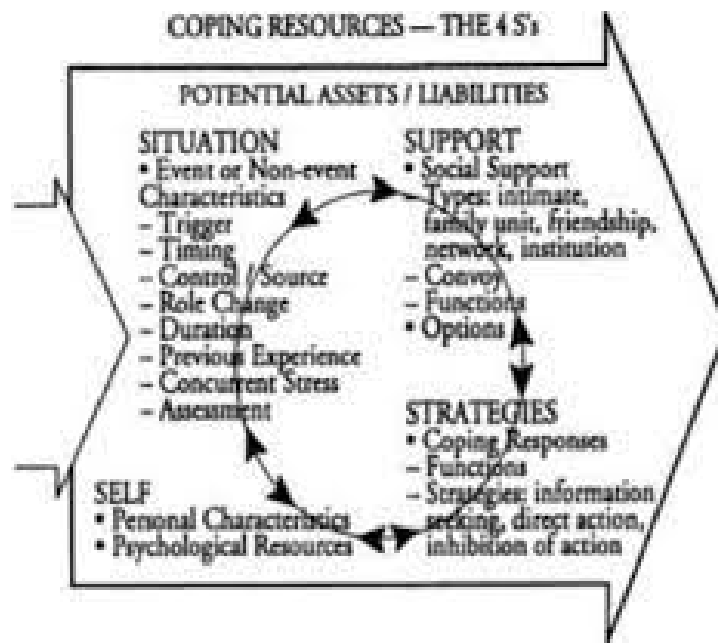
The *moving out* phase is typically characterized with the ending of a transition and into another. One example is the readjustment phase that Vietnamese graduate students experienced after graduating from U.S. higher education institutions and returning to their home countries (Le & Lacost, 2017). Le and Lacost's (2017) study indicated that readjustment to Vietnam was harder than the transition to the U.S. In this phase, there is a sense of loss of the former roles, resources, relationships, and structures. Schlossberg and colleagues (1995) cite Kübler-Ross's (1969) five stages of grief (denial, anger, bargaining, depression, and acceptance) as a way of explaining this phase.

Potential Resources

Finally, the third major component of the transition model is the potential resources, which is the cornerstone of Schlossberg, Waters, and Goodman's (1995) transition theory. This component is called the 4 S System (also known as the 4S's).⁶ The 4 S System is a model of coping resources that are available to an individual when responding to a transition, depicted in Figure 5. The 4S's, known as Situation, Self, Support, and Strategies influence an individual's ability to cope during a transition. In the context of international students, the 4S's model helps to frame the various factors

⁶ Schlossberg's initial conceptualization of the transition theory was first published in *The Counseling Psychologist* in 1981. As a response to critiques of her theory, she re-conceptualized both the theory and model in a book published in 1984, *Counseling Adults in Transition*. Then, in 1989, Schlossberg further modified her theory (which would later be integrated into a more holistic model in the second edition of *Counseling Adults in Transition* in 1995) in a book entitled *Overwhelmed*, which is where the 4S's model was first introduced—despite the 1995 book being the most cited source of the 4S's model. For this literature review, I use the 1995 reference, as it represents a more comprehensive theory and model of transition compared to her earlier work.

and resources that international students may have to cope with and address potential challenges that may arise as a result of the multi-dimensional transitions that they experience. This model also provides a foundation to understand some of the common elements of the transition and adjustment experience of new international students while also acknowledging the unique and personal situations of students. The following sections explore each of the resources in the 4S's model as it relates to resources for the transition and adjustment of international students in higher education institutions. In examining the different resources available to international students, it is also important to take into account the unique academic, socio-cultural, and daily life transition needs of undergraduate and graduate students. In this way, the appropriate resources are aligned with the transition needs of each student group.



Note. Adopted from Schlossberg, Waters, and Goodman (1995, p. 48)

Figure A5 Schlossberg, Waters, and Goodman's 4 S System

The 4S's: Situation

The first S, *Situation*, refers to the characteristics used to describe one's transition. Schlossberg and colleagues (1995) outlined eight characteristics:

1. **Trigger:** Something that sets off a transition. This could include something external that triggers an internal consequence and a transition. For example, a close friend's heart attack triggers an individual's realization to take better care of herself. The individual makes a transition to creating a healthier lifestyle.
2. **Timing:** Whether a transition is happening at a "good time" or a "bad time" in one's life, which may make it easier or more difficult to go through the transition. For example, an individual's unexpected pregnancy may occur at a time when they are at the peak of their career and unprepared to have a child. An unexpected situation may make it challenging for them to go through this transition.
3. **Control:** The extent to which can an individual control the transition. An individual's sense of control over a transition can be influenced by their competence and level of self-efficacy as a response to the trigger. For example, an individual who moves abroad voluntarily to pursue a degree may have more control over their transition compared to another individual who was pressured by their family to move abroad (Schartner & Young,

2016).

4. Role change: Whether an individual experiences a role change during the transition, which may determine the impact of the transition. A role change may include a role gain (such as gaining new responsibilities in a job) or a role loss (such as the loss of a family member). Schlossberg and colleagues (1995) emphasize that some degree of stress will occur no matter whether it is role gain or a role loss.
5. Duration: Whether the transition is seen as temporary or permanent, which affects the ease or difficulty of getting through the transition. For example, a transition that is seen as arduous, such as may be perceived as tolerable, if the individual perceives it to be temporary.
6. Previous experience: Whether the transition is one that an individual had encountered before. It is presumed that if an individual had successfully navigated a transition in the past, they would be able to do so for a transition that is similar. For example, international students with prior overseas experience adjust more easily as they are experienced with cross-cultural transition (Schartner & Young, 2016). Students with prior experience of a transition may know what to expect, thereby reducing the level of uncertainty and lessening the level of stress during the transition (Black et al., 1991).

7. Concurrent stress: Whether there are other areas in one's life that are causing stress at the same time of the transition. For example, some scholars have coined international students' transition as a triple-transition, whereby international students are moving into a new country, moving to a new educational system, and moving into a different level of academic study (Jindal-Snape & Ingram, 2013).
8. Assessment of the nature of the transition: An individual's attribution of who or what is responsible for the transition influences whether they view the transition as positive, negative, or neutral. For example, if an individual thinks that the cause of their job loss is a result of their own deficiencies, they might view the transition as negative and experience challenges in getting through the transition.

In the context of international students, some of the most relevant characteristics include role change, previous experience, and concurrent stress. These characteristics may play a bigger role in international students' transitions compared to others. An example of a role change is a new international graduate student who must adjust to being a teaching assistant at their host institution. In terms of previous experience, a study by Schartner and Young (2016) suggested that international students with prior overseas experience adjust more easily as they are experienced with cross-cultural transition. Finally, with regards to concurrent stress, new international students may be experiencing other stresses with their move to a new country, such as challenges with finding housing, understanding the new education

system, and navigating the local transportation. In formulating institutional support, practitioners should consider these various characteristics of a transition and be attuned to how the different characteristics affect new international students.

The 4S's: Self

The second S, *Self*, involves aspects that the individual brings into the transition. Schlossberg and colleagues (1995) outline two major aspects in Self as a resource, the first one being personal and demographic characteristics, which include socioeconomic status, gender, age and stage of life, state of health, and ethnicity. The second aspect of Self involves psychological resources, which include ego development, outlook, commitments, and values.

In the context of international students, there are differing needs of international students in their transition and adjustment based on personal and demographic characteristics, such as education level (Elturki et al., 2019; Krsmanovic, 2020), country of origin (e.g., Brutt-Griffler et al., 2020; Chen & Zhou, 2019; Heng, 2018; Montgomery, 2017), and gender (Arafah, 2020). For example, graduate international students, who typically bring their family with them to the U.S., may have needs related to finding activities for their spouses and schools for their children. Personal characteristics can also serve as resources for international students. For example, international students who had higher levels of English proficiency reported less challenges in their transition compared to those who were less proficient in English (Duru & Poyrazli, 2011; Poyrazli et al., 2004). However, practitioners should avoid overgeneralizations of these personal and demographic characteristics to avoid perpetuating deficit assumptions of international students.

Schlossberg, Waters, and Goodman (1995) describe psychological resources as personal characteristics that are used to help an individual respond to stressors. One of these psychological resources include ego development, which can be understood as level of maturity (Schlossberg et al., 1995). They explain that knowing the level of maturity of an individual that is going through a transition may help tailor the intervention appropriately. For example, a study found that undergraduate international students tend to have lower levels of skills to relate with their peers compared to graduate international students (Oyeniya, Smith, Watson, & Nelson, 2021; Zhang & Jung, 2017). This may be due to them being younger and having less opportunities to build those relational skills (Oyeniya et al., 2021). Therefore, some programs might be targeted at addressing specific undergraduate transition challenges, such as social integration, that are commensurate with their developmental stage as young adults.

The 4S's: Strategies

The third S, Strategy, refers to individuals' coping responses during the transition. There are three main coping responses that individuals use during a transition: (a) responses used to modify the situation, (b) responses to control the meaning of the situation, and (c) responses to control the stress (Schlossberg et al., 1995). Responses to modify the situation refer to responses that are directed at altering the source of stress, such as seeking out support or advice from advisors and mentors. Responses to control the meaning of the situation refer to actions that cognitively neutralize the source of stress, such as ignoring the problem or re-prioritizing an issue to make it less significant. Finally, responses that control the stress include venting out or suppressing emotions. Individuals may be best served by being flexible and use a

mixed methods of coping strategies (Schlossberg et al., 1995). For example, Gebhard (2012) discussed a variety of emotion-based coping strategies that international students have found to be helpful, which include reminders of home culture (response to control the meaning of the situation), humor (response to control the meaning of the situation), and being around their social support (response to control the stress). Other studies have highlighted how information seeking behavior, which could serve as a coping strategy (i.e., response that modify the situation), has been underutilized by international students (Bastien et al., 2018; Brunsting et al., 2018a). Although many different resources or information are available to assist with a transition, individuals who do not use a strategy or mix of strategies to seek out these resources or information may experience challenges in their transition.

The 4S's: Support

The fourth S, Support, refers to the types of social support that an individual has (or has not) to cope during a transition (Schlossberg et al., 1995). According to Schlossberg and colleagues (1995), there are four sources of support: (a) intimate relationships; (b) family; (c) friends and network; and (d) the institution and community of which the individual is a part. As such, the following sub-sections explore examples of sources of support for international students in their transition, namely from intimate relationships (spouses and partners), family, friends and network (co-national students and peers), and institutional support (orientation and first year seminars).

Intimate Relationships

Some case studies have found that married international students tend to not expand their social circles as they were able to find support from their spouses (Lynch,

2008; Poyrazli & Kavanaugh, 2006; Sakamoto, 2006). On the other hand, international students who did not receive support from their spouses experienced more challenges in their transition and adjustment to the new culture and environment (Zhang et al., 2011).

Family Support

Family members are well-documented sources of support for international students (Chai et al., 2020; Martirosyan et al., 2019; Qu, 2021). Connections with family members provide emotional support for students that facilitates their adjustment and engagement with their new environments (Cho & Yu, 2015; Montgomery, 2017). For some students, even host families in the U.S. became an important source of support to alleviate homesickness and loneliness (Le et al., 2016).

Co-national Support and Peer Mentoring

While there are many studies that advocate for improved quality of interaction between international students and domestic students (e.g., Arkoudis & Baik, 2010, S. Li & Zizzi, 2018), other studies have found that co-national students (i.e., students from the same country of origin) play an important role of supporting each other during their transition and adjustment periods (Magalhães Major, 2005; Qu, 2021). Part of the reason for why co-nationals play a large role in international students' experience involve sharing a common language and culture, which are moderating factors in reducing the acculturative stress that may occur during the transition and adjustment period (Dellinger, 2014). However, sharing a common language and culture does not necessarily mean that co-nationals could be a source of support. Differing tribes, religion, political views, socio-economic status, and other demographic or cultural characteristics within the same country may instead become a

source of tension or conflict. International students who see these differences as a source of discomfort will not utilize their co-nationals as a source or support. Additionally, the co-national communities may also expedite the transmission and sharing of information, such as through social media, during the transition and adjustment phase for new international students (Oh & Butler, 2018).

Along the same lines, peer mentoring, whether it is structured by the institution or formed organically by students themselves, is also another source of social support for international students (Abe et al., 1998; Menzies et al., 2015; Pekerti et al., 2021). Peer mentoring refers to current students within the host institutions who act as a role model to guide new students to orient them with their new environments (Harmon, 2006). Mentors are knowledgeable in the local culture and can help new international students navigate specific situations in the local culture (Pekerti et al., 2021). The type of advice or information the peer mentors provide can range from academic issues to questions about where to purchase international foods. Institution-sponsored peer mentoring programs are typically structured so that mentors are trained in intercultural communication skills. Fox (2020) documented that pairing Chinese students in an intensive English program with American students who are trained in intercultural communication skills improved the Chinese students' English language proficiency and cultural knowledge. Informal or organic peer mentoring may occur from student organizations, informal networks of student groups, or from specific departments, such as graduate students in the same lab.

Institutional Support.

Schlossberg, Waters, and Goodman (1995) outlined that institutions and communities to which the individual belong can serve as a source of social support. In

the case of international students, the main institution from which students can draw support is their host institution. There are several support offices or individuals at a host institution that can serve as sources of support during a transition, including the international student and scholar services office (Briggs & Ammigan, 2017; Madden-Dent et al., 2019), faculty (Arthur, 2017; Glass et al., 2017), English language programs (Hoekje & Stevens, 2018; Martirosyan et al., 2019), and the counseling center (Lau et al., 2019). International student satisfaction with these institutional support services have shown to strengthen student retention (Sullivan, 2021), propensity to recommend the institution to others (Ammigan, 2019), and sense of belonging (Alinda, 2021). One of the main ways institutions provide support is through orientation programming.

Orientation Programming

The third section of the literature review focuses on the orientation programming provided by institutions of higher education. The host institution can provide support that is consistent with the student lifecycle. As described previously, there are four main stages of an international student experience at host institutions: pre-arrival, arrival, during stay, and re-integration (Perez-Encinas & Rodriguez-Pomeda, 2018). Based on this student lifecycle, there are a series of transitions that students experience, such as transitioning into the university (new students) and transitioning out (graduating students). In alignment with these stages and transitions, many institutions have designed orientation programming for students to assist them

with these transitions, including pre-arrival (and/or pre-departure⁷) orientation, upon-arrival orientation, and re-entry orientation (returning to their home country).

The following sub-sections describe three types of orientation programming that host institutions have typically provided for new international students: pre-arrival orientation, upon- arrival orientation, and extended orientation. Pre-arrival orientation programs are typically offered prior to international students' arrival to the U.S., which can range from preparation to apply for the visa to understanding health insurance in the U.S. (Madden-Dent et al., 2019). International student upon-arrival orientation is typically held in person before the beginning of classes and is held in addition to the general student orientation programs, such as new undergraduate or new graduate student orientation. Finally, extended orientation is a program that is carried out after the upon-arrival orientation and takes place throughout the first semester. One common form of extended orientation is the First Year Seminar that is targeted for new undergraduate students.

⁷ In the context of new international students arriving in the U.S., pre-arrival and pre-departure may mean the same thing. However, for the purposes of this ELP and in the context of UD, pre-arrival orientation is the orientation provided by staff of the higher education institution from within the U.S. that is delivered to new international students to prepare for their arrival to the U.S. Meanwhile, many U.S. higher education institutions have begun to conduct pre-departure orientations for new students and their parents at the country of the new students (e.g. Jeon-Huh, 2015). These events typically involve cross-campus collaboration, including alumni relations, admissions offices, the international office, and faculty. One of the objectives of this pre-departure orientation may include conveying information to prepare students to travel to the U.S., but it also may include communicating a message of welcome to the institution, generating excitement to join the institution (and yield unconvinced students), meeting with parents and high-school counselors, and establishing brand recognition within the country. Additionally, with many different units on the trip, this program might also be conducted in different cities within the country and include other agendas, such as recruitment, networking with alumni, and parent orientation.

Pre-arrival Orientation

In the literature, pre-arrival orientation is a type of programming that is typically offered prior to new international students' arrival in the U.S. (Madden-Dent et al., 2019). Pre-arrival, or also known as pre-departure orientation, is also most commonly associated with U.S. students who are preparing to study abroad (Punteney, 2019). The focus of a pre-departure orientation is to facilitate student learning during their experience abroad and prepare for logistics of the study abroad experience (Punteney, 2019).

In the context of international students, the goal of a pre-arrival orientation may range from preparing students to prepare for the visa interview to preparing for the new academic and social environment they are entering into. Khanal and Gaulee (2019) found that some of the major challenges that international students face prior to arriving in their host institution is finding accurate information and preparing for the visa application process. Unfortunately, a study that interviewed staff and reviewed the websites of international offices of 200 U.S. universities and colleges found that pre-arrival support is one of the least provided service for new international students (Madden-Dent et al., 2019). A small number of studies have demonstrated the positive correlation between pre-arrival support and international students' transition and adjustment. A case study from Drexel University indicates that a pre-departure orientation (held in two cities in China) offered the opportunity for new students to make connections with Drexel students, faculty, and staff, which they attribute to helping them create a support group once they arrived at the university (Jeon-Huh, 2015). Another study found that pre-departure knowledge of mainland Chinese scholars and students in Singapore was helpful for adjustment to the new environment,

which in turn led to increased academic performance (Tsang, 2001). Other studies have also promoted the importance of pre-arrival orientation programs for new international students (Garza, 2015; Hagar, 2014; Kambouropoulos, 2014).

On the other hand, pre-arrival support need not only originate from the institution. A study showed that international students were active participants in preparing for their move to the United Kingdom (U.K.) in addition to relying on institutional pre-arrival support (López, 2021). Students used different strategies to minimize the potential challenges they thought they would face when arriving in the U.K., such as connecting with roommates early in the process to prevent loneliness and dedicating time to become familiar with British English. This study, along with Madden-Dent and colleagues' (2019) study, showed the importance of providing pre-arrival support for new international students. Pre-arrival support is necessary to assist those who have not made preparations on their own (perhaps because it is difficult to gauge what preparation is needed until after the students experience issues upon arrival) as well as to complement the preparation of students who have made preparations of their own.

Although Madden-Dent and colleagues (2019) stated that pre-arrival orientation is the least provided service for international students, there are host institutions that have developed comprehensive pre-arrival orientation programs. One such example is the University of Minnesota, who developed an online pre-arrival orientation program called the International Student Preparation Course (iPrep) (Mohamed et al., 2021). The iPrep course is a mandatory, self-paced series of online modules for new international students enrolled at University of Minnesota (Mohamed et al., 2021). It complements the in-person international student orientation program,

which takes place after the students arrive in the U.S. The course covers topics such as understanding immigration documents, preparing to travel to the U.S., housing resources, understanding American classrooms, and how to find a job on campus (Mohamed et al., 2021). Since the iPrep course focused on legal and practical matters, the emphasis of the in-person orientation program is on socialization events and understanding campus resources (Mohamed et al., 2021). Furthermore, even after new international students completed the iPrep course, they were able to have continued access to the modules. This means that the iPrep Course information can continue to be useful throughout the first semester, thus avoiding information overload, which is a common criticism of many international student orientation programs (Forbes-Mewett & Sawyer, 2016; Jean-Francois, 2019).

Upon-arrival Orientation

Upon-arrival orientation, or most commonly known as international student orientation, is one of the most commonly provided international student support services (Madden-Dent et al., 2019; Martirosyan et al., 2019). Traditionally, many host institutions provide international student orientation after new students have arrived in the U.S., with the premise that the orientation is held in person. However, the COVID-19 pandemic has changed that model, as the quarantine and travel restrictions in 2020 and 2021 made it close to impossible to hold any in-person mass events for new international students to travel to the U.S. Many host institutions were forced to provide international student orientation via virtual means, such as Zoom or other online modalities. This modality shift may continue to influence orientation programming in the future, where some institutions may choose to utilize a hybrid orientation model.

The review of upon-arrival orientation begins with a general overview of campus-wide new student orientation programming, which is conducted for all new students, both undergraduate and graduate. The goals and models of campus-wide new student orientation are also discussed. The review of campus-wide new student orientation provides a foundation for understanding how international student orientation serves to provide additional and specialized services for international students. After the general overview, the discussion focuses on the international student context and how international student orientation compares with campus-wide new student orientation programming. The last point describes the guiding principles and standards, design factors for an effective international student orientation, and limitations of international student orientation.

Campus-wide new student orientation programming

Upcraft and Farnsworth (1984) defined orientation as a way for the institution to help new students transition to the university environment and facilitate their success at the institution. Based on the Council for the Advancement of Standards (CAS) (2019), as well as a number of scholars (Jacobs, 2003; Mack, 2010; Mullendore & Banahan, 2005), orientation for undergraduate students typically seeks to accomplish the following goals:

- (a) Facilitate academic success by explaining academic expectations, regulations, and procedures, and describing students' academic responsibilities;
- (b) Assist new students in their transition and adjustment by explaining social and cultural values and expectations and providing information on campus resources, social programs, and leadership opportunities;

- (c) Assist parents and family members to understand the college environment and how to support their students; and
- (d) Provide higher education institutions an opportunity to understand the cohort of new students.

At the graduate level, host institutions also provide orientation programming for new graduate students (Poock, 2008). New student orientation for graduate students also seeks to facilitate the transition into their profession (Boyle & Boice, 1998; Golde, 1998 as cited in Poock, 2008, p. 92). This is typically accomplished through departmental-level orientations, which focus on academic topics and provide more opportunities for students to socialize with their cohort and learn the norms of their professions (Poock, 2008).

Depending on their situations, higher education institutions conduct different types of campus-wide new student orientations. Many institutions traditionally conduct orientation in the summer, which brings students (and often their parents) to campus (Mann et al., 2010). This model focuses on course registration and introducing students to institutional expectations and resources (Mann et al., 2010). International students are typically unable to attend these events, due to the immigration regulation that do not allow international students on an F-1 or J-1 visa to enter the U.S. more than 30 days before the start of the semester. Other higher education institutions, typically smaller institutions, conduct orientation at the beginning of the semester, which could last between one day to an entire week (Mann et al., 2010). Graduate student orientation is also typically conducted in one day at the beginning of the semester (Poock, 2008). International students typically attend these campus-wide orientation programs immediately after they arrived in the U.S. (Hoekje & Stevens,

2018; Young & Althen, 2013). The topics that are covered in these campus-wide new student orientations are broad and are aimed at all students.

International Student Orientation

In addition to the general campus-wide orientation programs, many institutions have provided additional orientation programs for special populations, including transfer students, athletes, honors students, and international students (Jacobs, 2003; Mann et al., 2010). These orientation programs are often delivered to complement the campus-wide new student orientation and meet the unique needs of the specific student population (Jacobs, 2003; Mann et al., 2010). International student orientation is one of the most commonly provided services for new international students (Madden-Dent et al., 2019). Unfortunately, there is a surprising dearth of literature that specifically outlines and discusses features of an effective international student orientation event/program. For instance, there is a limited number of articles found in *The Journal of College Orientation, Transition, and Retention*, the primary journal with a specific focus on orientation programming in higher education. A search for “international students” in the journal only yielded four articles focusing on international student orientation. Other articles that mention international student orientation tend to focus on its role and importance for the transition and adjustment of international students (Güvendir, 2018; Koo et al., 2021; Madden-Dent et al., 2019; Schartner & Young, 2016), but few discuss effective designs of orientation programs (e.g. Meyer, 2001; Mohamed et al., 2021). The following sub-section aims to address this gap by describing guiding principles, necessary content, modes of delivering information, ways of facilitating socialization, and sequence and timing of delivering content.

There are three broad goals of international student orientation: (a) to accelerate international students' adjustment to the U.S. culture and academic culture; (b) to help students learn to gather information about campus resources on their own (assuming that new students would not be able to retain all the information provided during the orientation); and (c) to facilitate new international students' interactions with domestic students, faculty, and staff, who include international student advisors (Althen, 1990). Compared to the goals of campus-wide new student orientation, the goals of international student orientation are geared to address the unique transition and adjustment needs of international students. These goals are also reflected in the information content that scholars and practitioners recommend be included in an orientation program, which is described in the subsection on design factors for orientation.

Guiding principles of international student orientation.

To achieve the goals of international student orientation, it is important to consider a number of principles, design and organizational factors, and innovations in orientation programming. This sub-section looks at a number of guiding principles for international student orientation planners to consider. Meyer (2001) suggested eight principles for conducting an effective comprehensive international student orientation:

1. Meet international students' needs: Based on Maslow's (1954) hierarchy of needs, an orientation program first addresses physiological and safety needs of students (such as finding housing), then addresses sense of belonging, esteem, and self-actualization needs (such as making friends and connecting with faculty).

2. Establish clear purposes: The purpose of an international student orientation is clear to the students. Students know why each topic or programmatic component is presented and how they are useful for their transition.
3. Use theory to guide orientation practice: International student planners use theories related to human development and learning. Since orientation programs are a form of learning for new students, theories such as adult learning (Knowles et al., 2020) may be useful in designing an effective program.
4. Facilitate learning how to learn: Due to the large amount of information that new students need to absorb, it is impossible and impractical to provide all the information all at once. Instead, international student orientation provides information on where students can find resources and how to find these resources.
5. Promote intercultural learning and cross-cultural adjustment: The international student orientation program makes clear that intercultural learning is part of the transition process and promotes dispositions and behaviors to engage with new cultures.
6. Be culturally inclusive and demonstrate language sensitivity: International student planners are mindful of their use of language (e.g., word choice, tone, speed) and avoid using slang, jargon, and long sentences when conveying important information. They also are mindful of cultural sensitivities and respect international students' pride in their culture.
7. Collaborate: Since a single office cannot meet the information and socialization needs of international students, effective deliver of orientation

requires collaboration with other offices on campus, senior administration (for a formal welcome), faculty, and the community.

8. Assess: To know whether the international student orientation program achieved its goal and to be able to make improvements for future programs, planners incorporate assessment as part of the orientation program.

Some of Meyer's (2001) principles are echoed by other scholars and are worth noting here. For example, Briggs and Ammigan (2017) emphasized the importance of collaboration across campus when providing programs to support international student success. They asserted that the Collaborative Programming and Outreach model facilitates the building of an inclusive community on campus where international students feel welcomed and engaged, which leads to a sense of belonging and positive experience (Briggs & Ammigan, 2017). This model also allows international student and scholar services offices to be able to provide linkages to expertise and resources that are beyond their own, such as career services, academic support, and mental health (Briggs & Ammigan, 2017). These linkages are important to provide a comprehensive international student orientation program that meets international students' needs.

Another principle from Meyer's (2001) list that is highlighted elsewhere is the importance of assessment. Daddona and Cooper (2002) measured the effectiveness of an orientation program by determining students' needs prior to the orientation program. They asserted that one measure of an effective orientation program is the extent to which the orientation was able to meet students' most pressing needs (Daddona & Cooper, 2002). They conducted a survey before and after an orientation program to discover students' most pressing needs (Daddona & Cooper, 2002). They

also assessed the program by analyzing whether the level of importance of the pre-orientation needs decreased after orientation (Daddona & Cooper, 2002). A measure like the one Daddona and Cooper (2002) conducted might help inform how an orientation program is designed and what types of information should be included for subsequent programs. Embedding an assessment or evaluation method as part of the design of the orientation program facilitates continuous improvements to better support international students' transition and adjustment (Giancola, 2021).

Young and Althen (2013) added a few more considerations for an international student orientation program:

1. Be mindful of international students' capacity to absorb information:
International students are likely to be influenced by jetlag, adjustment to the U.S. accent, preoccupation with more urgent logistical matters (such as finding housing), and anxiety due to uncertainties/unfamiliarity with the new setting. All of these influences international students' abilities to process new information.
2. Consider inviting a high-level official: Some students come from cultures where formality and ceremony are important. Inviting a high-level official or administration to officially welcome the new students signifies the host institution is sensitive and respectful of students' cultures.
3. Introduce support staff: Staff from the international student and scholar services office are those with whom the new students will most likely and most often encounter and interact. This introduction also serves as a way of welcoming new students to campus.

4. Include fellow international students and academic departments in the orientation program: Peer students and faculty are those with whom new students are most likely to form affiliations. This introduction helps facilitate early socialization and familiarity with the new social setting.

Unlike Meyer (2001), Young and Althen (2005) take a more practical approach in thinking about guidelines for designing an orientation program. Their approach is directed at creating a program that is welcoming and reassuring for new international students as they navigate a new setting. The foci of the orientation program are creating a welcoming environment and establishing early networks with peer students, staff, and faculty in order for international students to develop a sense of belonging. A sense of belonging to the host institution and local community enhances students' academic performance (Glass & Westmont, 2014), boosts students' confidence and lessens anxiety associated with moving to a new country (Chen & Zhou, 2019), and overall supports their transition and adjustment to the new host institution (Le et al., 2016; Rivas et al., 2019).

Finally, an additional principle is to ensure inclusivity by meeting the needs of a heterogeneous international student population (Ward-Roof & Guthrie, 2010). Although the literature typically groups international students as one social category, they are heterogeneous in terms of level of education, country of origin, gender, language proficiency of the host country, marital status, age, socio-economic status, and so on. This means that international student orientation planners should take into consideration this diversity when designing an effective orientation program.

These guiding principles serve as a conceptual basis to guide orientation planners as they design and think about creating an effective orientation program for

new international students. The following subsection reviews some of the more practical considerations in designing an effective international student orientation program.

Design factors.

Based on a synthesis of the literature on orientation programming, there are two main purposes of an orientation program. One purpose is to convey information, such as explaining academic expectations, students' responsibilities, learning about resources and rules. The second purpose is to facilitate socialization (e.g., making friends). In order to serve both purposes, planners should address the following guiding questions:

1. What content should be included in an international student orientation program?
2. How should information be most effectively conveyed to international students?
3. How should socialization be best facilitated during an international student orientation program?
4. When should the information and socialization events be delivered and how often?
5. What media should be used to deliver this information and socialization events?

1. What content should be included in an international student orientation program?

In addressing the unique transition and adjustment needs of international students, international student orientation programs generally include four major topics. The first one is immigration regulations. Since one of the biggest defining characteristic of an international student is their immigration status in the U.S., it is not surprising that the main topic that is conveyed at an international student orientation program centers on immigration regulations (Council for the Advancement of Standards in Higher Education, 2019; Young & Althen, 2013). During international student orientation, students gain an understanding of the different immigration regulations that govern their visa status in the U.S., their responsibilities in meeting immigration requirements, and how the regulations and responsibilities are connected to their academic career (Young & Althen, 2013). It is this topic that primarily differentiates international student orientation from other campus-wide new student orientation programs.

The second main topic is information about the American academic system and culture (Althen, 1990; Council for the Advancement of Standards in Higher Education, 2019). Since many international students come from countries that have different education systems and academic expectations from that of the U.S., navigating a new academic environment may be challenging for some (Perry et al., 2016). Including information such as etiquette for addressing and interacting with faculty, interpretation of academic honesty policies, and classroom expectations (Andrade, 2006) may help international students become better prepared for their academic program.

The third main topic is navigating the local culture. Examples include adjusting to a new place and its accompanying customs and culture (Terrazas-Carrillo

et al., 2014), understanding non-verbal behavior within American culture (Jacob & Greggo, 2001), and adjusting to new foods (Alakaam, 2016). This is an area that many international students may find challenging and cause acculturative stress (Smith & Khawaja, 2011; Wu et al., 2015). Furthermore, these challenges in adjusting to a new culture typically are most intense during students' first year of college (Cemalcilar & Falbo, 2008; Starr-Glass, 2016). Therefore, including information on how to navigate the new culture and providing an adequate support system at this time in the student lifecycle would be helpful to reduce acculturative stress.

Finally, the fourth main topic is information about practical matters and where to find resources to fulfill these practical matters (Althen, 1990; Council for the Advancement of Standards in Higher Education, 2019). Examples include finding housing, applying for a Social Security Number, and getting around the new location (Yoon & Chung, 2017). The Department of State requires that institutions hosting J-1 exchange visitors, which include students and scholars, provide an orientation program that cover topics related to life and customs in the U.S., local resources, healthcare and health insurance resources, rules that students and scholars need to follow, and contact information of immigration advisors and the Department of State (BridgeUSA, n.d.). These are topics that the U.S. government deemed important and necessary to facilitate a smoother transition into the community and new environment.

Based on the recommendations, standards, and requirements outlined above, an international student orientation program generally covers topics related to immigration regulations, campus and community resources (daily life topics), and cultural adjustment to the academic and social community. Scholars caution against providing too much information all at once during an international student orientation,

which can overwhelm students (Forbes-Mewett & Sawyer, 2016; Jean-Francois, 2019; Punteney, 2019). Therefore, international student orientation planners should take into account how and when to convey all of these important topics to new international students.

2. How should information be most effectively conveyed to international students?

Since one of the purposes of international student orientation is to convey a variety of information, it is important to consider what Chang and colleagues (2021) coin as “the digital information ecology of international students,” that is, “the relationship between information seekers/users and their digital information environments” (p.3). The information ecology includes aspects of what is already known, which sources are considered reliable, tools to find both formal and informal information, the speed with which to gain access to information, and preferences and strategies used to find information (Chang et al., 2021). Chang and colleagues (2021) posit that the information ecology works smoothly in a familiar setting. For example, when we are at home, it is easy to navigate how to find a nearby restaurant online, because we know the local language, are used to the search tools, and know which sources to trust for local reviews. However, whenever the context or setting changes, this information ecology is fragile (Chang et al., 2021). For example, as a visitor in a new country with limited knowledge of the local language, it may take longer for the individual to navigate how to find a nearby restaurant online, because the information and reviews may be in the local language and they do not have the local context to know which review is reliable. As many host institutions typically provide information to international students on their websites, the digital ecology of international students

is important to consider. This subsection takes a short detour into understanding the digital information ecology of international students, which has implications for how to present information to international students.

Chang and colleagues (2021) outlined seven aspects that need to be understood about the information ecology of international students:

- a) Information topics or needs: As mentioned previously, there are a several specific topics that students seek during their transition, such as information related to their academic work and their daily lives. Understanding the specific information needs is critical to meet the needs of new international students.
- b) State of information needs: This aspect refers to whether students have a clear recognition of the need for information or whether there needs of information that students do not recognize. Since international students are in a new context, there may be needs that they did not recognize that they needed. Understanding this state of information will help host institutions to engage with international students in more than one way to provide critical information. Further description on this consideration is provided later.
- c) Motivations that drive information needs: Students will have different drivers in seeking out information. For example, some students may seek information to learn something new, such as how to apply for a student visa. Others may seek information to find accurate information on a topic they already know about, such as the exact amount of the visa application fee.

- d) Information channels and formats: International students use different types of digital channels to find information, which include both offline and online channels. Offline channels include conversations with staff, peer mentors, faculty, and agents. Online channels include websites and social media platforms. To ensure that international students' information needs are met, it is important to understand which channels are preferred, used by, and are accessible by international students.
- e) Information sources: This aspect refers to the online sources and people from which international students seek information. International students may rely on sources of information from their home country, but they may also incorporate the new sources of information in the host country and institution. Providing different options of new sources of information can help expand options of information sources and thereby facilitating ease of finding the needed information.
- f) Information behaviors: This aspect refers to the strategies that international students use to seek out, encounter, or use information. Understanding the behaviors of seeking information is important to consider when structuring information for new international students, because it could either help students find the information they need or result in frustration and information overload. This is especially true since new international students may have limited sources for reliable information and limited initial familiarity with new

sources of information.

- g) Temporal aspects of information: This aspect refers to the certain times or interval of times when international students seek out information.

Understanding in which instances or certain times in which students seek specific information could be valuable to ensuring that students have the information they seek at the time that they need it. Further description is provided below.

Two of these aspects merit further exploration in terms of this Education Leadership Portfolio: the state of information needs and temporal aspects of information. Because new international students are new to the local culture and environment, they may have information needs that they did not recognize that they needed. International student orientation plays a role in filling these information gaps. The state of information needs refers to whether or not students recognize what type of information they need, and whether or not they are able to articulate those needs. Alzougool and colleagues (2013) created an information needs model to visualize the state of information of international students, as depicted in Figure A6.

	Demanded	Undemanded
Recognized	Recognized Demanded	Recognized Undemanded
Unrecognized	Unrecognized Demanded	Unrecognized Undemanded

Note. Adapted from Alzougool and colleagues, 2013.

Figure A6 State of Information Matrix

Recognized needs involve those that students have identified that they need and *unrecognized* needs are those that they are not aware of that they need. Meanwhile, *demanded* needs are those that students choose to ask for or seek out and *undemanded* needs are those that students deliberately choose not to seek out. The matrix in Figure 6 shows how the two states of information needs converge in a matrix to create four categories. In the context of new international students, a *recognized and demanded need* is one that students want and actively seek for, such as how to apply for a job. An example of a *recognized but undemanded need* is recognizing a need for mental health support during initial homesickness but choosing not to seek information about counseling. An *unrecognized but demanded need* is one that students are unaware of and they are looking for it, but unable to articulate it. For example, students know that there are some COVID-related requirements for travelling to the U.S. (demanded need), but because they do not know what they are, they are unable to articulate what kind of requirements they are looking for (unrecognized). Finally, an *unrecognized and undemanded need* is one where students are not aware that they need it and also not actively seeking to find out about it. An example of this *unrecognized and*

undemanded need is not realizing the need to read or understand the student code of conduct at the beginning of the semester and thus not actively seeking out where to find it. An orientation program functions as a way to address not only demanded or recognized information needs, but also undemanded and unrecognized needs.

In addition to the state of information needs, the information ecology of international students includes the temporal aspect of the digital ecology. Chang and colleagues (2021) outlined four patterns in which international students are likely to seek information: (a) when preparing for particular contexts; (b) just in time; (c) response to incidents; and (d) recurring temporal rhythm (i.e., predictable moments when information needs occur, such as stressful times during finals). For new international students who are transitioning and adjusting to their new environments, the first two patterns are most relevant. When students are preparing to depart to a new country or preparing to study at a new university, they will actively seek out pertinent information in preparation for these events (Chang et al., 2021). It is at this time when a pre-arrival orientation will be most useful and highly sought out. Additionally, there are certain information topics that become more salient and necessary at certain times. For example, many students reported feeling lonely around the Thanksgiving holiday (Senyshyn, 2019). Therefore, providing and/or re-introducing information about counseling services at this time may be more effective compared to at the beginning of the semester.

3. How should socialization be best facilitated during an international student orientation program?

As mentioned previously, the two purposes of a typical international student orientation program are to convey information and facilitate socialization. Therefore,

it is critical to include socialization opportunities during an orientation program. Researchers have suggested that smaller groups may be more conducive to encourage interaction among new students and creating friendships (Mayhew et al., 2010; Thongsawat et al., 2019).

4. When should the information and socialization events be delivered and how often?

Some international student orientation programs take place over multiple days (Wessel & Reed, 2005), while others are conducted during a half day (Kimoto, 2009). Each of these program structures have strengths and weaknesses. Multiple-day orientations may not be logistically possible if other events are happening on campus or if there are staff and budgetary constraints. Two to three-hour orientation programs may run the risk of presenting too much information in a short period of time (Kimoto, 2009). As international student orientation is typically one of the first events that new international students may experience, a tight schedule and overload of information may cause students to feel overwhelmed and frustrated (Yu et al., 2016), which suggest that long orientations are also not always desirable.

Orientation planners also need to consider the temporal aspect of information needs, as described by Chang and colleagues (2021). There are certain topics that are best presented before students arrive in the U.S., while other topics are best delivered immediately after they arrive or during the first few months of the semester.

In terms of how often information should be conveyed, important information for new international students should be conveyed in more than one way and more than one time (Althen, 1990). This is especially important given that many students have just traveled long distances and are still adjusting to their new surroundings

(Althen, 1990). For example, following an international student orientation program, students might receive an additional handout or a list of links to resources that they could visit at a later time. Having a written resource may be especially beneficial for students who are culturally and linguistically diverse and may need additional time or resources to learn the new information (Hoekje & Stevens, 2018).

5. What media should be used to deliver this information and socialization events?

Most upon arrival orientation programs have traditionally been held in-person, typically close to the time that international students arrive at their host institutions (Punteney, 2019). However, with the global COVID-19 pandemic in 2020, many host institutions were not able to conduct in-person student orientation events. This change pushed many host institutions to adapt their orientation programming to a virtual model, such as Zoom (Chang & Gomes, 2021; Day, 2021; Veerasamy & Ammigan, 2021).

Similar to the dearth of literature on best practices and design factors for an effective international student orientation program, there are also limited publications on which media or combination of media should be used to deliver information and socialization events for an international student orientation program. One such publication is a case study of the orientation program at the University of Minnesota, which employs a hybrid model of online pre-arrival orientation course and in-person orientation program, which was described briefly in an earlier sub-section of this literature review (Mohamed et al., 2021). This model focuses most of the conveying of information during the pre-arrival orientation course and most of the socialization aspects during the in-person international student orientation (Mohamed et al., 2021).

This orientation model was created in an effort to address some of the limitations of current international student orientation programs.

Limitations of current international student orientation programs.

The main limitation of current international student orientation programs is that many are held for half or one day at the beginning of the semester (Koo et al., 2021; Punteney, 2019; Yu et al., 2016) and the programs tend to include too much information in a short period of time (Forbes-Mewett & Sawyer, 2016; Jean-Francois, 2019). Information overload renders the international student orientation program less useful, as the information is not well-absorbed and students do not have the appropriate information they need to navigate their transition. Another limitation is the lack of follow-up events to facilitate the transition after the initial international student orientation program (Madden-Dent et al., 2019; Punteney, 2019; Yu et al., 2016). As discussed previously in the sub-section on the information ecology of international students, the timing of providing information is important, as specific information needs become more salient during specific times (Chang et al., 2021). Therefore, providing information and resources to students at several points in time during the transition phase may be more appropriate.

In order to address both limitations, host institutions can offer an extended orientation that takes place during the first semester or even during the first year. Not only does this recommendation address the issue of information overload, but it also allows for a more just-in-time approach to providing resources. One of the main programs for extended orientation is the first-year seminar, which will be examined further in the next section.

Extended Orientation: First Year Seminars

This sub-section provides a brief review of first-year seminars (FYS), which many higher education institutions consider as extended orientations. The sub-section begins with the rationale, objectives, and format of FYS courses for all new undergraduate students. Then it zooms into the existing, yet limited, literature on FYS courses for international students, which include an overview of the objectives, design factors, and international students' perception of the FYS courses. This sub-section on FYS for international students complements the sub-section on orientation as a form of support that institutions can provide to aid the transition and adjustment of international students.

The Council for the Advancement of Standards sets outcomes for campus-wide student orientations. However, the outcomes are far too broad for one department (typically the New Student Orientation office) to achieve, given the time limitation of orientation programs (Skipper et al., 2010). As a way to achieve the outcomes, orientation professionals have expanded programming offering in collaboration with other departments. These programs include outdoor orientation experiences, service experiences, common reading programs, first year seminars (Skipper et al., 2010), peer mentoring (Abe et al., 1998) or some combination of these programs. First year seminars have become a popular curricular and co-curricular approach to achieve multiple objectives: (a) extend orientation programming to strengthen students' transition; (b) support student development and active participation in the learning process; and (c) familiarize students with campus services and resources (Hunter & Linder, 2005; National Resource Center for First-Year Experience and Students in Transition, 2013). These FYS courses often are offered as a credit-bearing course

during the first semester and involves a peer mentor in the seminar delivery (Hunter & Linder, 2005). According to a survey conducted by the National Resource Center for First-Year Experience and Students in Transition (2013), 89.7% of surveyed institutions in the U.S. reported they offered a first-year seminar.

Similar to the fact that new student orientation cannot achieve all of the desired outcomes, many international student orientation programs are limited in what they can achieve in the pre-arrival and upon-arrival orientation programs. In addition to the issue of information overload during upon-arrival orientation, there is also the temporal aspect of information (Chang et al., 2021), whereby certain information would be more appropriate to be conveyed throughout the first few months after arrival. Therefore, many host institutions have developed FYS courses for international students that focus on their unique transition and adjustment needs (Krsmanovic, 2019). However, there is a dearth of publications that discuss and assess FYS for international students. A search for literature on FYS courses for international students yielded nine peer-reviewed articles and three dissertations.

The literature on FYS courses for international students indicates there are three main objectives:

- a) Strengthen students' academic preparation, expectations, and skills
(Andrade, 2006, 2008; Cox et al., 2006; Dorsett, 2017; Kovtun, 2011; Snyder & Chesire, 2002; Yan & Sendall, 2016);
- b) Convey and have students become familiar with information on campus support services (Andrade, 2006, 2008; Fletcher-Anthony & Efthymiou,

2017); and

- c) Facilitate inter-cultural communication (Brunsting et al., 2018; Senyshyn, 2019; Snyder & Chesire, 2002).

Although the first two objectives are in line with the objectives of the general FYS course, some of the content may be tailored specifically for the international student context. For example, to facilitate learning academic skills, the FYS course may include content on understanding their professor's expectations and interacting with their professors. Because international students are in a new culture, they may not be familiar with academic behaviors expected in the U.S. educational system (Andrade, 2006; Kovtun, 2011; Snyder & Chesire, 2002). To convey information on campus support services, the FYS course for international students may include an introduction to important resource offices, such as the writing center and academic enrichment offices.

The third objective of an FYS course for international students, facilitating inter-cultural communication, differs from the objectives of the general FYS course. Brunsting and colleagues (2018) and Senyshyn (2019) argued that learning inter-cultural communication skills are necessary and important to be able to navigate cross-cultural situations. Through an FYS course that includes a focus on inter-cultural communication skills, it is expected that international students would be equipped to address cultural challenges, such as interacting with their domestic peers, communicating with their professors, and navigating issues with roommates.

The literature on FYS courses for international students also discussed a number of design and organizational factors to consider. For example, an FYS class

that included a mix of domestic and international students may allow for better interaction between the student groups, as it gave international students the opportunity to better understand American culture through discussions with their domestic peers (Yan & Sendall, 2016). Additionally, the choice of peer mentors in an FYS class may also influence the outcomes of an FYS class for international students. An international peer mentor may better understand the unique needs and challenges of new international students (Cox, Diefes-Dux, & Lee, 2006). Another aspect of the course design involves supplementing lectures with activities, such as icebreakers and games (Kovtun, 2011). International students reported that discussions, group games, and icebreakers were important and useful in facilitating socialization and creating a cohort amongst the students (Kovtun, 2011). Finally, Snyder and Chesire (2002) emphasized the importance of cross-campus collaboration in designing an FYS course for international students. They argued that not only does the content from various guest speakers enrich the curriculum, but international students are able to hear from the leaders of various support offices on campus and how those resources meet their unique needs (Snyder & Chesire, 2002).

Finally, although there are only a few publications on FYS courses for international students, these publications reveal the benefits that these courses provide to international students. Many studies have reported that international students found the FYS course to be useful and have had a positive impact on their academic and social experience (Andrade, 2006, 2008; Krsmanovic, 2019; Yan & Sendall, 2016). Specifically, students have credited the FYS course for helping them understand diversity in the U.S. and increase their comfort level in interacting with people from diverse backgrounds (Kovtun, 2011), obtaining a better understanding of American

culture (Yan & Sendall, 2016), and having a positive perception of mental health and support services (Fletcher-Anthony & Efthymiou, 2017; Kovtun, 2010). International students enrolled in FYS courses that focused more on inter-cultural communication skills reported higher perceived campus belonging and social support (Brunsting et al., 2018) compared to those that did not have a focus on inter-cultural communication skills. These findings point to the overall benefits of FYS courses that focus on the transition and adjustment needs of international students.

Conclusion

This paper synthesized the current literature on the transition and adjustment experience of international students in the United States. It started by building an understanding of the international student experience in the U.S., including enrollment trends, financial and cultural benefits that international students bring, their unique transition and adjustment needs, and the demographic diversity of the international student population. After establishing a foundation of the international student context, the paper discussed a number of different frameworks of student lifecycles.

The subsequent major section discussed theories on student transition and adjustment, namely Tinto's (1993) theory of student departure and Schlossberg, Waters, and Goodman's (1995) transition theory. Both theories were examined to better understand the transition process and how it influences the international student experience.

After establishing a conceptual understanding of international student transition and adjustment, the final major section of the literature review focused on the practical aspects of transition and adjustment. In this section, orientation programming was discussed because it is a necessary institutional service to support

the transition and adjustment experience of international students. Three main orientation programs were explored: pre-arrival orientation, upon-arrival orientation, and extended orientation. These three orientation programs form what the literature considers a comprehensive orientation framework for new international students.

REFERENCES

- Abe, J., Talbot, D. M., & Geelhoed, R. (1998). Effects of a peer program on international student adjustment. *Journal of College Student Development*, 39(6), 539–547.
- Alakaam, A. A., Castellanos, D. C., Bodzio, J., & Harrison, L. (2015). The factors that influence dietary habits among international students in the United States. *Journal of International Students*, 5(2), 104–120. <https://doi.org/10.32674/jis.v5i2.428>
- Alakaam, A. A. H. (2016). International students' eating habits and food practices in colleges and universities. In K. Bista & C. Foster (Eds.), *Campus support services, programs, and policies for international students* (pp. 99–118). Information Science Reference.
- Alinda, C. (2021). *The perception of international students toward programs and support services offered by higher education institutions in the Mid-Atlantic region of the United States*. West Chester University Doctoral Projects.
- Althen, G. (1990). *Orientation of foreign students*. NAFSA Field Service Working Paper #13.
- Alzougool, B., Chang, S., & Gray, K. (2013). The nature and constitution of informal carers' information needs: What you don't know you need is as important as what you want to know. *Information Research: An International Electronic Journal*, 18(1). <http://informationr.net/ir/18-1/paper563.html>
- Ammigan, R. (2019). Institutional satisfaction and recommendation: What really matters to international students? *Journal of International Students*, 9(1), 262–281. <https://doi.org/10.32674/jis.v9i1.260>
- Anderson, M. L., Goodman, J., & Schlossberg, N. K. (2012). *Counseling adults in transition: Linking Schlossberg's theory with practice in a diverse world* (4th ed.). Springer Publishing Company, LLC.
- Andrade, M. S. (2006). A first-year seminar for international students. *Journal of the First-Year Experience & Students in Transition*, 18(1), 85–103.
- Andrade, M. S. (2008). The value of a first-year seminar: International students' insights in retrospect. *Journal of College Student Retention: Research, Theory and Practice*, 10(4), 483–506. <https://doi.org/10.2190/CS.10.4.e>
- Andrade, M. S. (2009a). The effects of English language proficiency on adjustment to

- university life. *International Multilingual Research Journal*, 3(1), 16–34.
<https://doi.org/10.1080/19313150802668249>
- Andrade, M. S. (2009b). The international student picture. In M. S. Andrade & N. W. Evans (Eds.), *International students: Strengthening a critical resource*. Rowman & Littlefield Education.
- Arafeh, A. (2020). Insights into Saudi female international students: Transition experiences. *Journal of International Students*, 10(3), 741–757.
<https://doi.org/10.32674/jis.v10i3.1111>
- Arambewela, R., & Hall, J. (2009). An empirical model of international student satisfaction. *Asia Pacific Journal of Marketing and Logistics*, 21(4), 555–569.
<https://doi.org/10.1108/13555850910997599>
- Arkoudis, S., & Baik, C. (2010). Crossing the interaction divide between international and domestic students in higher education. *HERDSA Review of Higher Education*, 1, 62. <http://www.herdsa.org.au/wp-content/uploads/HERDSARHE2014v01p47.pdf>
- Arthur, N. (2017). Supporting international students through strengthening their social resources. *Studies in Higher Education*, 42(5).
<https://doi.org/10.1080/03075079.2017.1293876>
- Bastien, G., Seifen-Adkins, T., & Johnson, L. R. (2018). Striving for success: Academic adjustment of international students in the U.S. *Journal of International Students*, 8(2), 1198–1219. <https://doi.org/10.5281/zenodo.1250421>
- Bista, K. (2015). Roles of international student advisors: Literature and practice in American higher education. *International Education*, 44(2), 87–101.
http://utexas.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMw3V3JTsMwELWg4sAFsVM2-cQlCmo2x0XiwJKSikJQGuCEqiZxJKQSJNJKfD6eOIkdUH-Aa3brWW_G48l7CFnmeU__xQmkZznEzqw-zRLqWixlccITfZa5dMpzhNJUwXMHL-T2gd5LI0V57D8AHwYjrzQkb6vdQurnPUYaj0PDcRCOoRQw4rwVisYHUIJ6CqGl
- Bittencourt, T., Johnstone, C., Adjei, M., & Seithers, L. (2021). “We see the world different now”: Remapping assumptions about international student adaptation. *Journal of Studies in International Education*, 25(1), 35–50.
<https://doi.org/10.1177/1028315319861366>
- Black, J. S., Mendenhall, M., & Oddou, G. (1991). Toward a comprehensive model of international adjustment: An integration of multiple theoretical perspectives. *The*

Academy of Management Review, 16(2), 291–317.

- Bound, J., Braga, B., Khanna, G., & Turner, S. (2016). *A passage to America: University funding and international students*. <http://www.nber.org/papers/w22981>
- Bound, J., Braga, B., Khanna, G., & Turner, S. (2021). *The globalization of postsecondary education: The role of international students in the US higher education system*. <http://www.nber.org/papers/w28342>
- Bowser, D., Danaher, P. A., & Somasundaram, J. (2007). Indigenous, pre-undergraduate and international students at Central Queensland University, Australia: Three cases of the dynamic tension between diversity and commonality. *Teaching in Higher Education*, 12(5–6), 669–681. <https://doi.org/10.1080/13562510701596224>
- Boyle, P., & Boice, B. (1998). Best practices for enculturation: collegiality, mentoring, and structure. *New Directions for Higher Education*, 1998(101), 87–94. <https://doi.org/10.1002/he.10108>
- BridgeUSA. (n.d.). *Orientation*. How to administer a program. <https://j1visa.state.gov/sponsors/how-to-administer-a-program/>
- Briggs, P., & Ammigan, R. (2017). A collaborative programming and outreach model for international student support offices. *Journal of International Students*, 7(4), 1080–1095. <https://doi.org/10.5281/zenodo.1035969>
- Brittin, H. C., & Obeidat, B. A. (2011). Food practices, changes, preferences and acculturation of Arab students in US universities. *International Journal of Consumer Studies*, 35(5), 552–559. <https://doi.org/10.1111/j.1470-6431.2011.01023.x>
- Brunsting, N. C., Smith, A. C., & Zachry, C. (2018). An academic and cultural transition course for international students: Efficacy and socio-emotional outcomes. *Journal of International Students*, 8(4), 1497–1521. <https://doi.org/10.5281/zenodo.1467805>
- Brunsting, N. C., Zachry, C., & Takeuchi, R. (2018a). Predictors of undergraduate international student psychosocial adjustment to US universities: A systematic review from 2009-2018. *International Journal of Intercultural Relations*, 66, 22–33.
- Brunsting, N. C., Zachry, C., & Takeuchi, R. (2018b). Predictors of undergraduate international student psychosocial adjustment to US universities: A systematic

review from 2009-2018. *International Journal of Intercultural Relations*, 66, 22–33. <https://doi.org/10.1016/J.IJINTREL.2018.06.002>

- Brutt-Griffler, J., Nurunnabi, M., & Kim, S. (2020). International Saudi Arabia students' level of preparedness: Identifying factors and maximizing study abroad experience using a mixed-methods approach. *Journal of International Students*, 10(4), 976–1004. <https://doi.org/10.32674/jis.v10i4.839>
- Cemalcilar, Z., & Falbo, T. (2008). A longitudinal study of the adaptation of international students in the United States. *Journal of Cross-Cultural Psychology*, 39(6), 799–804. <https://doi.org/10.1177/0022022108323787>
- Chai, D. S., Van, H. T. M., Wang, C. W., Lee, J., & Wang, J. (2020). What do international students need? The role of family and community supports for adjustment, engagement, and organizational citizenship behavior. *Journal of International Students*, 10(3), 571–589. <https://doi.org/10.32674/jis.v10i3.1235>
- Chang, S., & Gomes, C. (2017). Digital journeys: A perspective on understanding the digital experiences of international students. *Journal of International Students*, 7(2), 347–366. <https://doi.org/10.32674/jis.v7i2.385>
- Chang, S., & Gomes, C. (Eds.). (2021). *Digital experiences of international students: Challenging assumptions and rethinking engagement* (1st ed.). Taylor & Francis.
- Chang, S., Gomes, C., & McKay, D. (2021). The digital information ecology of international students: Understanding the complexity of communication. In S. Chang & C. Gomes (Eds.), *Digital experiences of international students: Challenging assumptions and rethinking engagement*. Routledge.
- Chen, J., & Zhou, G. (2019). Chinese international students' sense of belonging in North American postsecondary institutions: A critical literature review. *Brock Education Journal*, 28(2), 48–63. <https://doi.org/10.26522/brocked.v28i2.642>
- Chickering, A. W. (1969). *Education and identity*. Jossey-Bass.
- Chickering, A. W., & Reisser, L. (1993). *Education and identity* (2nd ed.). Jossey-Bass.
- Cho, J., & Yu, H. (2015). Roles of university support for international students in the United States: Analysis of a systematic model of university identification, university support, and psychological well-being. *Journal of Studies in International Education*, 19(1), 11–27. <https://doi.org/10.1177/1028315314533606>

- Church, A. T. (1982). Sojourner adjustment. *Psychological Bulletin*, 91(3), 540–572.
- Council for the Advancement of Standards in Higher Education. (2019). *CAS professional standards for higher education* (10th ed.).
- Cox, M. F., Diefes-Dux, H., & Lee, J. (2006). Development and assessment of an undergraduate curriculum for first-year international engineering students. *Proceedings - Frontiers in Education Conference, FIE*, 15–18.
<https://doi.org/10.1109/FIE.2006.322558>
- Daddona, M. F., & Cooper, D. L. (2002). Comparison of freshmen perceived needs prior to and after participation in an orientation program. *NASPA Journal*, 39(4), 300–319.
- Day, C. (2021). *A comparison of first-year students' sense of belonging between virtual and in-person delivery of orientation programs*. University of Central Florida.
- de Araujo, A. A. (2011). Adjustment issues of international students enrolled in American colleges and universities: A review of the literature. *Higher Education Studies*, 1(1), 2–8. <https://doi.org/10.5539/hes.v1n1p2>
- Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education*, 10(3), 241–266. <https://doi.org/10.1177/1028315306287002>
- Dellinger, S. (2014). Exploring the acculturation process of Venezuelan undergraduate students at a Mid-Western U.S. university. *International Education*, 44(1), 51–71.
<http://ezproxy.umgc.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=ofm&AN=99673996&site=eds-live&scope=site>
- Department of Homeland Security. (n.d.) *International student life cycle (F-1/M-1). Study in the States*.
https://studyinthestates.dhs.gov/sites/default/files/SEVP_International%20Student%20Life%20cycle_Oct%202015.pdf
- Dorsett, J. (2017). Exploring international student adaptation through a first-year experience course at Iowa State University. (Publication No. 15296) In *Graduate Theses and Dissertations*. <https://lib.dr.iastate.edu/etd/15296>
- Duru, E., & Poyrazli, S. (2011). Perceived discrimination, social connectedness, and other predictors of adjustment difficulties among Turkish international students. *International Journal of Psychology*, 46(6), 446–454.

<https://doi.org/10.1080/00207594.2011.585158>

- Elturki, E., Liu, Y., Hjeltness, J., & Hellmann, K. (2019). Needs, expectations, and experiences of international students in pathway program in the United States. *Journal of International Students*, 9(1). <https://doi.org/10.32674/jis.v9i1.274>
- Evans, N. J., Forney, D. S., Guido, F. M., Patton, L. D., & Renn, K. A. (2009). *Student development in college: Theory, research, and practice*. Wiley.
- Fletcher-Anthony, W., & Efthymiou, L. (2017). Assessment of a college orientation course for international students. *Journal of College Orientation, Transition, and Retention*, 24(1), 84–89. <https://doi.org/https://doi.org/10.24926/jcotr.v24i1.2911>
- Forbes-Mewett, H., & Sawyer, A. M. (2016). International students and mental health. *Journal of International Students*, 6(3), 661–677. <https://doi.org/10.32674/jis.v6i3.348>
- Fox, J. M. (2020). Chinese students' experiences transitioning from an intensive English program to a U.S. university. *Journal of International Students*, 10(4), 1064–1086. <https://doi.org/10.32674/jis.v10i4.1191>
- Garza, D. D. (2015). *The acculturation needs of international students at U.S. universities: A call for online anticipatory orientation*. (Publication No. 3713522) [Doctoral dissertation, University of Kansas]. ProQuest Dissertations Publishing.
- Gebhard, J. G. (2012). International students' adjustment problems and behaviors. *Journal of International Students*, 2(2), 158–164.
- Giancola, S. P. (2021). *Program evaluation: Embedding evaluation into program design and development*. SAGE Publications Inc.
- Glass, C. R., Gesing, P., Hales, A., & Cong, C. (2017). Faculty as bridges to co-curricular engagement and community for first-generation international students. *Studies in Higher Education*, 42(5), 895–910. <https://doi.org/10.1080/03075079.2017.1293877>
- Glass, C. R., & Westmont, C. M. (2014). Comparative effects of belongingness on the academic success and cross-cultural interactions of domestic and international students. *International Journal of Intercultural Relations*, 38(1), 106–119. <https://doi.org/10.1016/j.ijintrel.2013.04.004>
- Golde, C. M. (1998). Beginning graduate school: Explaining first-year doctoral attrition. *New Directions for Higher Education*, 1998(101), 55–64. <https://doi.org/10.1002/he.10105>

- Güvendir, M. A. (2018). The relation of an international student center's orientation training sessions with international students' achievement and integration to university. *Journal of International Students*, 8(2), 843–860. <https://doi.org/10.5281/zenodo.1250385>
- Hadley, W. M. (2009). The transition and adjustment of first-year students with specific learning disabilities: A longitudinal study. *Journal of College Orientation, Transition, and Retention*, 17(1), 31–44. <https://doi.org/https://doi.org/10.24926/jcotr.v17i1.2711>
- Hagar, L. D. (2014). Intercultural learning for international students: Designing a pre-departure orientation. (Publication No. 1553137) [Master's thesis, University of the Pacific]. ProQuest Dissertations Publishing.
- Heng, T. T. (2018). Different is not deficient: contradicting stereotypes of Chinese international students in US higher education. *Studies in Higher Education*, 43(1), 22–36. <https://doi.org/10.1080/03075079.2016.1152466>
- Hoekje, B. J., & Stevens, S. G. (2018). *Creating a culturally inclusive campus: A guide to supporting international students*. Routledge.
- Hunter, M. S., & Linder, C. W. (2005). First year seminars. In M. L. Upcraft, J. N. Gardner, & B. O. Barefoot (Eds.), *Challenging & supporting the first-year student: A handbook for improving the first year of college* (pp. 275–291). Jossey-Bass.
- Hurtado, S., Han, J. C., Sáenz, V. B., Espinosa, L. L., Cabrera, N. L., & Cerna, O. S. (2007). Predicting transition and adjustment to college: Biomedical and behavioral science aspirants' and minority students' first year of college. *Research in Higher Education*, 48(7), 841–887. <https://doi.org/10.1007/s11162-007-9051-x>
- Institute of International Education. (2020). Fall 2020 international student enrollment snapshot. In *Open Doors Report on International Educational Exchange* (Issue Fall 2020). <https://www.iie.org/Research-and-Insights/Publications/Fall-2021-International-Student-Enrollment-Snapshot>
- Institute of International Education. (n.d.) *Project Atlas: Glossary*. Retrieved December 7, 2021, from <https://web.archive.org/web/20180920151349/https://www.iie.org/en/Research-and-Insights/Project-Atlas/Glossary>
- Jacobs, B. C. (2003). New student orientation in the twenty-first century. In G. L. Kramer (Ed.), *Student academic services: An integrated approach*. Jossey-Bass.

- Jean-Francois, E. (2019). Exploring the perceptions of campus climate and integration strategies used by international students in a US university campus. *Studies in Higher Education*, 44(6), 1069–1085.
<https://doi.org/10.1080/03075079.2017.1416461>
- Jeon-Huh, A. (2015). *Exploring the influence of the pre-departure orientation on the undergraduate international students' cultural and academic adjustment at Drexel University: The example of students from China*. (Publication No. 3706900) (Doctoral dissertation, Drexel University]. ProQuest Dissertations Publishing.
- Jiang, X., Soylemez-Karakoc, B., & Hussain, M. (2021). A new generation of 'incorporated wife'? making sense of international students' spouses in the US. *Gender, Place & Culture*, 28(7), 933–954.
<https://doi.org/10.1080/0966369X.2020.1760216>
- Jones, E. (2017). Problematizing and reimagining the notion of 'international student experience.' *Studies in Higher Education*, 42(5), 933–943.
<https://doi.org/10.1080/03075079.2017.1293880>
- Jones, H., Smith, K., Jarvis, J., Orpin, H., Mansi, G., Molesworth, C., & Monsey, H. (2023). *Transition into higher education* (K. Smith & J. Jarvis (Eds.)). Critical Publishing.
- Kambouropoulos, A. (2014). An examination of the adjustment journey of international students studying in Australia. *Australian Educational Researcher*, 41(3), 349–363. <https://doi.org/10.1007/s13384-013-0130-z>
- Khanal, J., & Gaulee, U. (2019). Challenges of international students from pre-departure to post-study: A literature review. *Journal of International Students*, 9(2), 560–581. <https://doi.org/10.32674/jis.v9i2.673>
- Kimoto, L. (2009). The English language instructor: A bridge to support services on campus. In M. S. Andrade & N. W. Evans (Eds.), *International students: Strengthening a critical resource*. Rowman & Littlefield Education.
- Knight, J. (2003). Updating the definition of internationalization. *International Higher Education*, 33(Fall), 2–3.
- Knowles, M. S., Holton III, E. F., Swanson, R. A., & Robinson, P. A. (2020). *The adult learner: The definitive classic adult education and human resource development* (Ninth). Routledge.
- Koo, K. (2022). Distressed in a foreign country: Mental health and well-being among

- international students in the United States during COVID-19. In K. Bista, R. M. Allen, & R. Y. Chan (Eds.), *Impacts of COVID-19 on international students and the future of student mobility: International perspectives and experiences* (pp. 28–41). Routledge.
- Koo, K., Baker, I., & Yoon, J. (2021). The first year acculturation: A longitudinal study on acculturative stress and adjustment among the first year international college students. *Journal of International Students*, 11(2), 278–298. <https://doi.org/10.32674/jis.v11i2.1726>
- Kovtun, O. (2010). *International student adaptation to a U.S. college: A mixed methods exploration of the impact of a specialized first-year foundations course at a large midwestern institution*. (Publication No. 3432051) [Doctoral dissertation, The University of Nebraska - Lincoln]. ProQuest Dissertations Publishing.
- Kovtun, O. (2011). International student adaptation to a U.S. college: A mixed methods exploration of the impact of a specialized first-year course at a large Midwestern institution. *Journal of Student Affairs Research and Practice*, 48(3), 349–366. <https://doi.org/10.2202/1949-6605.6336>
- Krsmanovic, M. (2019). *The stories of transition: A qualitative exploration of international undergraduate students' academic experiences in first-year seminar courses in the United States*. (Publication No. 6519) [Doctoral dissertation, University of Central Florida]. Electronic Theses and Dissertations.
- Krsmanovic, M. (2020). I was new and I was afraid: The acculturation strategies adopted by international first-year undergraduate students in the United States. *Journal of International Students*, 10(4), 954–975. <https://doi.org/10.32674/jis.v10i4.1160>
- Krsmanovic, M. (2021). The synthesis and future directions of empirical research on international students in the United States: The insights from one decade. *Journal of International Students*, 11(1), 1–23. <https://doi.org/10.32674/jis.v11i1.1955>
- Kübler-Ross, E. (1969). *On death and dying*. Macmillan.
- Lau, J., Garza, T., & Garcia, H. (2019). International students in community colleges: On-campus services used and its affect on sense of belonging. *Community College Journal of Research and Practice*, 43(2), 109–121. <https://doi.org/10.1080/10668926.2017.1419891>
- Laws, K. N., & Ammigan, R. (2020). International students in the Trump era: A narrative view. *Journal of International Students*, 10(3), xviii–xxii.

<https://doi.org/10.32674/jis.v10i3.2001>

- Le, A. T., & Lacost, B. Y. (2017). Vietnamese graduate international student repatriates: Reverse adjustment. *Journal of International Students*, 7(3), 449–466. <https://doi.org/10.5281/zenodo.570295>
- Le, A. T., LaCost, B. Y., & Wismer, M. (2016). International female graduate students' experience at a Midwestern university: Sense of belonging and identity development. *Journal of International Students*, 6(1), 128–152.
- Leask, B. (2015). *Internationalizing the curriculum*. Routledge.
- Li, J., Wang, Y., Liu, X., Xu, Y., & Cui, T. (2018). Academic adaptation among international students from East Asian countries: A consensual qualitative research. *Journal of International Students*, 8(1), 194–214. <https://doi.org/10.5281/zenodo.1134289>
- Li, S., & Zizzi, S. (2018). A case study of international students' social adjustment, friendship development, and physical activity. *Journal of International Students*, 8(1), 389–408. <https://doi.org/10.5281/zenodo.1134317>
- Lizzio, A. (2011). *The student lifecycle: An integrative framework for guiding practice*.
- López, E. M. H. (2021). International students involvement with preparations: Pre-departure coping strategies implemented by Mexican postgraduate students in the UK. *International Journal of Intercultural Relations*, 81, 167–175.
- Lu, Y., Chui, H., Zhu, R., Zhao, H., Zhang, Y., Liao, J., & Miller, M. J. (2018). What does “good adjustment” mean for Chinese international students? A qualitative investigation. *Counseling Psychologist*, 46(8), 979–1009. <https://doi.org/10.1177/0011000018824283>
- Lynch, K. (2008). Gender roles and the American academe. *Gender and Education*, 20(6), 585–605.
- Mack, C. E. (2010). A brief overview of the orientation, transition, and retention field. In J. A. Ward-Roof (Ed.), *Designing successful transitions: A guide for orienting students to college* (pp. 3–10). University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- Madden-Dent, T., Wood, D., & Roskina, K. (2019). An inventory of international student services at 200 U.S. universities and colleges: Descriptive data of pre-departure and post-arrival supports. *Journal of International Students*, 9(4), 993–

1008. <https://doi.org/10.32674/jis.v9i4.346>

- Magalhães Major, E. (2005). Co-national support, cultural therapy, and the adjustment of Asian students to an English-speaking university culture. *International Education Journal*, 6(1), 84–95. <http://iej.cjb.net>
- Mann, A., Andrews, C., & Rodenburg, N. (2010). Administration of a comprehensive orientation program. In J. A. Ward-Roof (Ed.), *Designing successful transitions: A guide for orienting students to college* (pp. 43–59). University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- Marangell, S., Arkoudis, S., & Baik, C. (2018). Developing a host culture for international students: What does it take? *Journal of International Students*, 8(3), 1440–1458. <https://doi.org/10.5281/zenodo.1254607>
- Martirosyan, N. M., Bustamante, R. M., & Saxon, D. P. (2019). Academic and social support services for international students: Current practices. *Journal of International Students*, 9(1), 172–191. <https://doi.org/10.32674/jis.v9i1.275>
- Matheson, R. (2018). Transition through the student lifecycle. In R. Matheson, S. Tangney, & M. Sutcliffe (Eds.), *Transition in, through and out of higher education: International case studies and best practices*. Routledge.
- Mayhew, M. J., Vanderlinden, K., & Kim, E. K. (2010). A multi-level assessment of the impact of orientation programs on student learning. *Research in Higher Education*, 51(4), 320–345. <https://doi.org/10.1007/s11162-009-9159-2>
- Mbous, Y. P. V., Mohamed, R., & Rudisill, T. M. (2022). International students challenges during the COVID-19 pandemic in a university in the United States: A focus group study. *Current Psychology*. <https://doi.org/10.1007/s12144-022-02776-x>
- Menzies, J. L., Baron, R., & Zutshi, A. (2015). Transitional experiences of international postgraduate students utilising a peer mentor programme. *Educational Research*, 57(4), 403–419. <https://doi.org/10.1080/00131881.2015.1091202>
- Mesidor, J. K., & Sly, K. F. (2016). Factors that contribute to the adjustment of international students. *Journal of International Students*, 6(1), 262–282. <https://doi.org/10.32674/JIS.V6I1.569>
- Meyer, J. D. (2001). A conceptual framework for comprehensive international student orientation programs. *International Education*, 31(1), 56–79.

- Moglen, D. (2017). International graduate students: Social networks and language use. *Journal of International Students*, 7(1), 22–37. <http://jistudents.org/>
- Mohamed, N., Schoen, S., Yu, X., & Kappler, B. (2021). Creating an online orientation course: The journey to internationalizing the campus. In S. Chang & C. Gomes (Eds.), *Digital expeperiences of international students* (pp. 174–192). Routledge.
- Montgomery, K. A. (2017). Supporting Chinese undergraduate students in transition at U.S. colleges and universities. *Journal of International Students*, 7(4), 963–989. <https://doi.org/10.5281/zenodo.1029727>
- Mori, S. (2000). Addressing the mental health concerns of international students. *Journal of Counseling and Development*, 78(2), 137–144. <https://doi.org/10.1002/j.1556-6676.2000.tb02571.x>
- Mullendore, R. H., & Banahan, L. A. (2005). Designing Orientation Programs. In M. L. Upcraft, J. N. Gardner, & B. O. Barefoot (Eds.), *Challenging & supporting the first-year student: A handbook for improving the first year of college*. Jossey-Bass.
- NAFSA. (2020). *Delaware: Benefits from International Students*. NAFSA. <https://www.nafsa.org/isev/reports/state?state=DE&year=2020>
- NAFSA (2021, November 15). *New NAFSA Data Show Largest Ever Drop in International Student Economic Contributions to the U.S.* NAFSA. <https://www.nafsa.org/about/about-nafsa/new-nafsa-data-show-largest-ever-drop-international-student-economic>
- National Resource Center for First-Year Experience and Students in Transition. (2013). *2012-2013 national survey of first-year seminars*.
- Oh, C., & Butler, B. S. (2018). New international students' social information practices during transition to their host country. *Proceedings of the Association for Information Science and Technology*, 55(1), 879–880. <https://doi.org/10.1002/pra2.2018.14505501157>
- Oyeniya, O., Smith, R. L., Watson, J. C., & Nelson, K. (2021). A comparison of first-year international students' adjustment to college at the undergraduate and graduate level. *Journal of Comparative & International Higher Education*, 13(2), 112–131. <https://doi.org/10.32674/jcihe.v13i2.2450>
- Park, S. (2022). Academic acculturation of international doctoral students in the U.S.: A qualitative inquiry. *International Journal of Environmental Research and*

Public Health, 19(23). <https://doi.org/10.3390/IJERPH192316089>

- Pekerti, A. A., Vijver, F. J. R. Van De, & Moeller, M. (2021). A peer mentoring social learning perspective of cross-cultural adjustment: The rapid-acculturation mateship program. *International Journal of Intercultural Relations*, 84, 276–299. <https://doi.org/10.1016/j.ijintrel.2021.08.010>
- Perez-Encinas, A., & Rodriguez-Pomeda, J. (2018). International students' perceptions of their needs when going abroad: Services on demand. *Journal of Studies in International Education*, 22(1), 20–36. <https://doi.org/10.1177/1028315317724556>
- Perigo, D. J., & Upcraft, M. L. (1989). Orientation programs. In M. L. Upcraft, J. N. Gardner, & Associates (Eds.), *The freshman year experience: Helping students survive and succeed in college* (pp. 82–94). Jossey-Bass.
- Perry, C. J., Weatherford, J., & Lausch, D. (2016). Academic concerns of international students in the US. *Adult Education Research Conference*, 192–197. <https://newprairiepress.org/aerc/2016/%0Apapers/30>
- Pierce, S., & Bolter, J. (2020). Dismantling and reconstructing the U.S. immigration system: A catalog of changes under the Trump presidency. *Migration Policy Institute*, 1–126. <https://www.migrationpolicy.org/research/us-immigration-system-changes-trump-presidency>
- Poock, M. C. (2008). Orientation programs for graduate students. In K. A. Tokuno (Ed.), *Graduate students in transition: Assisting students through the first year (Monograph No. 50)* (pp. 91–105). University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- Poyrazli, S., & Kavanaugh, P. R. (2006). Marital status, ethnicity, academic achievement, and adjustment status: The case of graduate international students. *College Student Journal*, 40(4), 767–780.
- Poyrazli, S., Kavanaugh, P. R., Baker, A., & Al-Timimi, N. (2004). Social support and demographic correlates of acculturative stress in international students. *Journal of College Counseling*, 7(1), 73–82. <https://doi.org/10.1002/j.2161-1882.2004.tb00261.x>
- Punteney, K. (2019). *The international education handbook: Principles and practices of the field*. NAFSA: Association of International Educators.
- Qu, M. (2021). Chinese international students' experience: Integration or inclusion? In G. McCarthy, Y. Sun, & X. Song (Eds.), *Transcultural connections: Australia*

and China (pp. 127–141). Springer.

Rajapaksa, S., & Dundes, L. (2002). It's a long way home: International student adjustment to living in the United States. *College Student Retention*, 4(1), 15–28.

Rice, K. G., Choi, C. C., Zhang, Y., Villegas, J., Ye, H. J., Anderson, D., Nesic, A., & Bigler, M. (2009). International student perspectives on graduate advising relationships. *Journal of Counseling Psychology*, 56(3), 376–391.
<https://doi.org/10.1037/a0015905>

Rivas, J., Hale, K., & Burke, M. G. (2019). Seeking a sense of belonging: Social and cultural integration of international students with American college students. *Journal of International Students*, 9(2), 682–701.
<https://doi.org/10.32674/jis.v9i2.943>

Ryan, J., & Carroll, J. (2005). “Canaries in the coalmine”: International students in Western universities. In J. Carroll & J. Ryan (Eds.), *Teaching international students: Improving learning for all*.

Sakamoto, I. (2006). When family enters the pictures: The model of cultural negotiation and gendered experiences of Japanese academic sojourners in the United States. *Cultural Diversity and Ethnic Minority Psychology*, 12(3), 558–577.

Sanford, N. (1962). *The American college*. Wiley.

Schartner, A., & Young, T. J. (2016). Towards an integrated conceptual model of international student adjustment and adaptation. *European Journal of Higher Education*, 6(4), 372–386. <https://doi.org/10.1080/21568235.2016.1201775>

Schlossberg, N. K. (1981). A model for analyzing human adaptation to transition. *Counseling Psychologist*, 9(2), 2–18.

Schlossberg, N. K. (1984). *Counseling adults in transition*. Springer.

Schlossberg, N. K. (1989). *Overwhelmed: Coping with life's ups and downs*. Lexington Books.

Schlossberg, N. K., Waters, E. B., & Goodman, J. (1995). *Counseling adults in transition: Linking practice with theory* (2nd ed.). Springer Publishing Company, Inc.

Schulte, S., & Choudaha, R. (2014). Improving the experiences of international students. *Change: The Magazine of Higher Learning*, 46(6), 52–58.

<https://doi.org/10.1080/00091383.2014.969184>

- Senyshyn, R. M. (2019). A first-year seminar course that supports the transition of international students to higher education and fosters the development of intercultural communication competence. *Journal of Intercultural Communication Research*, 48(2), 150–170. <https://doi.org/10.1080/17475759.2019.1575892>
- Sharma, S. (2019). Focusing on graduate international students. *Journal of International Students*, 9(3), 2166–3750. <https://doi.org/10.32674/jis.v9i3>
- Skipper, T. L., Latino, J. A., Rideout, B. M., & Weigel, D. (2010). Extensions of traditional orientation programs. In J. A. Ward-Roof (Ed.), *Designing successful transitions: A guide for orienting students to college* (pp. 95–115). University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- Smith, R. A., & Khawaja, N. G. (2011). A review of the acculturation experiences of international students. *International Journal of Intercultural Relations*, 35(6), 699–713. <https://doi.org/10.1016/j.ijintrel.2011.08.004>
- Snyder, V., & Chesire, D. K. (2002). A training model for extended orientation and cross cultural training for international students. *The Journal of College Orientation and Transition*, 10(1), 73–75.
- Spencer, L.-A. M. (2016). *Exploring the transition experiences of successful international undergraduate students at a public research university in the USA: The impact on international student success and retention*. University of South Florida.
- Starr-Glass, D. (2016). The self, the other, and the international student. *Journal of International Students*, 6(1), 314–318. <https://doi.org/10.32674/jis.v6i1.572>
- Starr-Glass, D. (2019). Seeing international students as students: Changing institutional classification, identity, and stereotype. In K. Bista (Ed.), *Global perspectives on international student experiences in higher education: Tensions and issues*. Routledge.
- Strange, C. C., & Banning, J. H. (2015). *Designing for learning: Creating campus environments for student success* (2nd ed.). Jossey-Bass.
- Sullivan, J. L. G. (2021). *The impact of orientation programs on new student engagement and transition*. Northeastern University.

- Terrazas-Carrillo, E. C., Hong, J. Y., & Pace, T. M. (2014). Adjusting to new places: International student adjustment and place attachment. *Journal of College Student Development, 55*(7), 693–706. <https://doi.org/10.1353/csd.2014.0070>
- Thongsawat, S., Davidson-Shivers, G., & Chatphoomiphong, B. (2019). Designing an interactive student orientation to build social connectedness. *Journal of Education Multimedia and Hypermedia, 28*(1), 99–112.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*. The University of Chicago Press.
- Trimpe, M. L. (2022). *Reimagining a model for international students' college readiness and transition* (Vol. 12, Issue 4).
- Tsang, E. W. K. (2001). Adjustment of mainland Chinese academics and students to Singapore. *International Journal of Intercultural Relations, 25*(4), 347–372. [https://doi.org/10.1016/S0147-1767\(01\)00010-4](https://doi.org/10.1016/S0147-1767(01)00010-4)
- UNESCO. (2015). Internationally mobile students. UIS Glossary. <https://glossary.uis.unesco.org/glossary/en/home>
- Upcraft, M. Lee, & Farnsworth, W. M. (1984). Orientation programs and activities. *New Directions for Student Services, 1984*(25), 27–38. <https://doi.org/10.1002/ss.37119842504>
- Urban, E. L., & Palmer, L. B. (2014). International students as a resource for internationalization of higher education. *Journal of Studies in International Education, 18*(4), 305–324. <https://doi.org/10.1177/1028315313511642>
- Vakkai, R. J. Y., Harris, K., Chaplin, K. S., Crabbe, J. J., & Reynolds, M. (2020). Sociocultural factors that impact the health status, quality of life, and academic achievement of international graduate students: A literature review. *Journal of International Students, 10*(3), 758–775. <https://doi.org/10.32674/jis.v10i3.1222>
- Van Horne, S., Lin, S., Anson, M., & Jacobson, W. (2018). Engagement, satisfaction, and belonging of international undergraduates at U.S. Research universities. *Journal of International Students, 8*(1), 351–374. <https://doi.org/10.5281/zenodo.1134313>
- Veerasamy, Y. S., & Ammigan, R. (2021). Reimagining the delivery of international student services during a global pandemic: A case study in the United States. *Journal of Studies in International Education*. <https://doi.org/10.1177/10283153211052779>

- Wang, B. (2022). Immobility infrastructures: Taking online courses and staying put amongst Chinese international students during the COVID-19. *Journal of Ethnic and Migration Studies*, 1–19. <https://doi.org/10.1080/1369183X.2022.2029376>
- Ward-Roof, J. A., & Guthrie, K. L. (2010). Reflections on the history and future of orientation, transition, and retention programs. In J. A. Ward-Roof (Ed.), *Designing successful transitions: A guide for orienting students to college* (3rd ed., pp. 229–238). University of South Carolina, National Resource Center for the First-Year Experience and Students in Transition.
- Ward, C., Bochner, S., & Furnham, A. (2001). *The psychology of culture shock*. Routledge.
- Wessel, R. D., & Reed, J. L. (2005). Incorporating health care, English proficiency, social integration, and career planning in orientation programming for new international students. *The Journal of College Orientation and Transition*, 12(2), 17–27. <https://doi.org/10.24926/jcotr.v12i2.2618>
- Wu, H., Garza, E., & Guzman, N. (2015). International student's challenge and adjustment to college. *Education Research International*, 2015, 1–9. <https://doi.org/10.1155/2015/202753>
- Yan, Z., & Sendall, P. (2016). First year experience: How we can better assist first-year international students in higher education. *Journal of International Students*, 6(1), 35–51.
- Yoon, J., & Chung, E. (2017). International students' information needs and seeking behaviours throughout the settlement stages. *Libri*, 67(2), 119–128. <https://doi.org/10.1515/libri-2016-0048>
- Young, N. E., & Althen, G. (2013). *The handbook of international student advising* (3rd ed.). Intercultural Interaction LLC.
- Yu, X., Isensee, E., & Kappler, B. (2016). Using data wisely to improve international student satisfaction: Insights gained from International Student Barometer. In K. Bista & C. Foster (Eds.), *Exploring the social and academic experiences of international students in higher education insitutions* (pp. 212–232). IGI Global. <https://doi.org/http://doi:10.4018/978-1-4666-9749-2.ch012>
- Zhang, J., & Goodson, P. (2011). Predictors of international students' psychological adjustment to life in the United States: A systematic review. *International Journal of Intercultural Relations*, 35, 139–162.
- Zhang, J., Smith, S., Swisher, M., Fu, D., & Fogarty, K. (2011). Gender role

disruption and marital satisfaction among wives of Chinese international students in the United States. *Journal of Comparative Family Studies* 2, 42(4), 523–542.
<http://www.jstor.org/stable/41604466>

Zhang, Jing, & Goodson, P. (2011). Predictors of international students' psychosocial adjustment to life in the United States: A systematic review. *International Journal of Intercultural Relations*, 35, 139–162.
<https://doi.org/10.1016/j.ijintrel.2010.11.011>.

Zhang, Y., & Jung, E. (2017). Multi-dimensionality of acculturative stress among Chinese international students: What lies behind their struggles? *International Research and Review*, 7(1), 23–43.
<http://ezproxy.lib.uconn.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1170666&site=ehost-live>

Zhou, Y., Frey, C., & Bang, H. (2011). Understanding of international graduate students' academic adaptation to a U.S. graduate school. *International Education, Fall*, 76–95.

Appendix B

ARTIFACT 2 – STUDENT NEEDS ASSESSMENT

This artifact describes the Needs Assessment Survey that was distributed to newly arrived international students at the University of Delaware (UD) for the fall 2021 semester. This artifact outlines the purpose, instrument development and distribution procedures, results of the analysis of the data, and implications of the Needs Assessment Survey for the improvement strategies in this Education Leadership Portfolio. The instrument can be found in Appendix B1 and the recruitment emails can be found in Appendix B2 of this artifact.

Purpose

The purpose of distributing the Needs Assessment Survey was to better understand the various academic, social, and cultural information needs of new international students at the University of Delaware after their arrival to the United States. Research has shown that a positive student experience at their institution can drive satisfaction with their institution (Arambewela & Hall, 2009). For example, satisfaction with the arrival process positively influenced international students' overall university experience (Ammigan & Jones, 2018; Koo, Baker, & Yoon, 2021). In an effort to address the arrival and orientation experiences, it is important to understand the various information needs of new international students to ensure that the orientation strategies can meet those information needs.

Background and Timeline of Orientation Programs for Fall 2021 semester

During the summer of 2021, new international students were invited to and attended two orientation programs held by the Center for Global Programs and Services (CGPS) (See Figure B1 for a timeline). The first program is a pre-arrival information session, held virtually via Zoom on July 15, 2021. New international students were sent an email invitation to register for the program. The registration form included space for students to submit questions. One hundred and fifty students registered for the information session, and approximately ninety students attended.

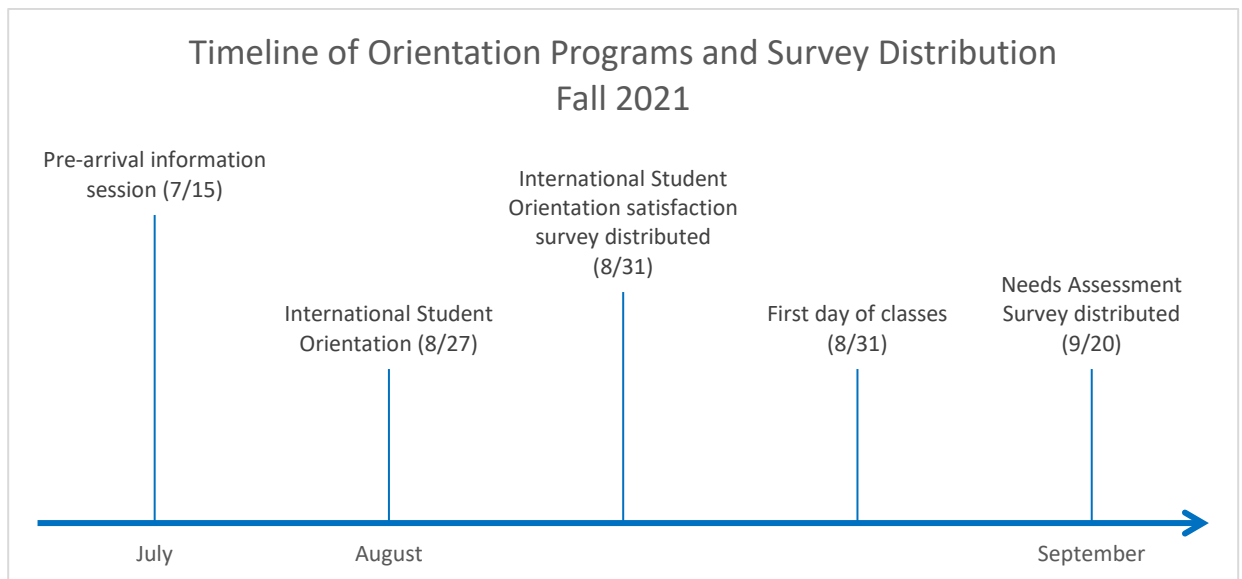


Figure B7 Timeline of Orientation Programs Fall 2021

The purpose of the pre-arrival information session, which was delivered in a live Zoom meeting, was to provide information related to travelling to the U.S. for the fall 2021 semester. The duration of the pre-arrival information session was approximately one hour, which included a thirty-minute information session and thirty

minutes to answer questions. The session included information on immigration documents to prepare and carry when travelling to the U.S. and updated immigration regulations, which may have been modified due to COVID-19.⁸ Other information included packing tips, COVID-19 vaccination requirements for the U.S. and UD, housing resources, local resources (e.g., grocery stores), and UD resources (e.g., Office of Academic Enrichment and the Career Center).

The second orientation program that new international students were required to attend was the upon-arrival orientation (hereafter referred to as international student orientation). Fall 2021 international student orientation was conducted live via Zoom on August 27, 2021. Four hundred and eighty students registered for the program and one hundred and twenty students attended. The program included presentations by the Center for Global Programs and Services and several campus partners, such as Student Wellness and Health Promotion, Student Health Services, and the Career Center (see Artifact 3 for detailed description of each session).

After the international student orientation, a satisfaction survey was distributed on August 31, 2021 to the orientation registrants to gain feedback on their satisfaction of the program (see Figure 1 for the timeline of orientation programs and Artifact 3 for the data analysis of the international student orientation satisfaction surveys). Three weeks after the first day of classes, the Needs Assessment Survey was distributed.

⁸ For example, during summer 2021, there were still a number of presidential proclamations that prohibited foreign nationals that had visited some countries within 14 days of entry to the U.S. from entering the U.S. These countries included China, Iran, the United Kingdom and Ireland, Brazil, South Africa, India, and European countries within the Schengen Area. However, there were some exceptions that people on an F-1 student visa may be eligible for.

Procedure

The Needs Assessment Survey included participants who were new international undergraduate and graduate students. The survey focused on the students' information needs and concerns during the first few weeks of their arrival in the U.S. Quantitative and qualitative data were collected and analyzed to address the questions below:

1. What types of information concerns and questions did new international students have upon their arrival to the U.S.?
2. After attending international orientation, did new international students still have concerns and questions? If yes, what were they?
3. What other concerns and questions did new international students have?

Institutional Research Board (IRB) authorization to distribute the survey was sought and granted on September 16, 2021. The survey was distributed on September 20, 2021 and closed on October 3, 2021. An initial email was sent to the new international students, which included the purpose of the study. Two reminder emails were sent to increase the response rate. The consent form was provided at the beginning of the survey. Only participants over 18 years old were eligible to participate in the survey. Data are currently stored on a secured drive and were de-identified before analysis was performed.

The email addresses of the participants were obtained through the immigration database, Terra Dotta Systems, which the Center for Global Programs and Services uses to record and maintain international students' immigration records. New international students who had arrived in the U.S. were required to complete a check-

in process through Terra Dotta Systems. Using the Terra Dotta Systems, I generated a list of new international students who had checked in.

Participants were asked to complete the following three major sections of the Needs Assessment Survey.

Demographic Information

Demographic questions included the participants' education level (undergraduate, master's, or doctoral), gender, nationality, race, and visa type. Participants were also asked a question about when they entered the U.S.

Concerns and Questions

This section asked participants about any concerns or questions they had since arriving in the U.S., which included the following topics:

1. Information about immigration: understanding immigration documents, maintaining visa status, how to complete government check-in, and understanding immigration regulations.
2. Information about COVID-19: where to get a COVID-19 vaccination, duration of quarantine upon entering the U.S., COVID-19 vaccination from abroad, how to upload proof of vaccination, how to request a vaccination exemption, rules about masks on campus, and where to get tested for COVID-19.
3. Academic information: the amount of academic work for the semester, understanding and meeting professors' expectations, English language proficiency, working with classmates in groups, online course availability,

obtaining books at the library, connecting with academic advisor, group studying via Zoom, and enrolling in preferred courses.

4. Financial information: source of funding, having enough of money, finding on-campus employment, managing finances, obtaining a credit card, opening a bank account, remitting money back to home country, obtaining a Social Security Number, and paying for health insurance.
5. Housing information: finding affordable housing, registering for on-campus housing, finding nearby housing, understanding the lease, finding information about housing, getting along with housemates, finding housemates, finding furniture, and getting along with neighbors.
6. Information about transportation: getting around Newark, buying a car, where to buy a car, obtaining a driver's license, buying a bike, and understanding the university shuttle system.
7. Social concerns and information about culture: making friends with people from the U.S., making friends with people from other countries, making friends with people from home country, interacting with Americans, adjusting to American culture, facing racism in the U.S., making new friends in class, and connecting with the local community.

8. Information about living in the U.S.: enrolling children in school, finding childcare, accessing grocery stores, understanding state laws, adjusting to a new culture, homesickness, finding foods from home country, accessing other shops, and accessing healthcare in the U.S.

Each of the eight topics also asked two follow-up questions: (a) Have your (topic here) concerns or needs been resolved?” and (b) “Which (topic here) concerns or questions have not been resolved? Please check all that apply.” The response to the second question provided information about the gaps in the current orientation programs. Identifying specific information that students still needed after attending two orientation sessions provides data about information needs that are not addressed by the programs. Findings from the second follow-up question were used to inform my improvement strategies, which focused on improving the design of the pre-arrival programs, international student orientation, and the First Year Seminar.

At the end of the survey, students were asked to rank the eight topics in order of importance. This question provided data about the type of information that is most important to new international students. These data provided information about which topics should be prioritized in the various orientation programs.

Qualitative Data

One of the qualitative questions included “Since arriving in the United States, what other concerns or questions have you had that were not mentioned above?” (survey question number 14, see Appendix 1 for the instrument). The responses to this question informed me if there were other topics that needed to be addressed in the orientation programs.

Sample and Analysis

Participants were first-year international students enrolled in undergraduate and graduate degree programs at the University of Delaware. A total of 95 students out of 281 participants responded, resulting in a 33.8% response rate. Participants included 18 (19%) international undergraduate students and 77 (81%) international graduate students. An equal number of men ($n = 38$, 40%) and women ($n = 38$, 40%) participated in the survey, but 18 participants (19%) preferred not to answer, and 1 participant identified as female, gender variant/non-conforming. Participants came from a total of 34 countries, whereby the top three nationalities were India ($n = 20$, 21%), China ($n = 11$, 12%), and Nigeria ($n = 8$, 8.4%).

Figure B2 provides the distribution of when participants entered the U.S. This figure suggests that the period in which most international students entered the U.S. was between August 20th and the 24th. Seventy-nine participants entered the U.S. before international student orientation on August 27th, while twelve participants entered the U.S. after international student orientation on August 27th. One participant entered the U.S. on August 27th.

Three data points were considered invalid as they chose dates that were outside the range of expected entry to the U.S. for fall 2021. One participant selected an entry date of January 2019; another selected an entry date of January 2021; and the third participant chose only the year 2017. The Needs Assessment Survey was distributed only to students who had checked-in with the Center for Global Programs and Services for the fall 2021 semester. Consequently, this excluded any students who were slated to begin their academic programs in or before spring 2021. Thus, I

consider the aforementioned three data points error and thereby invalid for the purposes of this analysis.

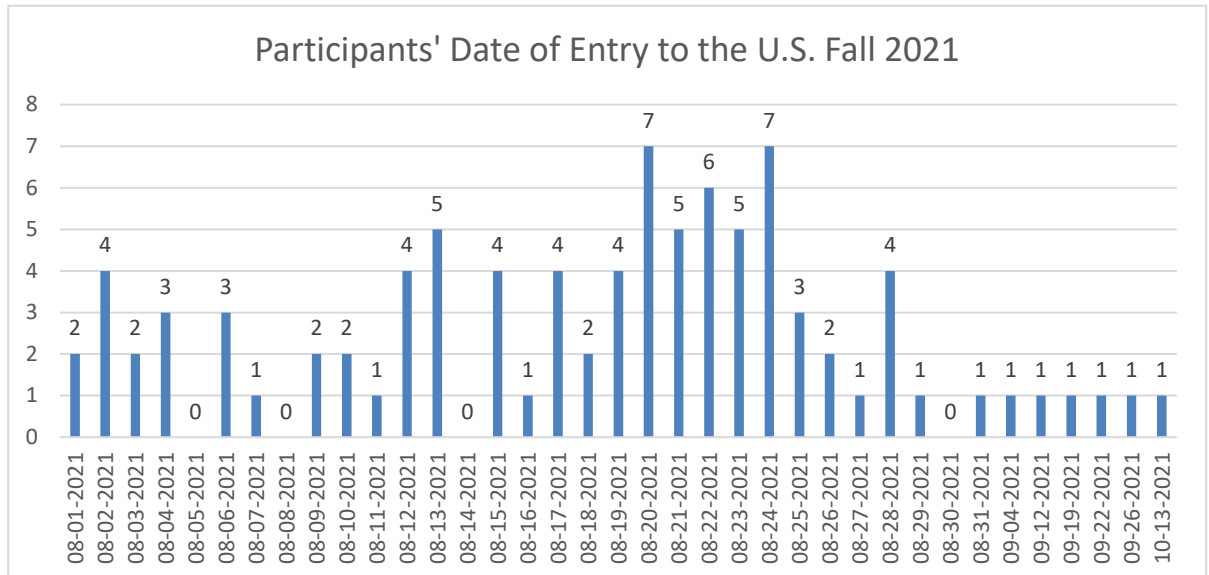


Figure B8 Participants' Date of Entry to the U.S.

Results of the Needs Assessment Survey

Question 1: What types of concerns and questions did new international students have upon their arrival to the U.S.?

The data are based on the set of survey questions that asked “Since arriving in the United States, what (topic) concerns or questions have you had?” I created a frequency table summarizing how many undergraduate and graduate international students reported concerns and questions upon their arrival to the U.S. in the fall 2021 semester (see Table B1).

Table B1 Frequency Table of Reported Concerns and Questions

Topic	Number of students (%) who reported concerns
1. Immigration	Undergrad: 12 (67%) Graduate: 44 (57%) Total: 56 (59%)
2. COVID-19	Undergrad: 5 (28%) Graduate: 43 (56%) Total: 48 (51%)
3. Academic	Undergrad: 9 (50%) Graduate: 57 (74%) Total: 66 (69%)
4. Financial	Undergrad: 16 (89%) Graduate: 66 (86%) Total: 82 (86%)
5. Housing	Undergrad: 6 (33%) Graduate: 48 (62%) Total: 54 (57%)
6. Transportation	Undergrad: 15 (83%) Graduate: 62 (81%) Total: 77 (81%)
7. Social & Culture	Undergrad: 8 (44%) Graduate: 41 (53%) Total: 49 (52%)
8. Living in the U.S.	Undergrad: 5 (28%) Graduate: 40 (52%) Total: 45 (47%)

Table B1 shows the concerns the participants had when they first arrived in the U.S. According to Figure B2, most participants ($n = 79$, 85%) arrived before international student orientation, which was held on August 27, 2021. Therefore, it is possible that their concerns were resolved after attending international student orientation. To determine if their concerns were resolved after international student orientation, it is important to analyze data that addresses question 2 of this artifact: “After attending international orientation, did new international students still have concerns and question? If yes, what were they?”

Nonetheless, it is also important to analyze the specific reported concerns within each topic to ensure that orientation programming (both pre-arrival and international student orientation) and any post-orientation materials or programs, can meet these specific needs.

The following tables illustrate the frequency of specific reported concerns within each topic, broken down by level of education. Some participants reported more than one concern within each topic. Table B2 describes the specific concerns related to immigration. Table B3 describes the specific concerns related to COVID-19. Table B4 describes the specific concerns related to academics. Table B5 describes the specific concerns related to finances. Table B6 describes the specific concerns related to housing. Table B7 describes the specific concerns related to transportation. Table B8 describes the specific concerns related to social and culture. Table B9 describes the specific concerns related to living in the U.S.

Table B2 Frequency of Specific Reported Immigration-related Concerns, by Education Level

Sub-topic	Undergraduate		Graduate		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Understanding immigration documents	2	9.09%	14	16%	16	14%
Going through port of entry	1	4.55%	9	10%	10	9%
Maintaining visa status in the US	6	27.27%	19	21%	25	23%
Completing government check in	4	18.18%	23	26%	27	24%
Understanding immigration regulations	8	36.36%	20	22%	28	25%
Other	1	4.55%	4	4%	5	5%
Total concerns	22	100%	89	100%	111	100%

Note: Some participants reported more than one concern

Table B3 Frequency of Specific Reported COVID-19 related Concerns, by Education Level

Sub-topic	Undergraduate		Graduate		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Where to get a COVID-19 test	0	0%	14	16%	14	15%
Length of quarantine period upon arrival	1	20%	11	13%	12	13%
Whether COVID-19 vaccination is accepted by UD	1	20%	21	24%	22	24%
How to upload vaccination record	0	0%	8	9%	8	9%
COVID-19 vaccination exemption	0	0%	3	3%	3	3%
Mask rules on campus	0	0%	6	7%	6	7%
Where to get a COVID-19 vaccine	2	40%	22	25%	24	26%
Other	1	20%	2	2%	3	3%
Total concerns	5	100%	87	100%	92	100%

Note: Some participants reported more than one concern

Table B2 describes the frequencies of the participants' concerns or questions about immigration. The results showed that upon arriving in the U.S., the most frequent concerns that students had was about understanding immigration regulations ($n = 28$, 25%). There were other concerns outside of the available options that participants reported. Three participants reported a concern about obtaining a Social Security Number. One participant reported a concern about getting a state ID card. One participant reported a concern about taxes. These concerns are not specifically related to immigration. One reason that the participant mentioned Social Security Number may be related to the fact obtaining a Social Security Number was mentioned during the immigration presentation at international student orientation. Obtaining a Social Security Number was discussed more extensively in the Finances section of the survey.

Table B3 describes the frequencies with which participants had concerns or questions about COVID-19. The results showed that upon arriving in the U.S., the most frequently reported concern was about knowing where to get a COVID-19 test ($n = 24$, 25%) and followed by knowing whether the COVID-19 vaccination that participants received abroad would be accepted by UD ($n = 22$, 24%). During this time, there were many new requirements related to COVID-19, including regulations by the U.S. government and requirements by the university. There was only one COVID-19 related concern that was not included in the survey question options. One participant expressed a concern about how mask mandates were not respected on campus. COVID-19 related campus requirements were shared during international student orientation by Student Health Services.

Table B4 Frequency of Specific Reported Academic-related Concerns, by Education Level

Sub-topic	Undergraduate		Graduate		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Amount of coursework	4	17%	31	20%	35	19%
Understand professors' expectations	6	26%	29	18%	35	19%
English proficiency	2	9%	11	7%	13	7%
Group work	3	13%	13	8%	16	9%
Online courses	0	0%	5	3%	5	3%
find books at library	5	22%	22	14%	27	15%
Academic advisor	1	4%	20	13%	21	12%
Group studying on Zoom	0	0%	8	5%	8	4%
Course registration	2	9%	18	11%	20	11%
Other	0	0%	0	0%	0	0%
Total concerns	23	100	157	100%	180	100%

Note: Some participants reported more than one concern

Table B5 Frequency of Specific Reported Financial-related Concerns, by Education Level

Sub-topic	Undergraduate		Graduate		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Have enough money	4	9%	37	17%	41	16%
Finding an on-campus job	8	18%	19	9%	27	10%
Managing money	7	16%	26	12%	32	12%
Getting a credit card	6	14%	29	13%	35	13%
Open a bank account	6	14%	22	10%	29	11%
Send money to family	1	2%	12	6%	13	5%
Getting a Social Security Number	10	23%	47	22%	57	22%
Paying health insurance	2	5%	21	10%	23	9%
Other	0	0%	3	1%	3	1%
Total concerns	44	100%	216	100%	260	100%

Note: Some participants reported more than one concern

Table B4 describes the frequencies with which participants reported concerns about academics. Both undergraduate and graduate participants reported the same top three academic concerns, but not in the same order. The most frequently reported academic-related concern was about the amount of coursework expected of students ($n = 35$, 19%) and understanding professors' expectations ($n = 35$, 19%).

Proportionately, the latter concern was slightly more pertinent for the undergraduate participants (26%) compared to the graduate participants (18%). This may be because college is a new experience for undergraduate students, whereas graduate students would have had experience in a university setting and presumably have a better understanding of professors' expectations.

Having some preparation to understand the level of coursework that students could expect before the beginning of the semester might be helpful to allay those concerns so that they feel more prepared. Being prepared for interacting with faculty

and advisors prior to the start of the semester may also be beneficial. This preparation may include understanding the American academic culture, such as how to address faculty, navigating the advisor relationship, and utilizing office hours as a support. Finally, to address the concern about finding books at the library, it may be helpful to include a pre-arrival session to introduce the library as an academic resource, and once students arrive in the United States, there should be an in-person introduction to the physical space of the library.

Table B5 describes the frequencies with which participants reported concerns about finances. The most frequently reported financial concern for both undergraduate and graduate participants was how to apply for a Social Security Number ($n = 57$, 22%). At the graduate level, having enough money is the second most frequently reported financial concern (17%). One reason for this concern may be that some graduate students may have family (either with them in the U.S. or in their home country) to take care of, thereby requiring more funding. At the undergraduate level, the next most frequently reported financial concern was finding an on-campus job ($n = 8$, 18%). Three participants reported other concerns that were not part of the survey options. One participant reported a concern about taxes. One participant reported a concern about getting payment as a teaching or research assistant and one participant reported a concern about how inflation is making it difficult to live in the U.S.

Table B6 Frequency of Specific Reported Housing-related Concerns, by Education Level

Sub-topic	Undergraduate		Graduate		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Finding affordable housing	2	22%	31	24.2%	33	24.1%
Finding on-campus housing	0	0%	2	1.6%	2	1.5%
Close to campus housing	2	22%	21	16.4%	23	16.8%
Understanding the lease	0	0%	21	16.4%	21	15.3%
Information about housing	2	22%	16	12.5%	18	13.1%
Getting along with roommate	1	11%	5	3.9%	6	4.4%
Finding roommate	1	11%	9	7.0%	10	7.3%
Finding furniture	0	0%	20	15.6%	20	14.6%
Getting along with neighbors	0	0%	2	1.6%	2	1.5%
Other	1	11%	1	0.8%	2	1.5%
Total concerns	9	100%	128	100%	137	100%

Note: Some participants reported more than one concern

Table B7 Frequency of Specific Reported Transportation-related Concerns, by Education Level

Sub-topic	Undergraduate		Graduate		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Getting around	5	18%	31	19%	36	19%
How to buy a car	3	11%	31	19%	34	18%
Where to buy a car	2	7%	25	15%	27	14%
Getting a driver's license	8	29%	31	19%	39	20%
Buying a bike	1	4%	13	8%	14	7%
Understanding the UD shuttle	9	32%	30	18%	39	20%
Other	0	0%	2	1%	2	1%
Total concerns	28	100%	163	100%	191	100%

Note: Some participants reported more than one concern

Table B6 describes the frequencies with which participants reported concerns about housing. The most frequently reported housing concern among undergraduate

and graduate students was finding affordable (off-campus) housing ($n = 33$, 24%). Graduate students are not provided on-campus housing, so it is not surprising that this was a main concern for many of the participants. This concern is followed by finding off-campus housing that is close to campus ($n = 23$, 16.8%). Along the same lines of off-campus housing, the next most frequently reported concerns were understanding the lease ($n = 21$, 15.3%) and finding furniture ($n = 20$, 14.6%). There were two concerns that were reported that were not part of the survey question. One undergraduate participant reported a concern about finding off-campus housing for their sophomore year, while another participant expressed a concern about how expensive housing in Newark is. Finding off-campus housing is a big priority for many graduate students prior to arrival, therefore, it would be appropriate to provide information to new graduate international students in a pre-arrival webinar or orientation.

Table B7 describes the frequencies with which participants reported concerns about transportation. The most frequently reported concerns were getting a driver's license ($n = 39$, 20%) and understanding the UD shuttle bus system ($n = 39$, 20%). In terms of transportation, undergraduate participants' biggest concern was understanding the UD shuttle system ($n = 9$, 32%), followed by getting a driver's license ($n = 8$, 27%) and getting around Newark ($n = 5$, 18%). For graduate participants, their biggest transportation concerns were tied between getting around Newark ($n = 13$, 19%), how to buy a car ($n = 13$, 19%), and getting a driver's license ($n = 13$, 19%). These findings are aligned with the housing situation of graduate students who live off-campus. The implication of these findings could be that pre-arrival information on housing could be paired with transportation.

Table B8 Frequency of specific reported social and cultural-related concerns by education level

Sub-topic	Undergraduate		Graduate		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Finding US friends	6	46%	20	18%	26	21%
Finding international friends	0	0%	12	11%	12	10%
Finding home country friends	0	0%	6	5%	6	5%
Interacting with US friends	1	8%	11	10%	12	10%
Navigating US culture	1	8%	18	16%	19	15%
Facing racism	0	0%	13	12%	13	10%
Making friends in class	4	31%	18	16%	22	18%
Involved with the local community	1	8%	13	12%	14	11%
Other	0	0	0	0	0	0
Total concerns	13	100%	111	100%	124	100%

Note: Some participants reported more than one concern

Table B9 Frequency of Specific Reported Concerns Related to Living in the U.S., by Education Level

Sub-topic	Undergraduate		Graduate		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
How to enroll a child in school	0	0%	3	3%	3	3%
Finding childcare	0	0%	2	2%	2	2%
Accessing grocery places	2	25%	13	14%	15	14%
Understanding state laws	0	0%	13	14%	13	13%
Adjusting to a new culture	0	0%	11	11%	11	11%
Homesickness	1	13%	9	9%	10	10%
Finding home foods	2	25%	10	10%	12	12%
Where to buy things	2	25%	17	18%	19	18%
How to access healthcare	1	13%	18	0.1875	19	18%
Other	0	0%	0	0%	0	0%
Total concerns	8	100%	96	100%	104	100%

Note: Some participants reported more than one concern

Table B8 describes the frequencies with which participants reported social and cultural concerns. The most frequently reported social and cultural concern among both undergraduate and graduate participants was finding American friends ($n = 26$, 21%). Along the same lines, the second most frequently reported social and cultural concern of undergraduate and graduate participants is making friends in class ($n = 4$, 30.8% and $n = 18$, 16%, respectively). These findings suggest that the social concerns of new international students are more focused on interacting and finding American friends than meeting other international students ($n = 12$, 10%) or making friends from their home countries ($n = 6$, 5%). The implication of this finding is that it may be beneficial to provide opportunities to facilitate meaningful interactions between international students and domestic students at the beginning of students' transition.

Table B9 describes the frequencies with which participants reported concerns regarding living in the U.S. The sub-topics are related to various aspects of daily lives in the U.S., such as finding grocery stores or figuring out how to enroll a child in school. The data show that the top two reported concerns about living in the U.S. were knowing where to buy things ($n = 19$, 18%) and how to access healthcare ($n = 19$, 18%). A majority of the concerns around living in the U.S. are mostly reported by the graduate participants ($n = 96$, 92%) compared to the undergraduate students ($n = 8$, 8%). This may be the case because many of the sub-topics presented in the survey question were more relevant to graduate students who typically would encounter these concerns, such as enrolling a child in school or finding childcare.

Question 2: After attending international orientation, did new international students still have concerns and questions? If yes, what were they?

This question is based on the survey questions (a) Have your (topic here) concerns or needs been resolved?” and (b) “Which (topic here) concerns or questions have not been resolved? Please check all that apply.” Data from these two questions are summarized in a frequency table that details the frequency that participants reported unresolved concerns within each topic (see Table B10).

Table B10 Frequency of Specific Resolved and Unresolved Concerns, by Education Level

Topic	Number of students (%) whose concerns were unresolved	Number of students (%) whose concerns were resolved	Number of students (%) who did not answer
1. Immigration	Undergrad: 2 (11%) Graduate: 7 (9%) Total: 9 (9%)	Undergrad: 7 (39%) Graduate: 35 (45%) Total: 42 (44%)	Undergrad: 9 (50%) Graduate: 35 (45%) Total: 44 (46%)
2. COVID-19	Undergrad: 1 (6%) Graduate: 9 (12%) Total: 10 (11%)	Undergrad: 16 (89%) Graduate: 67 (87%) Total: 83 (87%)	Undergrad: 1 (1%) Graduate: 1 (1%) Total: 2 (2%)
3. Academic	Undergrad: 2 (11%) Graduate: 14 (18%) Total: 16 (17%)	Undergrad: 7 (39%) Graduate: 40 (52%) Total: 47 (49%)	Undergrad: 9 (50%) Graduate: 23 (30%) Total: 32 (34%)
4. Financial	Undergrad: 8 (44%) Graduate: 38 (49%) Total: 46 (48%)	Undergrad: 8 (44%) Graduate: 24 (31%) Total: 32 (34%)	Undergrad: 2 (11%) Graduate: 15 (19%) Total: 17 (18%)
5. Housing	Undergrad: 3 (17%) Graduate: 15 (19%) Total: 18 (19%)	Undergrad: 3 (17%) Graduate: 29 (38%) Total: 32 (34%)	Undergrad: 12 (67%) Graduate: 33 (43%) Total: 45 (47%)
6. Transportation	Undergrad: 9 (50%) Graduate: 39 (51%) Total: 48 (51%)	Undergrad: 16 (21%) Graduate: 5 (22%) Total: 21 (22%)	Undergrad: 4 (22%) Graduate: 22 (29%) Total: 26 (27%)
7. Social & Culture	Undergrad: 2 (11%) Graduate: 18 (23%) Total: 19 (20%)	Undergrad: 5 (28%) Graduate: 16 (21%) Total: 21 (22%)	Undergrad: 11 (61%) Graduate: 43 (56%) Total: 54 (57%)
8. Living in the U.S.	Undergrad: 1 (6%) Graduate: 14 (18%) Total: 15 (16%)	Undergrad: 3 (17%) Graduate: 18 (23%) Total: 21 (22%)	Undergrad: 14 (78%) Graduate: 45 (58%) Total: 59 (62%)

Table B10 shows that despite having attended international student orientation, there were unresolved concerns. The topic of transportation was one that many participants reported as being unresolved. Both the undergraduate participants ($n = 9$, 50%) and graduate participants ($n = 39$, 51%) equally had unresolved concerns about transportation. Financial concerns were also another frequently reported unresolved topic ($n = 46$, 48%), whereby undergraduate ($n = 8$, 44%) and graduate participants ($n = 38$, 49%) almost equally had the same proportion of reported unresolved concerns.

These findings also indicate that many participants had reported that their concerns were resolved after completing the orientation program. Many others did not make a selection.

In order to understand the unresolved concerns that new international students had after attending international student orientation, I created frequency tables that summarized the data on specific needs within the eight topics.

The following tables illustrate the frequency of participants' unresolved concerns within each topic, broken down by level of education. Table B11 describes the specific unresolved concerns related to immigration. Table B12 describes the specific unresolved concerns related to COVID-19. Table B13 describes the specific unresolved concerns related to academics. Table B14 describes the specific unresolved concerns related to finances. Table B15 describes the specific unresolved concerns related to housing. Table B16 describes the specific unresolved concerns related to transportation. Table B17 describes the specific unresolved concerns related to social and culture. Table B18 describes the specific unresolved concerns related to living in the U.S.

Table B11 Frequency of Specific Unresolved Immigration-related Concerns, by Education Level

Sub-topic	Undergraduate		Graduate		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Understanding immigration documents	0	0%	1	10%	1	8%
Going through port of entry	0	0%	0	0%	0	0%
Maintaining visa status in the US	2	100%	4	40%	6	50%
Completing government check in	0	0%	0	0%	0	0%
Understanding immigration regulations	0	0%	2	20%	3	17%
Other	0	0%	3	30%	4	25%
Total unresolved concerns	2	100%	10	100%	14	100%

Table B12 Frequency of Specific Unresolved COVID-19 related Concerns, by Education Level

Sub-topic	Undergraduate		Graduate		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Where to get a COVID-19 test	1	100%	3	30%	4	36.4%
Length of quarantine period upon arrival	0	0%	2	20%	2	18.2%
Whether COVID-19 vaccination is accepted by UD	0	0%	1	10%	1	9.1%
How to upload vaccination record	0	0%	1	10%	1	9.1%
COVID-19 vaccination exemption	0	0%	1	10%	1	9.1%
Mask rules on campus	0	0%	0	0%	0	0.0%
Where to get a COVID-19 vaccine	0	0%	0	0%	0	0.0%
Other	0	0%	2	20%	2	18.2%
Total unresolved concerns	1	100%	10	100%	11	100.0%

Table B13 Frequency of Specific Unresolved Academic-related Concerns, by Education Level

Sub-topic	Undergraduate		Graduate		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Amount of coursework	0	0%	1	5%	1	4.5%
Understand professors' expectations	1	50%	5	25%	6	27.3%
English proficiency	1	50%	2	10%	3	13.6%
Group work	0	0%	2	10%	2	9.1%
Online courses	0	0%	0	0%	0	0.0%
Find books at library	0	0%	5	25%	5	22.7%
Academic advisor	0	0%	4	20%	4	18.2%
Group studying on Zoom	0	0%	1	5%	1	4.5%
Course registration	0	0%	0	0%	0	0.0%
Other	0	0%	0	0	0	0.0%
Total unresolved concerns	2	100	20	100%	22	100.0%

Table B2 reveals that there were 111 reported concerns about immigration, but Table B11 indicates that most of the immigration questions have been resolved after international student orientation (i.e., from a total of 111 concerns down to 12 concerns). However, there were three participants who reported unresolved immigration concern in the Other option, namely how to obtain a Social Security Number. This may have been reported because participants did not get enough information during international student orientation about the process for applying for a Social Security Number. To address this concern, it may be useful for Center for Global Programs and Services to hold a special information session that goes over the application process in detail after international student orientation. Table B3 shows that 92 participants had questions or concerns about COVID-19, but Table B12 indicates that many COVID-19 related concerns were resolved after international student orientation (i.e., from a total of 92 concerns to 11 concerns). There were two

other concerns that students selected, but they did not specify what those concerns were. This finding suggests that the information on COVID-19 regulations and requirements that were presented at international student orientation were sufficient to resolve most of the COVID-19 concerns.

Table B4 indicates that there were 180 reported academic concerns, but Table B13 indicates that many academic concerns were resolved after international student orientation (i.e., from a total of 180 concerns to 22 concerns). Although there was no presentation that focused on academics at international student orientation, the decline in unresolved concerns may have been caused by the effect of time. Students adjusted to the U.S. academic culture and academic policies as they gained academic experiences. Moreover, undergraduate international students are required to enroll in a First Year Seminar, where the academic policies are explained. Very few undergraduates reported unresolved academic concerns, and it is possible that the First Year Seminar helped the students. In fact, graduate students make up the majority of those who reported unresolved academic concerns. Since graduate students are not enrolled in a First Year Seminar, perhaps a suggestion would be to create a program or workshop similar to a First Year Seminar for graduate students.

Table B14 Frequency of Specific Unresolved Financial-related Concerns, by Education Level

Sub-topic	Undergraduate		Graduate		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Have enough money	1	6.3%	7	9.0%	8	8.5%
Finding an on-campus job	6	37.5%	9	11.5%	15	16.0%
Managing money	1	6.3%	7	9.0%	8	8.5%
Getting a credit card	2	12.5%	12	15.4%	14	14.9%
Open a bank account	1	6.3%	3	3.8%	4	4.3%
Send money to family	0	0.0%	8	10.3%	8	8.5%
Getting a Social Security Number	5	31.3%	20	25.6%	25	26.6%
Paying health insurance	0	0.0%	9	11.5%	9	9.6%
Other	0	0.0%	3	3.8%	3	3.2%
Total unresolved concerns	16	100.0%	78	100.0%	94	100.0%

Table B15 Frequency of Specific Unresolved Housing-related Concerns, by Education Level

Sub-topic	Undergraduate		Graduate		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Finding affordable housing	1	16.7%	6	23.1%	7	21.9%
Finding on-campus housing	0	0.0%	0	0.0%	0	0.0%
Close to campus housing	1	16.7%	7	26.9%	8	25.0%
Understanding the lease	1	16.7%	3	11.5%	4	12.5%
Information about housing	1	16.7%	3	11.5%	4	12.5%
Getting along with roommate	0	0.0%	0	0.0%	0	0.0%
Finding roommate	0	0.0%	2	7.7%	2	6.3%
Finding furniture	1	16.7%	5	19.2%	6	18.8%
Getting along with neighbors	1	16.7%	0	0.0%	1	3.1%
Other	0	0.0%	0	0.0%	0	0.0%
Total unresolved concerns	6	100.0%	26	100.0%	32	100.0%

Table B16 Frequency of Specific Unresolved Transportation-related Concerns, by Education Level

Sub-topic	Undergraduate		Graduate		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Getting around	3	16.7%	15	14.6%	18	14.9%
How to buy a car	3	16.7%	23	22.3%	26	21.5%
Where to buy a car	2	11.1%	20	19.4%	22	18.2%
Getting a driver's license	5	27.8%	27	26.2%	32	26.4%
Buying a bike	1	5.6%	6	5.8%	7	5.8%
Understanding the UD shuttle	4	22.2%	12	11.7%	16	13.2%
Other	0	0.0%	0	0.0%	0	0.0%
Total unresolved concerns	18	100.0%	103	100.0%	121	100.0%

Table B5 indicates that there were 260 reported financial concerns, but Table B14 indicates that some financial-related concerns were resolved after international student orientation (i.e., from a total of 260 concerns to 94 concerns). Results showed the top three unresolved concerns centered on how to get a Social Security Number ($n = 25$, 27%), how to find on-campus employment ($n = 15$, 16%), and how to apply for a credit card ($n = 14$, 15%). Although steps on how to apply for a Social Security Number were presented at international student orientation, the presentation was brief and did not go into many details. In addition, the Center for Global Programs and Services also created a webpage on their website outlining the steps and describing the required documents for applying for a Social Security Number. However, this finding indicates that additional explanation on how to obtain a Social Security Number might be needed. Students also might need to be directed to the Center for Global Programs and Services webpage, which includes more information on applying for a Social Security Number.

With regards to finding on-campus employment, the steps for finding an on-campus job were not specifically outlined in the Career Center's presentation at the international student orientation. Students were encouraged to contact a career counselor to learn more about this process and receive guidance. They were also provided the website for the Career Center and shown the website (Handshake) where they would be able to search for on-campus jobs. This finding suggests that perhaps some students may not have processed this information. Another possibility is that students wanted more targeted, specific information on how to search and apply for on-campus jobs, which was not addressed in the orientation or other digital materials.

In terms of the unresolved concerns around applying for a credit card, this was not a topic that had been covered in any pre-arrival, upon-arrival, or post-arrival orientations. Although PNC Bank introduced their services, including explaining how to open a bank account at the international student orientation, there was no mention of how to apply for a credit card. This finding suggests that additional information sessions and/or materials on financial resources may be needed. Perhaps a follow-up session on specific banking products and the steps for applying for a credit card would be helpful to address this specific concern. In this instance, some education on the different banking products might be helpful, with a focus on what kinds of services are necessary for making different purchases in the U.S.

Table B6 shows that there were 137 reported concerns on housing, but Table B15 indicates that some housing concerns were resolved after international student orientation (i.e., from a total of 137 concerns to 32 concerns). Finding off-campus housing remains one of the most frequently reported housing concerns for graduate students ($n = 7$, 27%). Finding affordable housing ($n = 6$, 23%) and finding furniture

($n = 6$, 19%) also continued to be a concern for graduate students. It is possible that new graduate students were still living in temporary housing at the time of taking this survey while waiting to move into a more affordable and/or closer housing. Although the Center for Global Programs and Services may not be able to provide direct services or any additional information on housing options, they may provide information on places where students could purchase furniture for their houses or apartments. In this instance, the role of the iBuddy Peer Mentoring program may be useful, as students could share their experiences on where and how to purchase furniture.

Table B7 reports that there were 191 reported concerns on transportation, but Table B16 indicates that some transportation concerns were resolved after international student orientation (i.e., from a total of 191 concerns to 121 concerns). Table B16 describes that the unresolved transportation concern centered on mobility with a car. Specifically, participants still had questions on how to buy a car ($n = 26$, 21%), where to buy a car ($n = 22$, 18%), and how to apply for a driver's license ($n = 32$, 26%). These concerns were shared almost equally between the undergraduate and graduate participants. The specific topics about how and where to purchase a car were not mentioned in any of the pre-arrival orientation events or materials, international student orientation, or post-orientation events or materials. While the procedure for applying for a driver's license was mentioned briefly during international student orientation, the presentation provided few details. This finding indicates that more specific information on transportation should be included in future programming.

Table B17 Frequency of Specific Unresolved Social and Cultural-related Concerns, by Education Level

Sub-topic	Undergraduate		Graduate		Full sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Finding US friends	1	25.0%	8	19.5%	9	20.0%
Finding international friends	0	0.0%	4	9.8%	4	8.9%
Finding home country friends	0		2	4.9%	2	4.4%
Interacting with US friends	2	50.0%	5	12.2%	7	15.6%
Navigating US culture	0	0.0%	3	7.3%	3	6.7%
Facing racism	0	0.0%	5	12.2%	5	11.1%
Making friends in class	1	25.0%	5	12.2%	6	13.3%
Involved with the local community	0	0.0%	9	22.0%	9	20.0%
Other	0	0.0%	0	0.0%	0	0.0%
Total unresolved concerns	4	100.0%	41	100.0%	45	100.0%

Table B18 Frequency of Specific Unresolved Concerns Related to Living in the U.S., by Education Level

Sub-topic	Undergraduate		Graduate		Total concerns	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
How to enroll a child in school	0	0.0%	2	6.9%	2	6.1%
Finding childcare	0	0.0%	2	6.9%	2	6.1%
Accessing grocery places	1	25.0%	2	6.9%	3	9.1%
Understanding state laws	0	0.0%	6	20.7%	6	18.2%
Adjusting to a new culture	0	0.0%	1	3.4%	1	3.0%
Homesickness	0	0.0%	1	3.4%	1	3.0%
Finding home foods	1	25.0%	1	3.4%	2	6.1%
Where to buy things	1	25.0%	5	17.2%	6	18.2%
How to access healthcare	1	25.0%	9	31.0%	10	30.3%
Other	0	0.0%	0	0.0%	0	0.0%
Total unresolved concerns	4	100.0%	29	100.0%	33	100.0%

Table B8 reveals that there were 124 reported social and cultural concerns, but Table B17 indicates that most social and cultural-related concerns were resolved after the international student orientation (i.e., from a total of 124 concerns to 45 concerns). Graduate participants reported most of the concerns, where the focus was on finding U.S. friends ($n = 8$, 20%) and getting involved with the local community ($n = 9$, 20%). As students settle into their new environment, the Center for Global Programs and Services may be able to facilitate building relationships, creating linkages with local community resources, or relay information on local community events. In this instance, the focus is not on providing information, but rather working with campus partners to create a sense of belonging through different events and avenues. Events such as the International Coffee Hour may facilitate building relationships with domestic students as well as connecting with the local community.

Table B9 reports that there were 104 reported concerns about living in the U.S., but Table B18 indicates that most concerns about living in the U.S. were resolved after the international student orientation (i.e., from a total of 104 concerns to 33 concerns). One possible explanation for this is the effect of time, where new students have settled into their new environments and have been able to find and access resources to resolve these concerns. The issue of accessing healthcare ($n = 10$, 30%) remains a frequently reported concern, which might suggest that information about how to access health care services might not be provided clearly or easily for international students. A potential strategy to address this concern is to provide information materials that are easy for international students to access, such as a webpage or recorded video explaining the different healthcare providers in the area.

Question 3: What other concerns and questions did new international students have?

This question corresponds to survey question number 14, “Since arriving in the United States, what other concerns or questions have you had that were not mentioned above?” Few participants provided concerns that were not addressed in the survey. 89.5% ($n = 85$) of participants did not report any other concerns. To answer research question 3, I collated the qualitative data that participants provided in the survey. These participants reported they had questions about Optional Practical Training and Curricular Practical Training employment rules requirements (3 participants). One participant mentioned a concern about adapting to the U.S. classroom environment. One participant had a concern about the process of travelling back to their home country. One participant had a specific concern about housing at Lewes campus. Although there were other responses to this question, the responses were already covered in the Needs Assessment Survey, such as obtaining a Social Security Number, opening a bank account, and local transportation.

Discussion and Implications

International student orientation programs typically aim to achieve three goals: (a) to accelerate international students’ adjustment to the U.S. culture and academic culture, (b) to teach students how to gather information about campus and local resources on their own, and (c) to facilitate new international students’ interactions with domestic students, faculty, and staff (Althen, 1990). In other words, international student orientation aims to provide tools and resources for international students to obtain appropriate information and to facilitate socialization with their new environment, which ultimately aids their transition and adjustment to the new culture, both socially and academically.

However, the literature suggests that there are some limitations to how most orientation programs are designed and implemented for international students. One of the main limitations is that there is a tendency to provide too much information in a very short period of time, especially during upon-arrival orientation (international student orientation) (Forbes-Mewett & Sawyer, 2016; Jean-Francois, 2019). During this time, new international students tend to have a limited mental resources, as there are competing priorities they are juggling as well as the possibility of jetlag (Young & Althen, 2013). Another limitation is that international students are not getting enough information to aid in their transition (Madden-Dent, Wood, & Roskina, 2019; Puntene, 2019; Yu, Isensee, & Kappler, 2016). When students do not have the information they need to make the decisions, this may lead to frustration, which could lead to a negative experience in their transition. However, the issue of not having information might not be because of a deficit within international students, but rather that the information was not made easily accessible for international students. Another possibility is that the information was made easily accessible, but international students chose not to access it.

Given the gaps in the connection between information, access, and international students, the first step is to identify what the information needs are. The Needs Assessment Survey identified the concerns or questions new international students had when they arrived in the U.S., which included the information needs that they had. The second step would be to determine how and when to provide access to this information. The improvement strategies proposed in this ELP seek to address these gaps through designing pre-arrival, upon-arrival, and post orientation programs.

Salient Information Topics and When to Introduce Them

One of the findings showed that there are some information topics that were not fulfilled either at a pre-arrival orientation program or at the upon arrival orientation program. This is evident by the reported concerns that students had when they first arrived in the U.S. and unresolved concerns that they still had, even after having attended international student orientation. The topics of finances ($n = 82$, 86%), transportation ($n = 77$, 81%), and academics ($n = 66$, 69%) were the top three topics that international students reported as concerns when they first arrived. After attending orientation, transportation ($n = 48$, 51%), and finances ($n = 46$, 48%), were still the top two concerns. The topic of social and cultural ($n = 19$, 20%) was the third most frequently reported concern.

None of these topics were presented during the pre-arrival information session or international student orientation. Some items within these topics were mentioned during the pre-arrival information session, but not extensively. For example, during the pre-arrival information session, there was one slide that mentioned available local transportation options, such as the UD shuttle bus, the DART bus, and ride shares. However, the presentation did not go into detail about these options, such as whether they were free, how to understand the routes, and where to access information about these options.

What this finding implies is that these topics are considered important to new international students, and therefore, they should be introduced during an orientation program, whether it is pre-arrival, upon-arrival, or post-arrival (extended orientation). The next steps are to determine when to introduce these topics. Determining the

appropriate times to introduce the information topics involves identifying which events or orientation programs would be suitable.

The first consideration to determine when information should be introduced is the temporal aspect of information needs as introduced by Chang and colleagues (2021). They outlined four instances when international students seek information: (a) when preparing for particular contexts; (b) just-in-time; (c) response to incidents; and d) recurring rhythms (Chang, Gomes, & McKay, 2021). In the context of international students arriving in the U.S., the first two patterns are most salient. To prepare themselves for the U.S. academic culture, international students may seek this information prior to beginning their academic program. Therefore, providing this information prior to their arrival might be more appropriate than after their arrival to the U.S. In terms of the just-in-time aspect, information is presented to international students at the time that the information is needed. For example, information about the locations of lecture halls on campus is more relevant after students have arrived on campus.

The other consideration for determining when to present information is information overload. The literature shows that presenting a lot of information in a short period of time at a time when new international students have competing priorities can make the information challenging to process (Forbes-Mewett & Sawyer, 2016; Jean-Francois, 2019), even if the information is useful and needed. To avoid information overload, it would be more strategic to disperse the information through an extended period of time (Chang et al., 2021).

Therefore, some topics and specific sub-topics should be introduced at pre-arrival orientation, upon-arrival orientation (international student orientation), and/or

post-arrival orientation (extended orientation). A pre-arrival orientation is the period of time before students arrive in the U.S. This time period can vary between several months and within a few weeks of arrival in the U.S. The nature of this orientation is to help students prepare to encounter their new environments (Tsang, 2001).

Additionally, since there is considerably more time available during this period compared to upon-arrival orientation (international student orientation), pre-arrival orientation may be used to provide information that requires more time to explain. For example, the topic of the healthcare system in the U.S. is complicated and multi-layered. There are also specific cultural terms and fundamental principles that may differ from the healthcare terms and principles of other countries that need to be unpacked. Therefore, a topic like this might be appropriate to be presented during a pre-arrival orientation program, where there is ample time to explain how the healthcare system in the U.S. works, what resources are available for international students, and how they can access these resources.

In terms of upon-arrival orientation (international student orientation), many higher education institutions conduct a half-day orientation program (Kimoto, 2009). The international student orientation program at UD is mandatory for new international students, as it presents important information about immigration responsibilities and regulations. Due to the mandatory nature of international student orientation, this program tends to have a captive audience, which increases the chances of important information being absorbed by new international students. On the other hand, the limitations of a half-day international student orientation program are that there tends to be too much information in a short period of time, as well as not enough information due to a short period of time. Additionally, many students have

just arrived within a few days of upon-arrival orientation and they are juggling several priorities, such as moving into their housing and getting acclimated to the new university and local environments. Therefore, the information presented at international student orientation should be succinct and aim to address practical issues (just-in-time to address upon-arrival needs). For example, the topic of knowing how to navigate the UD shuttle system might be one that is practical, just-in-time, and does not require too much time. This topic can be introduced at international student orientation.

Finally, similar to pre-arrival orientation, the time period of an extended orientation program is longer than upon-arrival orientation. Many extended orientation programs, such as a First Year Seminar, can extend throughout the first semester. Because of this extended period of time, it may be the appropriate time to introduce certain topics that require more time to explain and/or that is relevant for the specific event during a student's transition. For example, as new students begin to get acclimated to the campus environment and meet new people, an extended orientation, such as a First Year Seminar, might aid in facilitating a sense of belonging. This intervention is one that may need an extended period of time to complete, compared to international student orientation that is more practical and shorter in time. Additionally, a First Year Seminar is a course where participants are required to attend, which enhances the possibility that the information would be better absorbed.

Orientation programs are not the only strategies to provide information to new international students. There are other media that can be used to provide information, such as digital media. One example is a central webpage that contains information that new international students would want to know about. This central webpage could link

to other websites, resource pages, and videos. This webpage can also be divided according to the student lifecycle, pre-arrival, upon-arrival, and post-arrival.

Based on the nature of the different orientation programs and a consideration of different medium to deliver information to students, I created a table to illustrate a sample of how sub-topics might be organized into each orientation program and/or additional media (see Table B19).

Table B19 Topics and When to Introduce Them

Orientation program or media	Transportation					Finances		Academic			Immigration		Social cultural		
	Getting around Newark	Understa nding UD shuttle	How and where to buy a car	Getting a driver's license	Open ing a bank accou nt	Getting a SSN	Finding an on- campus job	Profess ors' expectat ion	Course registra tion	Group work	Going through port of entry	Understand immigration docs	Understand immigration regs	Finding friends	Navigating US culture
Pre-arrival (longer period, preparation, optional)	x		x			x		x			x	x			
Pre-arrival other media (eg: website)											x				
Upon-arrival (short period, just-in-time, mandatory)	x	x		x	x		x					x	x	x	x
Upon-arrival other media (eg: website)												x	x		
Extended orientation (longer period, just- in-time, mandatory)								x	x	x				x	x
Post arrival other media (eg: website)	x	x	x	x	x	x	x								

Limitations

Although the results of the Needs Assessment Survey provided information about the unresolved concerns that international students had after international student orientation, it did not assess international students' preferences for receiving the information. Chang and colleagues (2021) stated that the source and the channel from which international students seek information is just as important as the topic of information itself. Although the information and resources on the different topics are available in many different forms, such as digitally on a website or by word of mouth from peers, not all international students know how and where to find this information. Therefore, understanding the students' preferences for finding information might be helpful to better provide the necessary information for new international students.

Conclusion

The findings of this Needs Assessment Survey suggest that there are specific information topics that new international students specifically seek out during their transition and adjustment period. Moreover, it is important to consider how these information topics should be introduced to new international students as well as when the information is to be introduced, ranging from pre-arrival, upon-arrival (international student orientation), and extended orientation. Each type of orientation program has its own advantages and limitations. Other interventions or media can be used to convey information, such as a website, which many students use to find relevant information that they need. To determine which program is appropriate and when to present the information, it is necessary to understand how important the topic is for international students and analyze the content of each topic.

I will use the findings of this Needs Assessment Survey to design orientation programs that can meet the information needs of new international students. Artifact 4 will discuss how these information topics are conveyed in a pre-arrival orientation, and Artifact 5 contains the design of international student orientation. Finally, Artifact 6 contains a design for extended orientation, namely the syllabus of a First Year Seminar class with plans to improve the course to aid the transition and adjustment for new international students.

REFERENCES

- Althen, G. (1990). *Orientation of foreign students*. NAFSA Field Service Working Paper #13.
- Ammigan, R., & Jones, E. (2018). Improving the student experience: Learning from a comparative study of international student satisfaction. *Journal of Studies in International Education*, 22(4), 283–301.
<https://doi.org/10.1177/1028315318773137>
- Arambewela, R., & Hall, J. (2009). An empirical model of international student satisfaction. *Asia Pacific Journal of Marketing and Logistics*, 21(4), 555–569.
<https://doi.org/10.1108/13555850910997599>
- Chang, S., Gomes, C., & McKay, D. (2021). The digital information ecology of international students: Understanding the complexity of communication. In S. Chang & C. Gomes (Eds.), *Digital experiences of international students: Challenging assumptions and rethinking engagement*. Routledge.
- Forbes-Mewett, H., & Sawyer, A. M. (2016). International students and mental health. *Journal of International Students*, 6(3), 661–677.
<https://doi.org/10.32674/jis.v6i3.348>
- Jean-Francois, E. (2019). Exploring the perceptions of campus climate and integration strategies used by international students in a US university campus. *Studies in*

Higher Education, 44(6), 1069–1085.

<https://doi.org/10.1080/03075079.2017.1416461>

Kimoto, L. (2009). The English language instructor: A bridge to support services on campus. In M. S. Andrade & N. W. Evans (Eds.), *International students: Strengthening a critical resource*. Rowman & Littlefield Education.

Koo, K., Baker, I., & Yoon, J. (2021). The first year acculturation: A longitudinal study on acculturative stress and adjustment among the first year international college students. *Journal of International Students*, 11(2), 278–298.

<https://doi.org/10.32674/jis.v11i2.1726>

Madden-Dent, T., Wood, D., & Roskina, K. (2019). An inventory of international student services at 200 U.S. universities and colleges: Descriptive data of pre-departure and post-arrival supports. *Journal of International Students*, 9(4), 993–1008. <https://doi.org/10.32674/jis.v9i4.346>

Meyer, J. D. (2001). A conceptual framework for comprehensive international student orientation programs. *International Education*, 31(1), 56–79.

Mohamed, N., Schoen, S., Yu, X., & Kappler, B. (2021). Creating an online orientation course: The journey to internationalizing the campus. In S. Chang & C. Gomes (Eds.), *Digital experiences of international students* (pp. 174–192). Routledge.

Punteney, K. (2019). *The international education handbook: Principles and practices*

of the field. NAFSA: Association of International Educators.

Tsang, E. W. K. (2001). Adjustment of mainland Chinese academics and students to Singapore. *International Journal of Intercultural Relations*, 25(4), 347–372.
[https://doi.org/10.1016/S0147-1767\(01\)00010-4](https://doi.org/10.1016/S0147-1767(01)00010-4)

Young, N. E., & Althen, G. (2013). *The handbook of international student advising* (3rd ed.). Intercultural Interaction LLC.

Yu, X., Isensee, E., & Kappler, B. (2016). Using data wisely to improve international student satisfaction: Insights gained from International Student Barometer. In K. Bista & C. Foster (Eds.), *Exploring the social and academic experiences of international students in higher education insitutions* (pp. 212–232).
<https://doi.org/http://doi:10.4018/978-1-4666-9749-2.ch012>

APPENDIX B1

Survey Instrument

New International Students Needs Assessment

The purpose of this survey is to understand the needs of new international students upon their arrival in the United States and at the University of Delaware. Please be assured that your responses will be kept completely confidential and this survey has been granted approval by UD Institutional Review Board (IRB). Your name will NOT be collected, and results will be reported without using information that can specifically identify you, so email addresses will be de-identified.

The survey should take you around 10 minutes to complete. Your participation is voluntary. You have the right to withdraw at any point, for any reason, and without any consequence. If you would like to contact the researcher to discuss this survey, please e-mail Vina Titaley at titaley@udel.edu. A full copy of the survey consent form can be accessed [here](#).

By clicking below, you acknowledge that your participation is voluntary, you are least 18 years of age, and you have the right to withdraw at any point, for any reason, and without any consequence.

☐ I consent to participate (1)

1. I am a/an...

☐ Undergraduate student (1)

☐ Master's student (2)

☐ Doctoral student (3)

2. When did you arrive in the United States?

3. What is your home country (nationality)?

Afghanistan	Congo, Republic of the	Iran
Albania	Costa Rica	Iraq
Algeria	Côte d'Ivoire	Ireland
Andorra	Croatia	Israel
Angola	Cuba	Italy
Antigua and Barbuda	Cyprus	Jamaica
Argentina	Czech Republic	Japan
Armenia	Denmark	Jordan
Australia	Djibouti	Kazakhstan
Austria	Dominica	Kenya
Azerbaijan	Dominican Republic	Kiribati
The Bahamas	East Timor (Timor-Leste)	Korea, North
Bahrain	Ecuador	Korea, South
Bangladesh	Egypt	Kosovo
Barbados	El Salvador	Kuwait
Belarus	Equatorial Guinea	Kyrgyzstan
Belgium	Eritrea	Laos
Belize	Estonia	Latvia
Benin	Eswatini	Lebanon
Bhutan	Ethiopia	Lesotho
Bolivia	Fiji	Liberia
Bosnia and Herzegovina	Finland	Libya
Botswana	France	Liechtenstein
Brazil	Gabon	Lithuania
Brunei	The Gambia	Luxembourg
Bulgaria	Georgia	Madagascar
Burkina Faso	Germany	Malawi
Burundi	Ghana	Malaysia
Cabo Verde	Greece	Maldives
Cambodia	Grenada	Mali
Cameroon	Guatemala	Malta
Canada	Guinea	Marshall Islands
Central African Republic	Guinea-Bissau	Mauritania
Chad	Guyana	Mauritius
Chile	Haiti	Mexico
China	Honduras	Micronesia, Federated
Colombia	Hungary	States of
Comoros	Iceland	Moldova
Congo, Democratic	India	Monaco
Republic of the	Indonesia	Mongolia

Montenegro	Singapore
Morocco	Slovakia
Mozambique	Slovenia
Myanmar (Burma)	Solomon Islands
Namibia	Somalia
Nauru	South Africa
Nepal	Spain
Netherlands	Sri Lanka
New Zealand	Sudan
Nicaragua	Sudan, South
Niger	Suriname
Nigeria	Sweden
North Macedonia	Switzerland
Norway	Syria
Oman	Taiwan
Pakistan	Tajikistan
Palau	Tanzania
Panama	Thailand
Papua New Guinea	Togo
Paraguay	Tonga
Peru	Trinidad and Tobago
Philippines	Tunisia
Poland	Turkey
Portugal	Turkmenistan
Qatar	Tuvalu
Romania	Uganda
Russia	Ukraine
Rwanda	United Arab Emirates
Saint Kitts and Nevis	United Kingdom
Saint Lucia	United States
Saint Vincent and the Grenadines	Uruguay
Samoa	Uzbekistan
San Marino	Vanuatu
Sao Tome and Principe	Vatican City
Saudi Arabia	Venezuela
Senegal	Vietnam
Serbia	Yemen
Seychelles	Zambia
Sierra Leone	Zimbabwe

4. What type of visa do you have?

☐ F visa (1)

☐ J visa (2)

☐ Other: (3) _____

Immigration

5. Since arriving in the United States, what immigration concerns or questions have you had?
Select all that apply.

☐

I had questions understanding my immigration documents. (1)

☐

I had questions about going through immigration/passport check at the airport. (2)

☐

I had questions about how to maintain my visa status. (3)

☐

I had questions about how to complete government check in. (4)

☐

I had questions about understanding immigration regulations. (5)

☐

Other (please specify here): (6)

☐

None. (7)

5a. Have your immigration concerns or questions been resolved?

☐ Yes (1)

☐ No (2)

Display This Question:

If 5a. Have your immigration concerns or questions been resolved? = No

5b. Which immigration concerns or questions have NOT been resolved? Please check all that apply.

☐

Questions understanding my immigration documents. (1)

☐

Questions about going through immigration/passport check at the airport. (2)

☐

Questions about how to maintain my visa status. (3)

☐

Questions about how to complete government check in. (4)

☐

Questions about understanding immigration regulations. (5)

☐

Other (please specify here): (6)

COVID-19

6. Since arriving in the United States, what COVID-19 concerns or questions have you had? Select all that apply.

- ☐ I had questions about where to get a COVID-19 vaccination. (1)
- ☐ I had questions about how long I have to quarantine upon arrival in the United States. (2)
- ☐ I had questions about whether my COVID-19 vaccination from my home country is accepted by the University of Delaware. (3)
- ☐ I had questions about how to upload my COVID-19 vaccination documentation. (4)
- ☐ I had questions about how to request a COVID-19 vaccination exemption. (5)
- ☐ I had questions about whether I will have to wear a mask on campus. (6)
- ☐ I had questions about where to get tested for COVID-19. (7)
- ☐ Other (please specify here): (8)
- ☐ None. (9)
-

Skip To: Q14 If COVID-19 6. Since arriving in the United States, what COVID-19 concerns or questions have you had... = Other (please specify here):

6a. Have your COVID-19 related concerns or questions been resolved?

☐ Yes (1)

☐ No (2)

Display This Question:

If 6a. Have your COVID-19 related concerns or questions been resolved? = No

6b. Which COVID-19 related concerns or questions have NOT been resolved? Please check all that apply.

- ☐ Questions about where to get a COVID-19 vaccination. (1)
 - ☐ Questions about how long I have to quarantine upon arrival in the United States. (2)
 - ☐ Questions about whether my COVID-19 vaccination from my home country is accepted by the University of Delaware. (3)
 - ☐ Questions about how to upload my COVID-19 vaccination documentation. (4)
 - ☐ Questions about how to request a COVID-19 vaccination exemption. (5)
 - ☐ Questions about whether I will have to wear a mask on campus. (6)
 - ☐ Questions about where to get tested for COVID-19. (7)
 - ☐ Other (please specify here): (8)
-

Academic

7. Since arriving in the United States, what academic concerns or questions have you had? Select all that apply.

- ☐ I had questions about the amount of academic work I have this semester. (1)
- ☐ I had questions about understanding and meeting my professors' expectations. (2)

- ☐ I had questions about speaking and understanding English. (3)
 - ☐ I had questions about working in groups with classmates on course projects. (4)
 - ☐ I had questions about whether the courses I want are available online. (5)
 - ☐ I had questions about how to get books at the library. (6)
 - ☐ I had questions about connecting with my academic advisor. (7)
 - ☐ I had questions about group studying via Zoom. (8)
 - ☐ I had questions about getting into the classes that I want. (9)
 - ☐ Other (please specify here): (10)
 - ☐ None. (11)
-

Skip To: Q16 If Academic 7. Since arriving in the United States, what academic concerns or questions have you had... = None.

7a. Have your academic-related concerns or questions been resolved?

- ☐ Yes (1)
 - ☐ No (2)
-

Display This Question:

If 7a. Have your academic-related concerns or questions been resolved? = No

7b. Which academic concerns or questions have NOT been resolved? Please check all that apply.

- ☐ I had questions about the amount of academic work I have this semester. (1)
 - ☐ I had questions about understanding and meeting my professors' expectations. (2)
 - ☐ I had questions about speaking and understanding English. (3)
 - ☐ I had questions about working in groups with classmates on course projects. (4)
 - ☐ I had questions about whether the courses I want are available online. (5)
 - ☐ I had questions about how to get books at the library. (6)
 - ☐ I had questions about connecting with my academic advisor. (7)
 - ☐ I had questions about group studying via Zoom. (8)
 - ☐ I had questions about getting into the classes that I want. (9)
 - ☐ Other (please specify here): (10)
-

Financial

8. How are you funding your studies? Select all that apply.

- ☐ Own funds (1)
- ☐ Family funds (2)
- ☐ Loan (3)
- ☐ Home government funding (4)
- ☐ Assistantship from UD (as a teaching, research or graduate assistant) (5)
- ☐ Employer funding (6)
- ☐ Other: (7) _____

9. Since arriving in the United States, what financial concerns or questions have you had? Select all that apply

- ☐ I had concerns about having enough money to pay for living expenses. (1)
- ☐ I had questions about finding on-campus employment. (2)
- ☐ I had questions about managing my finances. (3)
- ☐ I had questions about getting a credit card. (4)
- ☐ I had questions about opening a bank account. (5)
- ☐ I had questions about sending money back to my family in my home country. (6)

- ☐ I had questions about how to get a Social Security Number. (7)
- ☐ I had questions about how to pay for health insurance. (8)
- ☐ Other (please specify here): (9)
- ☐ None. (10)
-

Skip To: Q18 If 9. Since arriving in the United States, what financial concerns or questions have you had? Select... = None.

9a. Have your financial-related concerns or questions been resolved?

☐ Yes (1)

☐ No (2)

Display This Question:

If 9a. Have your financial-related concerns or questions been resolved? = No

9b. Which financial-related concerns or questions have NOT been resolved? Please check all that apply.

- ☐ Concerns about having enough money to pay for living expenses. (1)
- ☐ Questions about finding on-campus employment. (2)
- ☐ Questions about managing my finances. (3)
- ☐ Questions about getting a credit card. (4)
- ☐ Questions about opening a bank account. (5)
- ☐ Questions about sending money back to my family in my home country. (6)

- ☐ Questions about how to get a Social Security Number. (7)
 - ☐ Questions about how to pay for health insurance. (8)
 - ☐ Other (please specify here): (9)
-

Housing

10. Since arriving in the United States, what housing concerns or questions have you had? Select all that apply.

- ☐ I had questions about finding affordable housing. (1)
- ☐ I had questions about getting registered for on-campus housing (for undergraduate students). (2)
- ☐ I had questions about finding housing close to campus. (3)
- ☐ I had questions about understanding my lease. (4)
- ☐ I had questions about where to find information about housing. (5)
- ☐ I had questions about getting along with my house/roommates. (6)
- ☐ I had questions about finding house/roommates. (7)
- ☐ I had questions about finding furniture for my apartment/house. (8)
- ☐ I had questions about getting along with my neighbors. (9)
- ☐ Other (please specify here): (10)

☐

None. (11)

Skip To: Q20 If Housing 10. Since arriving in the United States, what housing concerns or questions have you had?...
= None

10a. Have your housing-related concerns or questions been resolved?

☐ Yes (1)

☐ No (2)

Display This Question:

If 10a. Have your housing-related concerns or questions been resolved? = No

10b. Which housing concerns or questions have NOT been resolved? Please check all that apply.

- ☐ Questions about finding affordable housing. (1)
 - ☐ Questions about getting registered for on-campus housing (for undergraduate students). (2)
 - ☐ Questions about finding housing close to campus. (3)
 - ☐ Questions about understanding my lease. (4)
 - ☐ Questions about where to find information about housing. (5)
 - ☐ Questions about getting along with my house/roommates. (6)
 - ☐ Questions about finding house/roommates. (7)
-

- ☐ Questions about finding furniture for my apartment/house. (8)
 - ☐ Questions about getting along with my neighbors. (9)
 - ☐ Other (please specify here): (10)
-

Transportation

11. Since arriving in the United States, what transportation concerns or questions have you had?
Select all that apply.

- ☐ I had questions about how to get around in Newark, DE. (1)
- ☐ I had questions about how to buy a car. (2)
- ☐ I had questions about where to buy a car. (3)
- ☐ I had questions about how to get a driver's license. (4)
- ☐ I had questions about where to buy a bicycle. (5)
- ☐ I had questions about understanding the university shuttle bus system. (6)
- ☐ Other (please specify here): (7)
- ☐ None. (8)

Skip To: Q22 If Transportation 11. Since arriving in the United States, what transportation concerns or questions... = None.

11a. Have your transportation-related concerns or questions been resolved?

☐ Yes (1)

☐ No (2)

Display This Question:

If 11a. Have your transportation-related concerns or questions been resolved? = No

11b. Which transportation concerns or questions have NOT been resolved? Please check all that apply.

- ☐ Questions about how to get around in Newark, DE. (1)
 - ☐ Questions about how to buy a car. (2)
 - ☐ Questions about where to buy a car. (3)
 - ☐ Questions about how to get a driver's license. (4)
 - ☐ Questions about where to buy a bicycle. (5)
 - ☐ Questions about understanding the university shuttle bus system. (6)
 - ☐ Other (please specify here): (7)
-

Social and cultural

12. Since arriving in the United States, what social and cultural concerns or questions have you had? Select all that apply.

- ☐ I had concerns about making friends with people from the United States. (1)
 - ☐ I had concerns about making friends with people from other countries. (2)
 - ☐ I had concerns about finding friends from my home country. (3)
 - ☐ I had questions about how to interact with Americans. (4)
 - ☐ I had concerns about whether I will be able to adjust to American culture. (5)
 - ☐ I had concerns about whether I will face racism in the United States. (6)
 - ☐ I had concerns about making new friends in class. (7)
 - ☐ I had questions about how to get connected with members of the local community. (8)
 - ☐ Other (please specify here): (9)
 - ☐ None. (10)
-

Skip To: Q24 If Social and cultural 12. Since arriving in the United States, what social and cultural concerns or... = None.

12a. Have your social and cultural-related concerns and questions been resolved?

☐ Yes (1)

☐ No (2)

Display This Question:

If 12a. Have your social and cultural-related concerns and questions been resolved? = No

12b. Which social and cultural concerns or questions have NOT been resolved? Please check all that apply.

☐ Concerns about making friends with people from the United States. (1)

☐ Concerns about making friends with people from other countries. (2)

☐ Concerns about finding friends from my home country. (3)

☐ Questions about how to interact with Americans. (4)

☐ Concerns about whether I will be able to adjust to American culture. (5)

☐ Concerns about whether I will face racism in the United States. (6)

☐ Concerns about making new friends in class. (7)

☐ Questions about how to get connected with members of the local community. (8)

☐ Other (please specify here): (9)

Living in the United States

13. Since arriving in the United States, what concerns or questions regarding living in the United States have you had? Select all that apply.

- ☐ I had questions about how to enroll my child (or children) in school. (1)
 - ☐ I had questions about how to enroll my child (or children) in school. (2)
 - ☐ I had questions about finding childcare for my child (or children). (3)
 - ☐ I had questions about accessing a grocery store. (4)
 - ☐ I had questions about understanding state laws. (5)
 - ☐ I had questions about adjusting to a new culture. (6)
 - ☐ I had concerns about homesickness. (7)
 - ☐ I had questions about knowing where to find foods from my home country. (8)
 - ☐ I had questions about knowing where to go for the things I need. (9)
 - ☐ I had questions about how to access healthcare in the United States. (10)
 - ☐ Other (please specify here): (11)
 - ☐ None. (12)
-

Skip To: Q26 If Living in the United States 13. Since arriving in the United States, what concerns or questions r... = None.

13a. Have your concerns or questions related to living in the United States been resolved?

☐ Yes (1)

☐ No (2)

Display This Question:

If 13a. Have your concerns or questions related to living in the United States been resolved? = No

13b. Which concerns or questions related to living in the United States have NOT been resolved?
Please check all that apply.

- ☐ Questions about how to enroll my child (or children) in school. (1)
 - ☐ Questions about finding childcare for my child (or children). (23)
 - ☐ Questions about accessing a grocery store. (3)
 - ☐ Questions about understanding state laws. (4)
 - ☐ Questions about adjusting to a new culture. (5)
 - ☐ Questions about homesickness. (6)
 - ☐ Questions about knowing where to find foods from my home country. (7)
 - ☐ Questions about knowing where to go for the things I need. (8)
 - ☐ Questions about how to access healthcare in the United States. (9)
 - ☐ Other (please specify here): (10)
-

14. Since arriving in the United States, what other concerns or questions have you had that were not mentioned above?

15. Included below are different information that new international students find helpful when they arrive in the United States. Based on your personal experience, what information was the most important for you to have? Rank the topics based on order of importance with 1 being the MOST IMPORTANT and 8 being the LEAST IMPORTANT.

	1	2	3	4	5	6	7	8
Immigration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
COVID-19	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Academic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Financial	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Housing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Transportation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social and Cultural	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Living in the United States	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. Below please add any additional information about what was helpful or unhelpful in the orientation or pre-arrival information you received from the University of Delaware.

17. To which gender identity do you most identify? Select all that apply.

- ☐ Female (1)
- ☐ Male (2)
- ☐ Transgender female (3)
- ☐ Transgender male (4)
- ☐ Gender variant/non-conforming (5)
- ☐ Not listed (6) _____
- ☐ Prefer not to answer (7)

18. How do you identify your ethnicity? Select all that apply.

☐

Asian (1)

☐

Black/African (2)

☐

Caucasian (3)

☐

Hispanic/Latinx (4)

☐

Native American (5)

☐

Pacific Islander (6)

☐

Mixed race (7)

☐

Other: (8) _____

☐

Prefer not to answer (9)

Appendix B2

Recruitment Emails

Survey recruitment message (sent on Monday, 9/20/21)

Subject heading: New International Students Survey – Your help is requested

Dear (name),

You are invited to participate in a voluntary survey because you are a new international student at the University of Delaware. The purpose of the survey is to better understand the needs of new international students.

The information you provide can help us identify ways to improve programs and information for new international students to the University. Please access the [New International Students Needs Assessment survey here](#).

This survey is voluntary and will take no more than 10 minutes to complete. Your responses will be anonymous.

Please complete the survey by **October 2, 2021**. Your participation is greatly appreciated!

If you have any questions or comments, please contact Vina Titaley, Assistant Director for Special Programs at titaley@udel.edu or 302-831-2115.

Thank you in advance for your participation.

Sincerely,

CGPS

Survey recruitment reminder #1 message (sent on Monday, 9/27/21):

Subject heading: New International Students Survey – Reminder

Dear (name),

Last week, you should have received an invitation to participate in the New International Students Survey. This survey is your opportunity to provide information on the needs of new international students. The survey can be accessed at:

https://delaware.ca1.qualtrics.com/jfe/form/SV_e3RLBYG9mpkRZLU

If you have already completed the survey, thank you!

If you have not already completed the survey, please take 10 minutes to complete [this survey](#). Your responses are anonymous.

If you have any questions or comments, please contact Vina Titaley, Assistant Director for Special Programs at titaley@udel.edu or 302-831-2115. Thank you for your time and assistance.

Sincerely,

CGPS

Survey recruitment reminder #2 message (Sent on Friday, 10/1/2):

Subject heading: Final chance to complete the New International Student Survey

Hello (name),

This is a reminder that the [New International Student Survey](#) is still open until tomorrow, Saturday, October 2 at 5 pm.

If you have already submitted your responses, thank you very much! Your participation is valuable!

If you have not already completed the survey, please take 10 minutes to complete [the short survey](#).

Please let contact Vina Titaley (titaley@udel.edu) if you have any questions. We appreciate your time and participation!

Sincerely,

CGPS

Appendix B3

IRB Approval



Institutional Review Board
21001 Halliburton Hall
Newark, DE 19716
Phone: 302-831-2137
Fax: 302-831-2828

DATE: September 16, 2021

TO: Vina Titaley
FROM: University of Delaware IRB

STUDY TITLE: [1797456-2] Needs Assessment Study of New International Students Fall 2021

SUBMISSION TYPE: Amendment/Modification

ACTION: DETERMINATION OF EXEMPT STATUS
EFFECTIVE DATE: September 16, 2021

REVIEW CATEGORY: Exemption category # (1)

Thank you for your Amendment/Modification submission to the University of Delaware Institutional Review Board (UD IRB). According to the pertinent regulations, the UD IRB has determined this project is EXEMPT from most federal policy requirements for the protection of human subjects. The privacy of subjects and the confidentiality of participants must be safeguarded as prescribed in the reviewed protocol form.

This exempt determination is valid for the research study as described by the documents in this submission. Proposed revisions to previously approved procedures and documents that may affect this exempt determination must be reviewed and approved by this office prior to initiation. The UD amendment form must be used to request the review of changes that may substantially change the study design or data collected.

Unanticipated problems and serious adverse events involving risk to participants must be reported to this office in a timely fashion according with the UD requirements for reportable events.

A copy of this correspondence will be kept on file by our office. If you have any questions, please contact the UD IRB Office at (302) 831-2137 or via email at hsrb-research@udel.edu. Please include the study title and reference number in all correspondence with this office.

INSTITUTIONAL REVIEW BOARD

www.udel.edu

Appendix C

ARTIFACT 3 – INTERNATIONAL STUDENT ORIENTATION SATISFACTION SURVEYS

This artifact describes the results of two satisfaction surveys from the international student orientation programs in fall 2021 semester and spring 2022 semester. This artifact outlines the purpose of the surveys, distribution procedure, results, analysis, and the implications of the satisfaction surveys for the Improvement Strategies of this Education Leadership Portfolio. The instrument can be found in Appendix 1 of this artifact. International student orientation for fall 2021 and spring 2022 semesters were conducted virtually via Zoom because the COVID-19 pandemic prevented large gatherings. Moreover, other new international students were unable to arrive in the U.S. to begin their programs, so a virtual orientation program allowed them to receive the information without having to be on campus.

Purposes

The purposes of distributing the International Student Orientation Satisfaction surveys were to better understand the level of satisfaction of new international students and determine the gaps in the international student orientation program. Research has shown that satisfaction with the arrival process positively influences overall university experience (Ammigan & Jones, 2018; Koo, Baker, & Yoon, 2021). Furthermore, identifying the topics that were absent or insufficiently covered in the orientation program can help inform future orientation programs.

International Student Orientation Programs

The international student orientation programs for fall 2021 and spring 2022 semesters were held virtually on Zoom. The duration for the programs were approximately two and a half hours, which started at 9:00 am EST and ended around 11:30 am EST. Thirty minutes before the official program began, students were given the option to enter the Zoom meeting to have a casual conversation with some current international students and introduce themselves to each other. This time slot was provided as a way to include socialization and interaction between students. Table C1 describes the schedule of the international student orientation program.

Table C20 International Student Orientation Schedule for Fall 2021 and Spring 2022 Semesters

Time	Session	Office / Staff
8:30 - 9:00 am	Pre-event networking	iBuddy mentors
9:00 - 9:05 am	Opening and Zoom etiquette	CGPS staff: Vina Titaley
9:05 - 9:10 am	Welcome remarks by Associate Provost for International Programs	Associate Provost for International Programs: Ravi Ammigan
9:10 - 9:20 am	Welcome remarks by Deputy Provost for Academic Affairs*	Deputy Provost for Academic Affairs: Lynn Okagaki
9:20 - 9:25 am	Icebreaker	CGPS staff: Matt Drexler and iBuddy mentor
9:25 - 9:35 am	Introduction to CGPS staff	CGPS staff: Janica Cimo
9:35 - 10:05 am	Presentation: Maintaining Your Immigration Status	CGPS Immigration Advisors
10:05 - 10:15 am	Game	CGPS staff: Rachael Selway
10:15 - 10:25 am	Presentation: CGPS Programming	CGPS staff: Matt Drexler
10:25 - 10:35 am	Presentation: Student Health Services	Student Health Services: Dr. Tim Dowling
10:35 - 10:45 am	Presentation: Safety on Campus	UD Police Department: Capt. Pires
10:45 - 10:55 am	Game & message from prize sponsor, PNC Bank	CGPS staff: Rachael Selway and PNC Bank: Dexter Johnson

Table C1 Continued

Time	Session	Office / Staff
10:55 - 11:00 am	Presentation: Student Diversity**	Student Diversity & Inclusion: Rachel Garcia
11:00 - 11:10 am	Presentation: Student Wellness	Student Wellness and Health Promotion: Matt McMahon
11:10 - 11:20 am	Presentation and dialog: Career Center**	Career Services: Travis Pocta, and iBuddy mentors
11:20 - 11:30 am	Closing and announcements	CGPS staff: Vina Titaley

* For the spring 2022 program, this welcome remark was delivered by the Dean of Students, Adam Cantley.

** For the spring 2022 program, this session was not included.

Description of Each Event and Session

The international student orientation schedule included a combination of shorter non-content events, such as pre-event networking session and games, and longer content sessions, such as presentations on Student Health Services. A description of each event and session is provided in the following section.

Event 1: Pre-event networking

The pre-event networking session was scheduled at 8:30 am EST as an optional session for new students to attend before the orientation program began at 9:00 am EST. The purpose of this event was to facilitate socialization between new and current international students, who were iBuddy mentors⁹. New students were encouraged to introduce themselves while the current students facilitated a discussion.

⁹ iBuddy mentors are current domestic and international students who are part of the iBuddy Mentoring Program. iBuddy mentors are paired with new international students (mentees) who have signed up to be paired with a mentor. Pairing typically occurs two months before the beginning of the semester. Mentees are able to ask

Event 2: Welcome Remarks

The welcome remarks were delivered by the Associate Provost for International Programs and the Deputy Provost for Academic Affairs.

Event 3: Icebreakers and Games

The icebreakers and games were conducted using an interactive software called Mentimeter. The purpose of the icebreaker was to create an informal atmosphere among participants. The game was conducted to provide a break between content sessions. Before the game was introduced, PNC Bank was provided five minutes to introduce themselves as the official banking partner of UD, their services, and the prizes that they sponsored for the winners of the Mentimeter game. The game was a fun, interactive quiz about trivial knowledge about UD and Delaware. The top three winners who scored the most points were eligible to claim a prize from PNC Bank.

Major Session 1: Maintaining Your Immigration Status

The presentation on Maintaining Your Immigration Status included topics such as understanding the different immigration documents, immigration rules on employment, students' responsibilities to keep their documents active and updated, and how to obtain a Social Security Number and a driver's license. This presentation also included several messages to consult with an immigration advisor when in doubt to ensure students receive accurate information about their immigration status.

Major Session 2: CGPS Programming

questions from their mentors to help them prepare to arrive in the U.S., as well as during their transition period.

This session covered the various programs and events that the CGPS Programming team holds for international students to facilitate their transition and get involved. These programs include Coffee Hour, employment workshops, the annual essay contest, the iBuddy Mentoring Program, and others.

Major Session 3: Student Health Services

The presentation on Student Health Services included information about the COVID-19 regulations on campus, such as where to get vaccinated, requirements of uploading vaccination records, and masking guidance on campus. This presentation also covered the various services provided by Student Health Services and how to access those services.

Major Session 4: Safety on Campus

This session featured a presentation by a representative from the UD Police Department (UDPD). The presentation included information about UDPD services, jurisdiction, campus safety resources and tips, and protecting oneself from phone scams.

Major Session 5: Student Diversity

This session was presented only during the fall 2021 international student orientation. It was not presented during the spring 2022 program due to a change in the program to reduce the number of major sessions. The planning committee felt that it was important to include a session on student diversity at orientation due to the current discussions on diversity, equity, and inclusion at the national level at the time. The presentation was delivered by a representative from Student Diversity & Inclusion. Included in the presentation was information on the definitions of diversity

and equity, the different student councils and organizations on campus, and various events and programs that are held by the office.

Major Session 6: Student Wellness

This session focused on introducing the concept of wellbeing, various resources for maintaining wellbeing, such as discussion forums, videos, books, and other events, how to reach out for mental health support, and the various offices on campus that are available to support students' wellbeing. This session was presented by a representative from Student Wellness and Health Promotion.

Major Session 7: Career Readiness

This session was presented by a representative from the Career Center who focused specifically on career readiness of international students. Information about the Career Center services, workshops, programs, and location were delivered by way of a Q&A session between iBuddy mentors and the career counselor. This was the only session that included active student participation in delivering information to the audience. This session was only presented in the fall 2021 program due to the representative from Career Center having departed the University.

Procedure

Institutional Review Board (IRB) authorization was not sought to conduct and distribute these surveys, as they were originally designed not as part of a research or study, but as part of an institutional programmatic duty.

The International Student Orientation Satisfaction Surveys were distributed to all new international undergraduate and graduate students who were invited to and attended international student orientation during the fall 2021 or spring 2022

semesters. Both quantitative and qualitative data were collected to answer the following questions to evaluate the international student orientation program:

1. How satisfied were participants with the international student orientation program?
 - a. Which information topics or activities were useful for the participants?
2. What were the shortcomings of the international student orientation program?

The survey for fall 2021 international student orientation was distributed on August 31, 2021, four days after international student orientation was conducted. Another reminder email was sent on September 9, 2022 to increase the response rate. The survey for spring 2022 international student orientation was distributed on February 7, 2022, four days after international student orientation. Data from both surveys are currently stored on a secured drive and was deidentified before analysis was performed.

Participants were asked six questions:

1. Are you an undergraduate or graduate student?
2. What sessions did you find useful? (Participants were asked to choose among all the available sessions that were presented at international student orientation)
3. What other sessions would you have liked to be presented at international student orientation? (This was an open-ended question)
4. Overall, how satisfied were you with the international student orientation program? (Participants were asked to choose a score between 0 and 100, with 0 being extremely unsatisfied and 100 being extremely satisfied)

5. Do you have any comments regarding your overall international student orientation experience? If yes, please specify.
6. What suggestions do you have for international student orientation next semester that will help new international students?

Sample

Participants of the international student orientation satisfaction survey were first-year international students enrolled in undergraduate and graduate degree programs at the University of Delaware who attended the international student orientation program.

For the fall 2021 orientation program, 480 students registered, but only 120 students attended. A total of 40 students out of 120 attendees (33.3%) responded to the satisfaction survey. Of the completed survey, 15 (38%) were undergraduate students and 25 (63%) were graduate students.

For the spring 2022 orientation program, 141 students registered and 122 students attended. A total of 50 students out of 122 attendees (40.9%) responded to the satisfaction survey. Of the completed survey, 9 (18%) were undergraduate students and 41 (82%) were graduate students.

Results of the International Student Satisfaction Surveys

Question 1: How satisfied were participants with the international student orientation program?

Data from the question number 5, “Overall, how satisfied were you with the international student orientation program?” were used to answer this question. I calculated the mean and standard deviation of the satisfaction scores for each semester

orientation program, disaggregated by education level. Table C2 indicates that the level of satisfaction of the spring 2022 international student orientation ($M = 91.91$, $SD = 9.75$) was higher than the fall 2021 international student orientation ($M = 87.52$, $SD = 13.15$). The data indicates that participants were very satisfied with the international student orientation program.

Table C2 Satisfaction Scores of International Student Orientation in Fall 2021 and Spring 2022 Semesters

Semester	Group	M	SD
Fall 2021	Undergraduate	86.4	13.6
	Graduate	87.63	13.4
	Total	87.525	13.15
Spring 2022	Undergraduate	91.84	9.85
	Graduate	91	9.74
	Total	91.91	9.75

Question 1a: Which information topics or activities were useful for the participants?

This question corresponds to the survey question number 3, “What sessions did you find useful? Choose all that apply.” To answer this question, I created a table that summarizes how often undergraduate and graduate international students reported each event or session to be useful for them during international student orientation (see Table C3). Although Welcome Remarks was an event featured at each international student orientation, it was not included as an option to choose from. Moreover, because the session on Student Diversity and Career Readiness were not presented in spring 2022, data on these two sessions were not available.

Table C21 Frequency of Useful Events and Sessions during International Student Orientation Fall 2021

Semester	Event or session	Undergraduate (<i>n</i> = 15)		Graduate (<i>n</i> = 25)		Full sample (<i>n</i> = 40)	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Fall 2021	Pre-event networking	3	20%	6	24%	9	23%
	Game	5	33%	7	28%	12	30%
	Immigration	8	53%	20	80%	28	70%
	CGPS Programming	3	20%	13	52%	16	40%
	Student Health Services	6	40%	19	76%	25	63%
	Safety on Campus	5	33%	12	48%	17	43%
	Student Diversity	5	33%	2	8%	7	18%
	Student Wellness	4	27%	16	64%	20	50%
	Career Readiness	3	20%	10	40%	13	33%

Table C22 Frequency of Useful Events and Sessions during International Student Orientation Spring 2022

Semester	Event of session	Undergraduate (Total <i>n</i> = 9)		Graduate (Total <i>n</i> = 41)		Full sample (<i>n</i> = 50)	
		<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Spring 2022	Pre-event networking	1	11%	18	44%	19	38%
	Game	3	33%	25	61%	28	56%
	Immigration	4	44%	36	88%	40	80%
	CGPS Programming	2	22%	27	66%	29	58%
	Student Health Services	3	33%	37	90%	40	80%
	Safety on Campus	6	67%	32	78%	38	76%
	Student Diversity	-	-	-	-	-	-
	Student Wellness	1	11%	26	63%	27	54%
	Career Readiness	-	-	-	-	-	-

The data from Table C3 indicate that the most frequently reported event or session that students considered useful during the international student orientation program in fall 2021 was immigration (*n* = 29, 70%), which is followed by and student health services (*n* = 25, 63%). In the spring 2022 international student

orientation program, the most frequently reported event or session that students equally considered useful were immigration ($n = 40$, 80%) and student health services ($n = 40$, 80%). These findings suggest that for fall 2021 and spring 2022 orientation programs, the information shared on immigration was salient as there were uncertainties related to the influence of COVID-19 on immigration regulations, particularly during the fall 2021 semester. Furthermore, as it relates to the session on student health services being among the most frequently reported useful session, the information shared might be considered important due to the various COVID-19 policies and guidance that students need to know about.

The third most frequently reported session as being useful for the fall 2021 program was the presentation on Student Wellness ($n = 20$, 50%). For the spring 2022 program, the second most frequently reported session as being useful was the presentation from the UD Police Department at 76%.

Question 2: What were shortcomings of the international student orientation program?

To answer this question, I used qualitative data from responses to the following survey questions:

4. What other sessions would you have liked to be presented at ISO? Please specify below.

7. What suggestions do you have for ISO next semester that will help other new international students?

The responses to survey question 4 provided information on topics that participants perceived as being lacking or insufficient during orientation, with 7

participants providing a response for fall 2021 (10%) and 17 participants responding to this question in spring 2022 (34%). Table C5 provides the frequency of the different responses and sessions that participants reported wanting to have been presented at international student orientation. I conducted initial coding on the responses, which was followed by axial coding to produce categorization of topics. This categorization was aligned with the information topics presented in the Needs Assessment Survey (see Artifact 2), such as Academic, Financial, and Housing topics. A sample quotation from the data supporting each claim is also presented in Table C5.

Table C23 Topics Considered Lacking or Insufficient from Fall 2021 and Spring 2022 Programs

Category of topics	Sub-topic	Frequency of sub-topic	Frequency of category
No other session needed	Example: <i>"Nothing else, all my questions [were] addressed"</i>		11
Finances	Employment Example: <i>"On campus jobs"</i>	3	6
	Career Readiness Example: <i>"Career readiness"</i>	1	
	Social Security Number Example: <i>"How we can apply for SSN"</i>	1	
	Taxes Example: <i>"Some ideas about taxes for international students"</i>	1	
Housing	On and off-campus housing Example: <i>"Securing housing on campus and outside"</i>	2	2
Living in the U.S.	Healthcare and health insurance Example: <i>"As an international student, many of us are not familiar with the US health system. A session on health insurance and how to get dependents insurance will be helpful"</i>	1	2
	Map of University Example: <i>"Location of campus buildings"</i>	1	
Social cultural	Meeting new friends Example: <i>"More on how to meet other students and tips for shy students"</i>	1	2
	Meeting current students Example: <i>"Share the experiences and recommendations of the previous students"</i>	1	

Table C5 Continued

Category of topics	Sub-topic	Frequency of sub-topic	Frequency of category
Academic	Course registration Example: “ <i>Course registration</i> ”	1	1
Total		24	

Responses from survey question number 7, which asked about suggestions for future orientation programs, revealed further two types of shortcomings, namely topics that participants felt were insufficient or lacking and shortcomings in the execution of the program. Table C6 describes the first shortcoming, which documents the frequency with which additional topics that participants felt were lacking or insufficient. I conducted initial coding on the responses, which was followed by axial coding to produce categorization of topics. This categorization was aligned with the information topics presented in the Needs Assessment Survey (see Artifact 2), such as Academic, Financial, and Housing topics. A sample quotation from the data supporting each claim is also presented in Table C6.

Table C24 Additional Topics Considered Insufficient or Lacking

Category of topics	Sub-topic	Frequency of sub-topic	Frequency of category
Finances	Banking	2	9
	Example: <i>"It could probably be helpful to include the session about banking not only in this event, but also in previous events for international students."</i> SSN	3	
	Example: <i>"More information about payroll, SSN/ITIN, etc for those who need it. Maybe a separate orientation"</i> Employment	3	
	Example: <i>"I personally felt internships could have been little more elaborate. Regarding CPT [curricular practical training] and OPT [optional practical training] so that students can understand better and prepare well in advance."</i> Taxes	1	
	Example: <i>"Please talk a little bit about taxes and relevant regulations for international students."</i>		

Table C6 Continued

Category of topics	Sub-topic	Frequency of sub-topic	Frequency of category
Housing	On campus Example: <i>"Securing housing on campus and outside"</i>	1	
	Off campus housing Example: <i>"Securing housing on campus and outside"</i>	1	
	Family housing Example: <i>"Information on housing for people moving in as family"</i>	1	
	Information on housing Example: <i>"Housing suggestion"</i>	4	
Social cultural	Making new friends Example: <i>"I would say the events had better make opportunity that students interact with each other."</i>	2	
	Involvement Example: <i>"Be involved!!!"</i>	1	

Table C6 Continued

Category of topics	Sub-topic	Frequency of sub-topic	Frequency of category
Social cultural	Peer mentoring Example: <i>"Pair exchange students with a buddy from udel so they'll have someone to contact for anything, classes food etc"</i>	1	1
	Meeting current students Example: <i>"I think it would be nice to include former/current international students that have been in the university for more than a semester and probably give us some information and tips from their personal experiences, or what to expect throughout the first semester."</i>	1	
Academic	Academic support Example: <i>"Academic support"</i>	1	1
	Academic advisor Example: <i>"If you have any questions about your class, please context [sic] your advisor"</i>	1	
Digital information	Online tools Example: <i>"Maybe make a point on all the online tools they have access to."</i>	1	

Table C6 Continued

Category of topics	Sub-topic	Frequency of sub-topic	Frequency of category
Digital information	Online tools Example: <i>"Maybe make a point on all the online tools they have access to."</i>	1	
	Submitting documents Example: <i>"Give more details on submitting documentation."</i>	1	
Orientation to campus	Tour of university Example: <i>"I hoped students could have a tour of the University."</i>	1	
	Map of university Example: <i>"If an UD campus map could be send by email, that would be perfect!"</i>	1	
Living in the US	Telecommunications Example: <i>"...also it would be good if university could provide student with sim card services just like the ones which are available for pnc bank."</i>	1	
Pre-arrival	<i>"How to arrive at UD"</i>	1	
Transportation	<i>"... and transportation facilities specially for International Students."</i>	1	

Due to the time constraint, not all information topics that international students wanted or needed were covered during international student orientation. Therefore, these information topics were considered lacking from international student orientation. For example, information about finding off-campus housing was not covered during international student orientation. The reason for not including information about finding off-campus housing in international student orientation was the assumption that students should have already found housing after arriving in the U.S. However, this assumption ignores the fact that international students might still be staying at temporary housing while trying to find permanent housing. Additionally, although information about how to find off-campus housing is available on the CGPS website and new students received an email prior to the beginning of the semester about some housing resources, students might not have accessed these two resources.

Some information topics may have been mentioned briefly during a session, but did not go in depth with a specific topic. For example, information about off-campus internships (Curricular Practical Training or CPT) and post-graduation (Optional Practical Training or OPT) work authorization was mentioned briefly during the Maintaining Your Immigration status. However, the presentation did not go into detail about the application process and required documents. Although CGPS planned to hold workshops on these two processes during the semester, this information was not mentioned. Therefore, not knowing that more information was going to be shared about this topic at a different time, students at that time may have felt like this topic was insufficiently explained.

An analysis of the results of survey question 7 also resulted in a number of shortcomings related to the execution of the program, which is described in Table C7.

I conducted initial coding on the responses, which was followed by axial coding to produce categorization of the components of program execution. A sample quotation from the data supporting each claim is also presented in Table C7.

Table C25 Shortcomings in Execution of Fall 2021 and Spring 2022 Orientation Programs

Category of execution component	Sub-category	Frequency of sub-category	Frequency of category
Modality	In person Example: <i>"Having it in person would be great"</i>	9	12
	Games Example: <i>"More games"</i>	3	
Duration	Too long Example: <i>"The event was quite long and I lost focus towards the end. A shorter event"</i>	3	3
	Information overload Too much information Example: <i>"I think as an International student who is a nonnative English speaker, this is too intensive, the Amount of the info are overwhelmingly large (to me personally, even though I already tried to participate In all the zoom talk) too much to learn..."</i>	3	3
Timing	Earlier program Example: <i>"The orientation should be held a week to start of classes"</i> <i>"Fast response"</i>	2	3
	Sense of belonging Welcoming environment Example: <i>"Improving on making all international students feel welcomed"</i>	1	1

Data from Table C7 suggests that the most frequently reported feedback on the execution of international student orientation was related to modality, namely the desire for an in-person program and more games and icebreakers. Although some scholars have advocated for the effectiveness of a virtual orientation program (Murphy, Hawkes, & Law, 2002) and students expressed that they understood why

international student orientation had to be delivered virtually (*“I wish it was physical, but it’s fine due to the pandemic”* and *“Hopefully the situation will improve and the orientation can be held in person next year...”*), a number of students ($n = 9$) expressed the desire for an in-person orientation program. Some did not specify why they preferred an in-person orientation, but others reported that it would be more fun and interesting, as well as allowed for more socialization and interaction with other students. Another possibility for this preference is that students are eager to meet other people in person again after having to do much learning virtually through Zoom for the past few years (Zapata-Cuervo, Montes-Guerra, Shin, Jeong, & Cho, 2021). This finding suggests that CGPS should plan for an in-person orientation program, as long as the health and safety circumstances allow for it.

The second sub-component of the modality category was related to the desire for more icebreakers and games ($n = 3$) and more socialization opportunities. Although the virtual orientation programs included a pre-event networking session before the beginning of the official start time of the orientation, not all students attended that session. For those who did attend, the Zoom meeting room was not an optimal medium to facilitate interaction, since Zoom does not have the capability for participants to speak simultaneously. This is in line with the findings that the least frequently reported event that participants found useful at international student orientation in fall 2021 and spring 2022 semesters, that is the pre-event networking event ($n = 9$, 23% and $n = 18$, 36%, respectively). It is presumed that an in-person international student orientation program could address this issue. However, previous international student orientation programs prior to fall 2021 have also not incorporated many opportunities for students to meet other students.

There are two potential reasons for this shortcoming. The first one is that the lecture-style seating arrangement makes it difficult for students to move around. The second one is that there may have been an over-prioritization on planning of the information topics and how information is delivered at international student orientation, while the importance of socialization was overlooked. As a result, little time was invested in intentionally designing and incorporating opportunities for socializations during international student orientation. Therefore, the CGPS planning team should design and incorporate socialization opportunities during international student orientation with the goal of allowing students to make new friends. An additional benefit of this strategy is that it adds variety to the orientation program, which could make it more engaging and interesting.

The next category in relation to the execution of the program is related to the duration of the program, which participants reported was too long. Some students ($n = 3$) have complained that the program was too long and that some breaks should have been incorporated into the program (*"In case of virtual meeting, there could be short breaks since it's a really long time to listen and focus."*). Although a program of two-and-a-half to three hours can be objectively long, this perception may also depend on the agenda items or components of a program. Students may have difficulties maintaining focus for a three-hour lecture with little breaks or interaction. On the other hand, an interactive program that included speaking, getting up to stretch, asking a question, participating in a fast-paced game, watching a video, and reading a printed resource, might make the program more engaging and interesting.

Limitations to the International Student Orientation Satisfaction Survey

One of the limitations of the international student orientation satisfaction survey was that it could not effectively measure the effectiveness of international student orientation in helping new international students get oriented to their new environment, because a pre-orientation survey was not conducted. To address this limitation, a pre-orientation survey could be conducted before the beginning of the orientation program to measure students' level of knowledge of the information presented in the sessions. At the end of the international student orientation program, a post-test survey can be conducted to measure students' level of knowledge of the information presented in the sessions. The comparison of the pre-orientation and post-orientation survey is one measure of the international student orientation's effectiveness in teaching the important information topics to students. A more carefully designed survey will be distributed to evaluate the effectiveness of international student orientation program, which is planned as another artifact (Artifact 8).

Discussion and Implications

The International Student Orientation Satisfaction Survey was distributed to international student orientation participants to find out whether international students were satisfied with the program and whether there were improvements that could be made to make future programs better. Two questions were posed to fulfill these purposes.

The first question was, "How satisfied were participants with the international student orientation program?" Satisfaction with the program was influenced by the extent to which the participants found the information useful as well as the quality of the program execution. Most students expressed satisfaction with international student

orientation during fall 2021 ($M = 87.52$, $SD = 13.15$) and spring 2021 ($M = 91.99$, $SD = 9.75$). This finding suggests that the international student orientation program has met most of new international students' needs, even when it was conducted virtually on Zoom.

If students found the program to be satisfactory, the follow-up question was, "Which information topics or activities were useful for the participants?" For the fall 2021 and spring 2022 orientation programs, the most frequently reported information topics that students found useful were information on immigration, student health services, student wellness, and safety on campus. These findings confirm that the information topics presented at international student orientation should continue to be presented at future orientation programs. However, the international student orientation planners should ensure that these topics are delivered in an efficient and effective way that does not overburden the students with too much information.

The second question that was posed was, "*What were the shortcomings of the international student orientation program?*" These shortcomings included lacking or insufficient topics and shortcomings in the program execution.

In terms of information, some that were lacking included information on housing, taxes, academic support, and other logistical concerns. Some topics were briefly mentioned during international student orientation, but students considered them insufficient, such as information about employment authorization, obtaining a Social Security Number, banking, healthcare and health insurance, and current students' experiences. To address these shortcomings, the improvement strategy might not necessarily be to add the topics to the international student orientation. One improvement is to incorporate the information in a pre-arrival orientation (e.g.,

healthcare and health insurance), websites (e.g., links to academic support services), printed materials (e.g., calendar of programs for the upcoming semester), post orientation events (e.g., follow up webinars), and extended orientation (e.g., First Year Seminar).

In terms of the quality of the execution of the program, there were three main themes that emerged as challenges. The first one was that some students preferred the in-person orientation program compared to the virtual orientation program, as they believed it would have offered a more interesting, engaging, and interactive program. To address this challenge, an in-person orientation program will be conducted in the fall 2022 semester, which will also include sessions and events that not only incorporate information topics that students are wanting, but also components that create a fun atmosphere to make it more engaging and interactive.

Related to that, the second challenge was the duration of the program that some students found too long. There are two ways to interpret this remark. The first is at face value, in that a two-and-a-half to three-hour program of constant information with few breaks was indeed too long. The second way to interpret this remark is that the program *felt* too long, because the structure of the program was not engaging. Many of the content sessions were delivered by PowerPoint presentations with very little interaction with the audience. Listening to a series of presentations for three hours may be taxing and feel monotonous, which makes the program feel long. To address this challenge, one improvement strategy may be to reduce the amount of PowerPoint presentations and include more interaction with the audience. Another improvement strategy might also be to include information through other media, such as printed materials, information to a central website, and an interactive

game. Moreover, another improvement strategy would be to shorten the program to less than two and a half hours.

Finally, the third challenge was related to the dearth of socialization opportunities at international student orientation. This challenge may be related to the virtual modality, which limits the ability of participants to interact in a meaningful way since the Zoom software does not allow meeting participants to talk simultaneously. To address this challenge, international student orientation planners will not only plan an in-person orientation program in the fall 2022 semester, but also include meaningful socialization opportunities.

Conclusion

In conclusion, to design an orientation program that can meet students' information and socialization needs, there are several balancing acts that need to be achieved. These include finding balancing the type and amount of information, using different media to convey the information, finding the appropriate duration of the program, and combining educational content and fun components. Artifact 5 will outline the improvement strategy for the fall 2022 international student orientation.

REFERENCES

- Ammigan, R., & Jones, E. (2018). Improving the student experience: Learning from a comparative study of international student satisfaction. *Journal of Studies in International Education*, 22(4), 283–301.
<https://doi.org/10.1177/1028315318773137>
- Koo, K., Baker, I., & Yoon, J. (2021). The first year acculturation: A longitudinal study on acculturative stress and adjustment among the first year international college students. *Journal of International Students*, 11(2), 278–298.
<https://doi.org/10.32674/jis.v11i2.1726>
- Murphy, C., Hawkes, L., & Law, J. (2002). How international students can benefit from a web-based college orientation. *New Directions for Higher Education*, (117), 37–44. Retrieved from
<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ647401&site=ehost-live>
- Zapata-Cuervo, N., Montes-Guerra, M. I., Shin, H. H., Jeong, M., & Cho, M. H. (2021). Students' psychological perceptions toward online learning engagement and outcomes during the COVID-19 pandemic: A comparative analysis of students in three different countries. *Journal of Hospitality and Tourism Education*, 00(00), 1–15.
<https://doi.org/10.1080/10963758.2021.1907195>

Appendix C1
International Student Orientation Survey Instrument

Spring 2022 ISO Satisfaction Survey

International Student Orientation Survey

Thank you for participating in the Spring 2022 International Student Orientation (ISO). As we continue to improve our program and services to the international student community, we would appreciate your feedback by completing this short survey.

We invite you to explore [the CGPS website](#) as it provides comprehensive information on government regulations and other important campus and community resources. You can also contact us at: (302) 831-2115 or oiiss@udel.edu.

1. Are you an undergraduate or graduate student?

- ☐ Undergraduate (1)
- ☐ Graduate (2)

2. What is your academic college?

- ☐ Agriculture & Natural Resources (1)
- ☐ Arts & Sciences (2)

- ☐ Lerner College of Business & Economics (3)
- ☐ Earth, Ocean and Environment (4)
- ☐ Engineering (5)
- ☐ Health Sciences (6)
- ☐ University Studies (undeclared) (7)
- ☐ Other (8)

3. Which sessions did you find useful? * Select all that apply.

- ☐ Pre-event networking (1)
- ☐ Immigration information - Maintaining your status (2)
- ☐ Games (3)
- ☐ CGPS Programing (5)
- ☐ PNC Bank information (6)
- ☐ Student Health Services (8)
- ☐ UD Police Department (10)
- ☐ Student Wellness (11)

4. What other sessions would you have liked to be presented at ISO? Please specify below.

5. Overall, how satisfied were you with the ISO program?

Extremely dissatisfied	Somewhat dissatisfied	Neither satisfied nor dissatisfied	Somewhat satisfied	Extremely satisfied
------------------------	-----------------------	------------------------------------	--------------------	---------------------

0 0 0 0 0 0 0 0 0 00

Overall satisfaction with
International Student Orientation ()



6. Do you have any comments regarding your overall ISO experience?

☐ Yes, please specify (1)

☐ No (2)

7. What suggestions do you have for ISO next semester that will help other
new international students?

Appendix D

ARTIFACT 4 – DESIGN OF PRE-ARRIVAL ORIENTATION WEBINARS

Introduction

This artifact describes the design behind an implementation strategy that I am proposing in this Education Leadership Portfolio (ELP), namely the pre-arrival webinar series. In this document, I describe how the data and literature contributed to shaping this program. Findings from the Needs Assessment Survey (see Artifact 2) identified the concerns and questions that new international students had, which included the types of information needs. The results of the International Student Orientation Satisfaction Surveys (see Artifact 3) provided information about gaps in the international student orientation program that were not being met. Findings from the International Student Orientation Satisfaction Surveys complement the Needs Assessment Survey to determine the information needs and at which points these information needs would be introduced. The literature on pre-arrival orientation programs (e.g., Garza, 2015; Hagar, 2014) and the digital ecology of information for international students (Chang, Gomes, & McKay, 2021) also informed the design of this program.

This document includes three sections. The first section provides a description of the webinar series and a visualization of how it is presented on the website. The second section describes how I used data and literature to design the program. The final section explains the limitations of the program and provides some conclusions.

Description and Visualization of the Pre-Arrival Webinar Series

In line with the data and literature, I have implemented a digital pre-arrival orientation program for new international students at the University of Delaware (UD). This orientation program is called Before Your Arrive: A Pre-Arrival Webinar Series (<https://www.udel.edu/academics/global/signature-programs/special-events/pre-arrival-series/>). The name was created to mirror an existing webinar series by the Center for Global Programs and Services (CGPS) for students who are planning to study abroad, which is called Before You Explore. The present pilot project was launched the first week of June 2022 and ended on the last week of July 2022. The objectives of this program are to help international students to:

1. Prepare for their arrival to the United States and Newark, Delaware.
2. Understand where to find support and resources on campus to help with transition and adjustment at the University of Delaware.
3. Meet fellow new and current international students at the University of Delaware.

The format of most of the webinar sessions was a live Zoom meeting. The first thirty minutes was used to present the material through a PowerPoint presentation, while the second thirty minutes was used as a live question-and-answer (Q&A) session. Students were encouraged to type in their questions in the chat box. The questions would be collated and answered during the Q&A session. The presentation was recorded and the recording was posted on the website the next day. The Q&A session was not recorded. Any additional resources, such as a PDF of links and contact information that was shared during the webinar, were also posted on the website. Posting a video of the webinar after the live session allowed students to pick which topics they were interested in learning about at their own leisure. Throughout the

summer, students would be able to go back to the videos and could take as much time as they needed to digest the information. This option could prevent the issue of trying to compress too much information in a short period of time, which is a feedback of participants at previous international student orientation programs (see Artifact 3).

Not all webinar sessions were conducted via a live Zoom meeting. Two sessions, namely understanding healthcare in the U.S. and understanding health insurance in the U.S., were pre-recorded and posted on the website. The session on managing finances was also not conducted via a live Zoom meeting. Instead, videos and written resources from PNC Bank, which covered topics on opening a bank account, managing finances and a budget, and protecting a debit or credit card from fraud were posted on the website. These topics were not presented via a live Zoom webinar for tactical purposes instead of strategic. These reasons involved the limited availability of speakers and limited capacity of CGPS staff to hold a live Zoom webinar during the allotted dates and times.

Table D1 describes the schedule of the webinar series. It includes information about the topic of each webinar, the purpose and description of the topic, the medium of the webinar, collaborators, and any supplemental resources that were posted on the website. These supplemental resources included a resource page that outlines any links and contact information of other resources that were shared during the webinar.

Table D26 Detailed Description of Each Session of the Before You Arrive Webinar Series

No.	Date	Title	Purpose and content	Medium	Presenters	Supplemental Resources Posted on the Website
1	Thursday, June 2, 2022	Welcome to UD and CGPS	Introduce UD campus (through virtual tour); introduction to what a Blue Hen is; introduce CGPS; introduce immigration documents; and an overview of the webinar series	Live webinar	CGPS staff	None
2	Thursday, June 9, 2022	Understanding Healthcare in the U.S.	Provide an overview of services provided by Student Health Services; introduction to local healthcare providers; and introduction to how health insurance interacts with healthcare providers	Pre-recorded video	Student Health Services	Link to required immunization forms; link to UD's COVID-19 dashboard; link to CGPS webpage on healthcare and health insurance
3	Thursday, June 16, 2022	Understanding Health Insurance in the U.S.	Introduce health insurance terms; case samples of how health insurance works; summary of benefits of the UD health insurance plan; and how to contact health insurance provider	Pre-recorded video	University Student Health Plan representative	Link to the UD health insurance plan; glossary of health insurance terms; link to CGPS webpage on healthcare and health insurance
4	Thursday, June 23, 2022	Housing (for Graduate students)	Introduce tools and resources for searching off-campus housing; considerations to make when conducting search; case samples of how to assess housing options; understanding the lease; and suggested next steps	Live webinar	CGPS staff; iBuddy Council Members	PDF of resources and links mentioned in the webinar; link to CGPS webpage on housing

Table D1 Continued

No.	Date	Title	Purpose and content	Medium	Presenters	Supplemental Resources Posted on the Website
5	Thursday, June 30, 2022	Social Security Number part 1	Introduce the concept of Social Security Number; an overview of when a SSN might be needed; how to obtain a SSN; how it's related to a driver's license; and future SSN webinar in the fall semester	Live webinar	CGPS staff	Link to a CGPS webpage on the Social Security Number
6	Thursday, July 7, 2022	Academics in the U.S.: Understanding professors' expectations (graduate students)	Introduce the relationship with faculty, advisors, and mentors for graduate students. Graduate student iBuddy Council members talk about their experiences	Live webinar	CGPS staff; iBuddy Council Members	None
		Academics in the U.S.: Understanding the U.S. classroom	Introduce some expectations for the American classroom, including class schedules, etiquette in addressing professors, and understanding the syllabus; introduce academic honesty policies; and introduce services of Office of Academic Enrichment	Live webinar	Office of Academic Enrichment	None
7	Thursday, July 14, 2022	Managing Your Finances	Provide information on how to open a bank account; how to create a budget; how to manage finances; and how to protect accounts from fraud	Pre-recorded videos, link to PNC Bank website and PDFs	PNC Bank	None

Table D1 Continued

No.	Date	Title	Purpose and content	Medium	Presenters	Supplemental Resources Posted on the Website
8	Thursday, July 21, 2022	Living in the U.S.	Introduce transportation options and how to access them; local grocery and general shopping options; tips on communication options and electronics (universal adaptor); and engagement opportunities. Students shared their experiences during the Q&A session.	Live webinar	CGPS staff; iBuddy Council Members	PDF of resources and links mentioned in the webinar; link to CGPS webpage on Living in the U.S.
9	Thursday, July 28, 2022	Pre-arrival Information Session	Explain immigration document to prepare and carry for travel to the U.S.; explain COVID-19 regulations for travel to the U.S.; prepare a contingency plan in case of delay; provide packing tips and clothing needed for the four seasons in the U.S.; and prepare for international student orientation.	Live webinar	CGPS Staff	PDF of resources and links mentioned in the webinar

Figure D1 depicts a screenshot of the Before Your Arrive webpage that outlines the schedule of webinars and pre-recorded videos. Figure 2 depicts a screenshot of how each topic is presented on the webpage, with a sample of the first three information topics. These figures illustrate that it is not only important to make information available, but that the way information is organized and presented is important to make the information more accessible to international students (Chang et al., 2021).

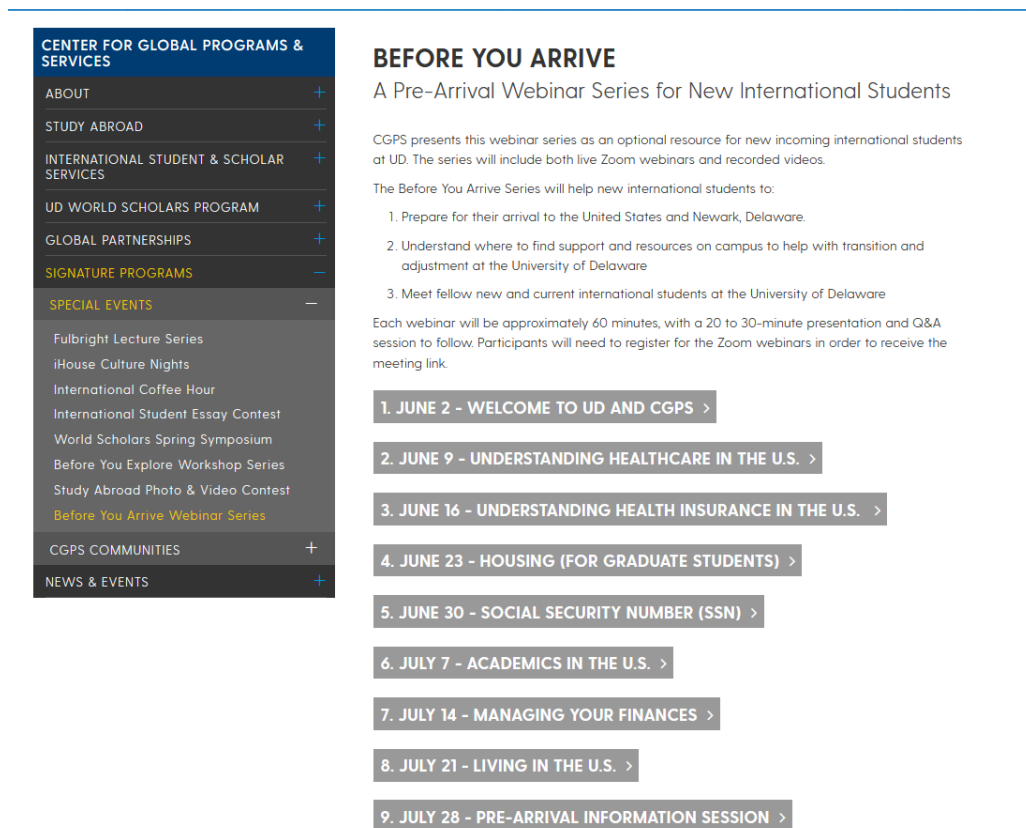


Figure D9 Screenshot of the Before You Arrive website. Taken on July 14, 2022.



Welcome to UD and CGPS!

Get to know UD and CGPS and what it means to become a Blue Hen. Understand your immigration documents and get an overview of this pre-arrival webinar series.

[WATCH THIS WEBINAR >](#)

Note that the recorded information is current as of the date of the event, but may be subject to change. Please always consult or check with an immigration advisor at CGPS before making any final decision that may impact your immigration status.



Understanding Healthcare in the U.S.

Thursday, June 9

Get an introduction to U.S. healthcare concepts, introducing Student Health Services at UD, other local healthcare providers and how to access them.

[WATCH THIS WEBINAR >](#) [SHARE YOUR FEEDBACK ABOUT THIS WEBINAR >](#)

[LEARN WHICH HEALTH AND IMMUNIZATION FORMS AND DOCUMENTS TO UPLOAD >](#)

[VIEW UD'S COVID-19 DASHBOARD >](#)

[FIND MORE INFORMATION ON HEALTHCARE & INSURANCE >](#)

Note that the recorded information is current as of the date of the event, but may be subject to change. Please always consult or check with an immigration advisor at CGPS before making any final decision that may impact your immigration status.



Understanding Health Insurance in the U.S.

Thursday, June 16

Get an introduction to the basics of health insurance in the U.S., why it's important to have good health insurance, and understanding the University health insurance plan.

[WATCH THIS WEBINAR >](#) [SHARE YOUR FEEDBACK ABOUT THIS WEBINAR >](#)

[LEARN ABOUT THE UNIVERSITY OF DELAWARE STUDENT HEALTH INSURANCE PLAN >](#)

[FIND A GLOSSARY OF HEALTH INSURANCE TERMS >](#)

[FIND MORE INFORMATION ON HEALTHCARE & INSURANCE >](#)

Note that the recorded information is current as of the date of the event, but may be subject to change. Please always consult or check with an immigration advisor at CGPS before making any final decision that may impact your immigration status.

Figure D10 Screenshot of the Before Your Arrive webpage with a sample of the first few topics and supplemental materials.

Literature and Data-Based Design of the Program

The literature has suggested that many orientation models result in information overload (Forbes-Mewett & Sawyer, 2016; Jean-Francois, 2019), which renders the program less effective in meeting the information needs of new international students. Some of these models include half-day orientation program (Kimoto, 2009) or multiple-day programs (Wessel & Reed, 2005). To address this issue, many higher education institutions have opted to use different strategies. One option is to spread the information over an extended period of time (Chang et al., 2021), such as through a pre-departure/pre-arrival orientation program (Garza, 2015; Hagar, 2014) or an extended orientation program, like First Year Seminars (Andrade, 2006; Cox, Diefes-Dux, & Lee, 2006). Another option is to also provide information that students can revisit later in the semester after the orientation program, such as a Canvas module and websites. At UD, the international student orientation model that is used is a half-day orientation model. One contributing factor for using this model is staff capacity that would not be able to execute a full-day or multiple-day orientation program.

The literature also indicates the importance of pre-arrival orientation programs including relevant and accessible information (Garza, 2015; Hagar, 2014; Kambouropoulos, 2014; Khanal & Gaulee, 2019). Therefore, one of the most important components of new international students' transition is the availability and access to information. Using Chang, Gomes, and McKay's (2021) framework of digital ecology of international students, I describe the design decisions behind the Before You Arrive webinar series. Chang and colleagues (2021) outlined seven factors to consider when providing information to international students:

- a) Information topics: What topics are important to new students?

- b) State of information needs: Do students recognize all of their information needs?
- c) Motivation of information needs: What drives international students to seek information?
- d) Information channels: Which offline and online channels do international students use to seek information?
- e) Information sources: Which online sources and people do international students use to find information?
- f) Information behaviors: What strategies do international students use to find information?
- g) Temporal aspects of information: In which instances do students seek information?

In designing the Before You Arrive webinar series, I addressed four of the above seven factors, including information topics, information channels, information sources, and temporal aspects of information.

Information topics

According to Chang and colleagues (2021), understanding the specific information needs of international students is critical to meet their needs. These specific information needs were identified from the Needs Assessment Survey (see Artifact 2). The Needs Assessment Survey provided data that international students had concerns and questions about eight topics:

- a) Immigration
- b) COVID-19
- c) Academic
- d) Finances
- e) Housing

- f) Transportation
- g) Social and Cultural
- h) Living in the U.S.

The results also showed that there were information topics that international students reported as concerns but were neither addressed in the existing pre-arrival information session, international student orientation, nor any post-orientation (extended orientation) program. These topics included transportation, finances, and academic concerns. More specifically, findings from the analysis of data of the Needs Assessment Survey also revealed that there were specific sub-topics that international students specifically wanted to know more about.

For example, one of the most prominent specific financial concerns that was reported in the Needs Assessment Survey was applying for a Social Security Number. One reason for this might have been that most of the participants were graduate students who were funded by the university as a teaching or research assistant. As a result, obtaining a Social Security Number became a priority so that they could get paid. However, it is possible as well that there may be an over-inflation of the significance of the Social Security Number. Therefore, information about the concept of the Social Security Number might be necessary to both explain the concept of Social Security and the process of obtaining a Social Security Number.

In a survey of seven universities and colleges at and around the University of Kansas, Garza (2015) recommended the following topics to be presented in a pre-arrival orientation:

- Accommodations/housing: an overview of residence halls, off-campus housing options and resources, and an explanation of housing terms.

- Transportation: public transportation options, information about how to get a driver's license, and transportation options from the airport.
- Weather: information about what to expect about the local weather, such as winter.
- Food: information and expectations about meal plans, grocery store options, and available ethnic restaurants.
- Visa and employment regulations: information about how to apply for employment authorization the correct way in order to maintain compliance with visa regulations.
- Academic and university life: information about academic honesty, academic writing, and academic resources.
- Healthcare system: information about the complicated healthcare and health insurance system.

Therefore, based on the results of the Needs Assessment Survey and recommendations from literature, I decided to pilot eight topics to be presented in the Before You Arrive webinar series. Table D2 depicts the reasoning for choosing each topic of the webinar series.

Table D2 Information Topics of Before You Arrive Webinars and Bases for Including Topics

Before You Arrive Session	Topics covered	Basis for this topic being covered
Welcome to UD and CGPS	Introduce UD campus (through virtual tour); introduction to what a Blue Hen is; introduce CGPS; introduce immigration documents; and an overview of the webinar series.	<ul style="list-style-type: none"> Needs Assessment Survey and International Student Orientation Satisfaction Surveys results indicated a desire for knowing campus buildings. Create a welcoming atmosphere to set the tone for the rest of the webinar series and demonstrating why each topic is important.
Understanding Healthcare in the U.S.	To provide an overview of services provided by Student Health Services; introduction to local healthcare providers; introduction to how health insurance interacts with healthcare providers.	<ul style="list-style-type: none"> Result from International Student Orientation Satisfaction Surveys indicated that this topic was not covered during international student orientation. This is a recommended topic according to Garza (2015). This is a complicated topic that requires ample time to explain.
Understanding Health Insurance in the U.S.	Introduction to health insurance terms; case samples of how health insurance works; summary of benefits of the UD health insurance plan; and how to contact health insurance provider.	<ul style="list-style-type: none"> Result from International Student Orientation Satisfaction Surveys indicated that this topic was not covered during international student orientation. This is a recommended topic according to Garza (2015). This is a complicated topic that requires ample time to explain.
Housing (for Graduate students)	To introduce tools and resources for searching off-campus housing; considerations to make when conducting search; case samples of how to assess housing options; understanding the lease; and suggested next steps.	<ul style="list-style-type: none"> Needs Assessment Survey results indicates graduate students reported concerns about off-campus housing, such as finding affordable housing, housing close to campus, understanding the lease, and finding furniture. This is a recommended topic according to Garza (2015).

Table D2 Continued

Before You Arrive Session	Topics covered	Basis for this topic being covered
Social Security Number part 1	To introduce the concept of Social Security Number; an overview of when a SSN might be needed; how to obtain a SSN; how it's related to a driver's license; and overview of a future SSN webinar in the fall semester.	<ul style="list-style-type: none"> Needs Assessment Survey (25 unresolved concerns reported after international student orientation). This is a complicated topic that requires ample time to ample time to discuss and explain.
Academics in the U.S.: Understanding professors' expectations (graduate students)	To introduce the relationship with faculty, advisors, and mentors for graduate students. Graduate student iBuddy Council members provided student-level experiences.	<ul style="list-style-type: none"> Needs Assessment Survey results indicates that academic concerns, specifically on expectations on understanding professors' expectations (19%) and the amount of coursework (19%) were the top two most frequently reported academic concern among both undergraduate and graduate students. This is a recommended topic according to Garza (2015).
Academics in the U.S.: Understanding the U.S. classroom	To introduce some expectations for the American classroom, including class schedules, etiquette in addressing professors, and understanding the syllabus; introduction to academic honesty; and services of Office of Academic Enrichment.	<ul style="list-style-type: none"> Needs Assessment Survey results indicates that academic concerns, specifically on expectations on understanding professors' expectations (19%) and the amount of coursework (19%) were the top two most frequently reported academic concern among both undergraduate and graduate students. This is a recommended topic according to Garza (2015).
Managing Your Finances	To provide information on how to open a bank account; how to create a budget; how to manage finances; and how to protect accounts from fraud.	<ul style="list-style-type: none"> Needs Assessment Survey results showed that finances was a concern among of 86% students.

Table D2 Continued

Before You Arrive Session	Topics covered	Basis for this topic being covered
Living in the U.S.	To introduce transportation options and how to access them; introduce local grocery and general shopping options; tips on communication options and electronics (universal adaptor); and engagement opportunities. Students shared their experiences during the Q&A session.	<ul style="list-style-type: none"> Needs Assessment Survey results showed that transportation was a concern among 81% of students. Topics on transportation and grocery options were recommended by Garza (2015).
Pre-arrival Information Session	To explain immigration document to prepare and carry for travel to the U.S.; COVID-19 regulations for travel to the U.S.; prepare for contingency plan in case of delay; packing tips; and preparation for international student orientation.	<ul style="list-style-type: none"> The existing pre-arrival information session to prepare international students with immigration documents before traveling to the U.S.

Information channels

Chang and colleagues noted that international students use different types of digital channels to find information, which include both offline and online channels. Offline channels include conversations with staff, peer mentors, faculty, and agents. Online channels include websites and social media platforms. To ensure that international students' information needs are met, it is important to understand which channels are preferred, used by, and are accessible by international students.

A study on communication preferences among international students at the University of Delaware reported that YouTube was the most frequently visited social media platform compared to other platforms (Ammigan & Laws, 2018). Although it is difficult to infer the videos are the preferred or only medium for communicating and receiving information, it does suggest that there is some interest in videos. The webinar model offers a bit of a combination of watching videos and a live Q&A discussion with staff and peer students. The information topics were conveyed through live webinars that were recorded and posted to the website as well as pre-recorded videos that were posted on the website. The decision to choose a live webinar medium on Zoom was that it would allow for some topics to be discussed at length as well as allow participants to ask live questions and receive an immediate answer. Furthermore, since the live webinars were recorded and posted on the website, this meant that participants who could not come to the live webinar would be able to obtain the information at their own time. However, the Q&A sessions were not recorded or posted to the website. This decision was made to avoid mention of specific businesses or commercial brands that were discussed during the Q&A session that

could be misconstrued as an endorsement by the Center for Global Programs and Services.

Information Sources

According to Chang et al. (2021), this aspect refers to the online sources and people from which international students seek information. International students may rely on sources of information from their home country, but they may also incorporate the new sources of information in the host country and institution. Providing different options of new sources of information can help expand options of information sources and thereby facilitating ease of finding the needed information.

Not all sessions were presented by Center for Global Programs and Services staff. Some sessions, particularly those that require expertise knowledge, were presented by those experts. For example, the sessions on understanding healthcare in the U.S. was presented by the university medical doctor from Student Health Services, while the session on understanding health insurance in the U.S. was presented by a representative of the University Student Health Plans.

There were other sessions where it was decided that new international students might benefit from hearing from peer students. Three sessions involved the presence and experiences of peer students who are members of the iBuddy Council: housing for graduate students, understanding professors' expectations (for graduate students), and living in the U.S. Literature has shown that peer support is considered a source of support for new international students (Abe, Talbot, & Geelhoed, 1998; Menzies, Baron, & Zutshi, 2015; Pekerti, Vijver, & Moeller, 2021). Peers are considered knowledgeable in the local culture and thereby able to help new students navigate their new surroundings (Pekerti et al., 2021). Including peer students in these webinars

enriches the content of the presentations as they are contextualized by their experiences, tips, and advice that new international students can relate to. Since this was the first time a webinar series was conducted, the iBuddy Council members had not yet gained confidence to lead a presentation. Therefore, the Center for Global Programs and Services staff would lead the presentation and then refer to the students to share any experiences, advice, or tips they might have in relation to a specific topic that was presented. For example, during the Q&A session of the webinar on living in the U.S., the iBuddy Council members shared their experiences on how they were able to get around Newark without a car. This story was aimed at helping allay any concerns that new international students might have about being able to get around without a car, which might be a pricey and cumbersome means of transportation to consider.

The added benefit of including iBuddy Council members in the sessions was to provide an opportunity for new international students to connect with the iBuddy Mentoring program. While socialization is not easily achieved through Zoom, this webinar series introduced engagement opportunities with iBuddies that they might encounter when they arrive on campus.

Temporal Aspect of Information

Chang and colleagues (2021) state that there are specific instances when information seeking becomes salient for international students. One of those instances include in preparation for certain contexts (Chang et al., 2021). The topics presented in the webinar series were aimed at preparing new international students to make necessary logistical preparations for when they arrive in the U.S. (e.g., housing, Social Security Number, and immigration pre-arrival information session). Some sessions

were presented with the aim of not necessarily preparing them for their arrival, but preparing them conceptually for encountering their new environment, such as understanding healthcare and health insurance, and academic preparation.

The benefit of a pre-arrival orientation program is that it occurs before international students arrive in the U.S., when they are typically overwhelmed with information (Forbes-Mewett & Sawyer, 2016; Jean-Francois, 2019), competing priorities (Young & Althen, 2013), and adjusting to a new environment. Therefore, it can be presumed that the ample time prior to arrival, such as weeks or months before the start of the semester, can be capitalized to expound on topics that require more time to introduce and digest, such as healthcare in the U.S. This strategy provides students more time to learn, absorb, and use this information to aid in their preparation before coming to the U.S.

Although international student orientation (or upon-arrival orientation) might also be a suitable platform to present some of this information, such as practical advice on how to open a bank account, offering this information before the students arrive might alleviate the burden of too much information upon their arrival on campus. The challenge would be to ensure that students know where to find this information and be able to access information when they need it. In this regard, the just-in-time type of information, such as logistical and practical needs, might be better presented on a website or resource page, compared to a webinar or recording.

Limitations and Conclusions

Limitations

There are some limitations to this webinar series. First, although not all the offerings of the Before You Arrive webinar series were in a webinar format, almost all

of them were in the form of a video. This requires time to attend the live webinar and/or watch the video. Some international students might be overwhelmed by the amount of time that is needed to watch a 20- or 30-minute video. Some students might have wanted instant information by visiting a single website where they might be able to find all of the information that were presented in the videos.

The second limitation is that not all topics that are important to new international students were addressed in the webinar series. If students felt like their information needs are not being addressed, they may feel unsatisfied with their transition experience. Therefore, a thorough evaluation of the program is necessary to determine which topics need to be included in the program.

Conclusions

This pre-arrival webinar series was created to meet information needs of new international students prior to their arrival in the U.S. It was created to fill a gap of pre-arrival support for new international students, whereby some information needs were not met by existing support services. The design of the webinar series took into consideration the results of the Needs Assessment Survey and literature on pre-arrival orientation programs. Specifically, I used the framework of digital ecology of information of international students to determine the topics of information, the channels, sources of information, and the temporal aspect of information of the webinar series (Chang et al., 2021).

References

- Abe, J., Talbot, D. M., & Geelhoed, R. (1998). Effects of a peer program on international student adjustment. *Journal of College Student Development*, 39(6), 539–547.
- Ammigan, R., & Laws, K. N. (2018). Communications preferences among international students: Strategies for creating optimal engagement in programs and services. *Journal of International Students*, 8(3), 1293–1315.
<https://doi.org/10.5281/zenodo.1254584>
- Andrade, M. S. (2006). A first-year seminar for international students. *Journal of the First-Year Experience & Students in Transition*, 18(1), 85–103.
- Chang, S., Gomes, C., & McKay, D. (2021). The digital information ecology of international students: Understanding the complexity of communication. In S. Chang & C. Gomes (Eds.), *Digital experiences of international students: Challenging assumptions and rethinking engagement*. Routledge.
- Cox, M. F., Diefes-Dux, H., & Lee, J. (2006). Development and assessment of an undergraduate curriculum for first-year international engineering students. *Proceedings - Frontiers in Education Conference, FIE*, 15–18.
<https://doi.org/10.1109/FIE.2006.322558>
- Forbes-Mewett, H., & Sawyer, A. M. (2016). International students and mental health. *Journal of International Students*, 6(3), 661–677.
<https://doi.org/10.32674/jis.v6i3.348>
- Garza, D. D. (2015). *The acculturation needs of international students at U.S. universities: A call for online anticipatory orientation*. (Publication No. 3713522) [Doctoral dissertation, University of Kansas]. ProQuest Dissertations Publishing.
- Hagar, L. D. (2014). Intercultural learning for international students: Designing a pre-departure orientation. (Publication No. 1553137) [Master's thesis, University of the Pacific]. ProQuest Dissertations Publishing.
- Jean-Francois, E. (2019). Exploring the perceptions of campus climate and integration strategies used by international students in a US university campus. *Studies in Higher Education*, 44(6), 1069–1085.
<https://doi.org/10.1080/03075079.2017.1416461>

- Jeon-Huh, A. (2015). *Exploring the influence of the pre-departure orientation on the undergraduate international students' cultural and academic adjustment at Drexel University: The example of students from China*. Drexel University.
- Kambouropoulos, A. (2014). An examination of the adjustment journey of international students studying in Australia. *Australian Educational Researcher*, 41(3), 349–363. <https://doi.org/10.1007/s13384-013-0130-z>
- Khanal, J., & Gaulee, U. (2019). Challenges of international students from pre-departure to post-study: A literature review. *Journal of International Students*, 9(2), 560–581. <https://doi.org/10.32674/jis.v9i2.673>
- Kimoto, L. (2009). The English language instructor: A bridge to support services on campus. In M. S. Andrade & N. W. Evans (Eds.), *International students: Strengthening a critical resource*. Rowman & Littlefield Education.
- Menzies, J. L., Baron, R., & Zutshi, A. (2015). Transitional experiences of international postgraduate students utilising a peer mentor programme. *Educational Research*, 57(4), 403–419. <https://doi.org/10.1080/00131881.2015.1091202>
- Pekerti, A. A., Vijver, F. J. R. Van De, & Moeller, M. (2021). A peer mentoring social learning perspective of cross-cultural adjustment: The rapid-acculturation mateship program. *International Journal of Intercultural Relations*, 84, 276–299. <https://doi.org/https://doi.org/10.1016/j.ijintrel.2021.08.010>
- Wessel, R. D., & Reed, J. L. (2005). Incorporating health care, English proficiency, social integration, and career planning in orientation programming for new international students. *The Journal of College Orientation and Transition*, 12(2), 17–27. <https://doi.org/10.24926/jcotr.v12i2.2618>

Appendix E

ARTIFACT 5 – DESIGN OF IMPROVED INTERNATIONAL STUDENT ORIENTATION

Introduction

This artifact describes the improved international student orientation program. I start by describing the history of UD's international student orientation, which reveals some of the gaps and shortcomings of the past and current international student orientation programs. Then I describe how the data and literature contributed to shaping the revisions. Specifically, the data from the Needs Assessment Survey (see Artifact 2) and the International Student Orientation Satisfaction Surveys (see Artifact 3) informed the changes in the international student orientation.

History of International Student Orientation

International student orientation is one of many orientation programs at UD that occur during the week before the semester begins. New undergraduate students attended a new student orientation program that typically occurs at the beginning of the week before classes. As part of their orientation experience, undergraduate students are also involved in the 1743 Welcome Days, which occurs during the weekend before the beginning of classes. During this time, students are involved in a series of welcome activities, such as an Involvement Fair, Game Day 101, and the Twilight Induction Ceremony.

New graduate students attend graduate student orientation. Some graduate students who are teaching assistants also are required to attend teaching assistant orientation. These two graduate orientation programs typically happen in the middle of

the week. Some graduate departments might also hold specific departmental orientation programs before or during the first week of classes.

International student orientation is held specifically for new international students, which typically occurs towards the end of the week. Therefore, international student orientation occurs after students have attended new student orientation (undergraduate) or graduate student orientation. This means that some information about campus support services that were introduced at these orientation programs have occasionally been repeated at international student orientation. However, international student orientation planners have tried to customize their information for international students. For example, even if a police officer from UD Police Department spoke at graduate student orientation, when they were invited to speak at international student orientation, they are asked to talk about how some U.S. laws may differ from other countries. This customization makes the content more relatable for international students and avoids duplication of content.

International student orientation is typically held in person at the Multipurpose Rooms at Trabant Student Center. Because more international students typically begin their academic program in the fall semester, the size of the audience of international student orientation in the fall is much larger than in the spring. For example, in spring 2019, approximately 150 students attended international student orientation, whereas in fall 2019, approximately 500 students attended international student orientation.

The topics that were covered during international student orientation have not changed over the years. An executive position paper written by a UD student in the EDD program in 2011 recorded their observation of international student orientation

in 2009 (Nassim, 2011), the agenda for which is documented in Table E1. Table E2 outlines the agenda for international student orientation in fall 2018 for comparison.

Table E27 Agenda of International Student Orientation Fall 2009

Time	Agenda
8:30 - 9:00 am	Continental breakfast
9:00 - 9:10 am	Welcome
9:10 - 9:30 am	Living and Studying in a New Culture
9:30 - 9:40 am	Campus language support services for international students
9:40 - 9:50 am	Immigration and interaction with OISS
10:00 - 10:10 am	Break
10:10 - 10:30 am	Students panel
10:35 - 10:45 am	Financial services
10:45 - 10:55 am	Billing services
10:55 - 11:05 am	Safety on campus
11:15 - 11:30 am	Health services
11:30 am - 12:00 pm	Graduate students proceed downstairs to Trabant Undergraduate students stay for Delaworld

Table E28 Agenda of International Student Orientation Fall 2018

8:00 – 9:00 am	Mandatory Check-in and Breakfast <i>Mandatory check-in with representatives from the Office for International Students and Scholars (OISS), who will report your arrival at UD with the U.S. government. Once you have checked in, join us for a light breakfast before the presentations begin. Meet other new students as well as current UD student “experts”.</i>
9:00 – 9:15 am	Welcome Address <i>Ravi Ammigan, Executive Director of the Office for International Students and Scholars</i>
9:15 – 9:30 am	Meet the OISS Staff <i>If OISS is your home away from home, this is your family! Meet the people working hard to make your UD experience the best!</i>

Table E2 Continued

9:30 – 10:15 am	Maintaining Your Status as an International Student <i>The Office for International Students and Scholars will explain important immigration policies and give advice about how to maintain your legal status in the U.S.</i>
10:15 – 11:00 am	Health, Safety, and Wellbeing <i>You will learn about resources available to you as a UD student to support your health, safety, and wellbeing.</i>
11:00 – 11:15 am	Programming & Outreach <i>Learn more about the programs that OISS has to offer throughout the year.</i>
11:15 – 11:30 am	Academic Success & Career Readiness <i>Learn about resources on how to have a successful academic experience at UD and prepare for a career beyond UD.</i>
11:30 am – 12:00 pm	Navigating American Culture <i>Brief overview of what to expect when interacting with Americans.</i>
12:00 pm	Navigating to Lunch

The comparison of the programs indicate that the international student orientation program largely has not changed. Information about the office and how to maintain immigration status tends to be presented at the beginning of the program. Then, representatives from partner offices, such as Student Health Services, the UD Police Department, and the Library are invited to introduce their offices and services during the second half of the program. The duration of the two programs is also relatively similar, between two-and-a-half to three hours.

In terms of how the information is conveyed, many offices, including the Center for Global Programs and Services (CGPS), have relied on PowerPoint presentations. During these presentations, information typically only flows one way and Q&A sessions were not held. Additionally, the presentations were oftentimes done one after another without a break in between. This continuous flow of information

without time to digest and process this information might be overwhelming for students, especially for students who struggle with English.

Current international students were occasionally involved in international student orientation. One format was to hold a student panel, where current international students would provide some advice, tips, and guidance for new international students. Some topics that they discussed included where to get groceries, tips for work/life balance, and interesting engagement opportunities. With the creation of the iBuddy Mentoring program, some mentors were asked to sit with the new international students to facilitate interaction and engagement. In other instances, international student leaders were involved in presenting information during orientation by performing skits with staff members, acting in recorded videos, or engaging in conversation with a guest presenter live on stage. Including students in the planning and implementation of international student orientation provided the planning committee with insights on which strategies might be effective and preferable to students.

Finally, although orientation programs are typically designed to introduce new students to the academic and social culture of their university, it is also a time to facilitate new students' interaction with their peers, faculty, and staff (Althen, 1990). In the past, international student orientation programs at UD have not optimally facilitated these socialization moments for new international students. One factor that contributed to this challenge was the lecture-style seating arrangement. For several years, during fall international student orientation, when it was attended by between 400 to 500 students, the choice of seating arrangement has always been a lecture-style one. Given the capacity of the Multipurpose Rooms at Trabant of 800 seated people,

the orientation planners understood this seating arrangement to be the most feasible to accommodate the number of students. This seating arrangement made it challenging to create engagement opportunities among new international students. In the spring orientation programs, since there are considerably less students compared to the fall, the Multipurpose Rooms in Trabant can be configured to hold round tables of about six to eight students. This arrangement makes it slightly easier to facilitate interaction amongst the students.

The other factor that has led to the dearth of socialization events during international student orientation is that not enough time had been spent to plan meaningful and appealing opportunities for new students to meet other students during orientation. Many of the efforts were focused on improving ways of conveying the information to students that would be interesting and meaningful to students. As a result, the socialization aspect of the program was neglected.

COVID Disruptions

Due to the COVID-19 pandemic, international student orientation was conducted virtually via Zoom starting in fall 2020 semester. This format continued until spring 2022 semester. Despite the virtual nature of the program, much of the format of the program did not change. The sequencing of topics, the offices invited to present, the mode of presentation, and duration of the program remained unchanged. Socialization opportunities became even more challenging. The planning team tried to address this by creating a pre-event networking session that was held before the beginning of the program where new international students would be able to meet and chat with each other.

Data-Driven Design

For the upcoming fall 2022 international student orientation program, I intend to implement improvement strategies to address the past and current gaps in international student orientation. An effective international student orientation should meet international students' information needs (Meyer, 2001), help them feel welcomed (Young & Althen, 2013), and facilitate interactions with their peers, faculty, and staff (Althen, 1990). These aspects of an effective orientation ultimately aid their transition and adjustment to the university and the local community. International student orientation is not the only type of institutional support to aid in this transition and adjustment, but it can be a significant event. It is a time when students expect to have their questions and uncertainties answered. The orientation also signifies the "real beginning of university study" (Reid, 2013).

To understand how the fall 2022 international student orientation program will be an improvement from previous programs, it is helpful to understand what those gaps and shortcomings were. I will outline five components of previous and current international student orientation programs that made them less effective. Then, using data from the International Student Orientation Satisfaction Surveys (see Artifact 3) and the literature, I will outline the strategies I intend to use to improve the international student orientation program.

Challenge 1: Too Little Information

New students have many questions about their new university and environment. New international students may have even more questions or concerns due to cultural differences. Therefore, international students want to learn about many different topics. Even within those topics, there are further specific sub-topics that international students consider important or a priority. The Needs Assessment Survey

(see Artifact 2) indicated that 81% new international students were curious about transportation. Within that topic, there were many reported concerns or questions about wanting to know about where (14%) and how to buy a car (18%) as well as obtaining a driver's license (20%).

The international student orientation program at UD has been consistently conducted using the half-day model, where the orientation program takes between two-and-a-half to three hours. Given the time limitation, it is not possible to address all the information topics that new international students want and need. At the same time, since events such as orientation are typically considered a significant event where new students would receive answers to all of their questions, there is an expectation that international student orientation should cover all of these pertinent topics. Introducing other media like websites, pamphlets, and handbooks, as well as using peer mentoring may fill this gap.

Even when a presentation does cover a specific topic, such as employment, the presentation might not cover enough details to satisfy students' information needs. For example, in the immigration presentation, there is a slide that mentions that international students are eligible to work up to 20 hours per week on campus, as well as being eligible for off-campus internships (Curricular Practical Training, or CPT) and post-graduate work opportunities (Optional Practical Training, or OPT). However, the presentation did not explain the specific application procedures for CPT or OPT. In the International Student Orientation Satisfaction Surveys (see Artifact 3), five students indicated that they did not receive information about CPT and OPT. These findings suggest that international students' information needs must be met by other

media or that international student orientation can be the opportunity to make connections with those other media or programs that do cover these topics.

Improvement 1: Referring to Other Information Resources

Since CGPS continues to use the half-day model of international student orientation (due to budgetary and human resource constraints), the time allotted for the program will be between two and three hours. Given this time constraint, it would not be possible to address all information needs of new international students during the international student orientation program. Chang, Gomes, and McKay (2021) and Fox (2020) mention that higher education institutions have adopted strategies to spread information for international students over an extended period. While this strategy is one way of addressing the issue of information overload (see next challenge), it can also be used to ensure that topics that matter to international students are being provided to them.

As a way to meet these information needs, the international student orientation program will refer to the pre-arrival Before You Arrive webinar series, which is available on CGPS's website. The recorded webinars provide more in-depth explanation of certain topics. Additionally, CGPS will provide a pamphlet that contains the contact information and links of different support services that would be useful and salient for new international students but were not covered or mentioned during international student orientation. Some examples include information about the UD shuttle bus, contact information for the UD Police Department, and information on PNC Bank. Finally, CGPS will also provide a printed copy of the fall programming calendar, which includes dates of employment workshops, bus trips to the Social Security office and the Department of Motor Vehicles, Coffee Hours, sports events,

and other engagement opportunities. This calendar is a tool to link information that is mentioned during international student orientation and will be followed up by a future event. For example, off-campus work authorization (Curricular Practical Training/CPT and Optional Practical Training/OPT) will be mentioned briefly during the immigration presentation. It will then be followed by a reference to the CPT and OPT workshops that will be held in the fall semester that are outlined on the programming calendar.

Challenge 2: Information Overload

Another challenge is that international students feel overwhelmed by the volume of information that is conveyed in one sitting at international student orientation. In the International Student Orientation Satisfaction Surveys (see Artifact 3), three participants expressed that there was too much information presented during the orientation. One specific comment was that, “... *as a non-native English speaker, this is too intensive, the amount of the info are overwhelmingly large, too much to learn.*” Moreover, the literature has indicated that many international student orientation programs tend to provide too much information for new international students, which result in information overload (Forbes-Mewett & Sawyer, 2016; Jean-Francois, 2019; Kovtun, 2011; Moogan, 2020). For example, information overload could happen when a presentation includes all information about the services of a support office, whether or not that information is pertinent, relevant, or considered important by new international students.

This problem is further exacerbated by the way in which the information is conveyed, which is typically via a standard PowerPoint presentation format. This format does not typically afford many opportunities for the audience to interact with

the presenter or ask questions. Therefore, international students are passive receivers of information. When there are numerous presentations conducted one after the other without little breaks, the ability to absorb this information becomes diminished.

Improvement 2: Targeted Information

On the one hand, the results of the International Student Orientation Satisfaction Surveys (see Artifact 3) indicate that there are a number of topics that new international students report to be useful. In the fall 2021 semester, the top three most frequently reported sessions that students considered useful were immigration (70%), student health services (63%), and student wellness (50%). Meanwhile, in the spring 2022 semester, the top three most frequently reported sessions that students considered useful were immigration (80%), student health services (80%), and safety on campus (76%).

On the other hand, however, students have also expressed that there were other information topics that they would have wanted to be presented at international student orientation. For example, in the International Student Orientation Satisfaction Survey (see Artifact 3), three students expressed that the topic of finding off-campus housing should have been included in the orientation program. Another example comes from the Needs Assessment Survey (see Artifact 2), where the concern of how to apply for a driver's license was the most frequently unresolved concern on transportation (26%).

Given the data showing that there are information gaps in international student orientation, there might be a desire to cover all of these topics at international student orientation. Attempting to include all the information needs at international student orientation might result in information overload.

Therefore, one strategy to address this challenge is to provide targeted information that includes topics that international students find most useful. Data from the International Student Orientation Satisfaction Surveys (Artifact 3) can help inform how to decide which topics should be included in the program. Additionally, planners may also want to coordinate with other campus-side orientation planners to ensure that there is not unnecessary replication of information. For example, the results of the International Student Orientation Satisfaction Survey in spring 2022 indicate that campus safety was considered one of the most frequently reported sessions as being useful. However, the fall 2022 international student orientation will not include this topic in the program, because it will have already been presented at the graduate student orientation program.

Another strategy to strike the balance of trying to provide too much information and not providing enough information is by referring to the Before You Arrive pre-arrival webinar series as well as future workshops and extended orientation programs that will cover the other topics or go in more detail about certain topics. It is expected that this strategy would assure new international students that the information they are looking for is available in a central place (e.g., programming calendar) without overwhelming them with too much information to remember at once.

In addition to the tendency of an international student orientation program to want to cover many topics, there is often the problem of the information conveyed in a lecture style presentation that provides few opportunities for interaction with the audience. When there is a series of presentations without active participation from the

audience, the students may feel there is too much information or feel that the presentations were uninteresting.

One way that the fall 2022 international student orientation will address this shortcoming is by using a mix of different media to convey information. Some examples include having a dialog between a student and a presenter, using a video to explain a topic, using smartphones to elicit feedback or questions from students, and providing written resources that can be referenced. In this way, students become more engaged in the program as active participants.

Challenge 3: Virtual Orientation

The COVID-19 pandemic has forced CGPS to hold a virtual international student orientation program since fall 2020 semester via Zoom. In the International Student Orientation Satisfaction Surveys, two students expressed their understanding why it had to be conducted virtually (*“I wish it was physical, but it’s fine due to the pandemic”* and *“Hopefully the situation will improve and the orientation can be held in person next year...”*). However, qualitative data from the International Student Orientation Satisfaction Surveys also indicated that students recommended an in-person international student orientation for the future. One of the cited reasons for a desire for an in-person program was so that it would be more fun and interesting. Another reason was so that there could be more socialization and interaction with other students, which Zoom technology could not facilitate effectively.

Improvement 4: Return to In-Person Orientation

To address the above challenge as well as to facilitate more socialization opportunities, the fall 2022 international student orientation program is planned to be conducted in person at the Multipurpose Rooms at Trabant. Health and safety

measures will be taken into consideration, including encouraging mask-wearing, shortening the program to two hours, and providing some distance in the seating arrangement.

Challenge 4: Limited Socialization Opportunities

As mentioned previously, despite some attempts to facilitate socialization opportunities during international student orientation, socialization events were not always present during the program. Although many international students might prioritize getting information at international student orientation in order to meet certain needs, socialization with peer students, faculty, and staff can be beneficial to help them get acclimated with the new social settings. In the International Student Orientation Satisfaction Surveys, students have also expressed their desire for more socialization opportunities ($n = 3$) as well as icebreaker activities ($n = 3$).

In the past, when international student orientation programs were convened in person before the COVID-19 pandemic, one of the factors contributing to this challenge was continuing to use a lecture-style seating arrangement for the fall international student orientation programs. Other seating arrangements had rarely been explored. The virtual international student orientation programs that were conducted via Zoom during the pandemic made this challenge even greater.

Additionally, socialization opportunities had also been rarely prioritized as an important aspect of international student orientation. However, planners need to prioritize this aspect and think of creative ways to facilitate these events.

Improvement 4: Facilitate Socialization Opportunities

The lecture-style seating arrangement was cited as a challenge that hindered socialization opportunities amongst new international students, as it allowed little

flexibility in maneuvering around the seats. With the planned return to an in-person international student orientation program for the fall 2022 semester, the planning committee will re-evaluate this seating arrangement by exploring alternative seating arrangements, such as cafeteria-style seating. Other options may also include grouping students by education level or major, which might contribute to facilitating effective socialization opportunities.

Technology-assisted icebreakers and games will also be considered to encourage interaction between students. Literature has also shown that smaller groups might also be conducive to facilitate these opportunities (Mayhew, Vanderlinden, & Kim, 2010; Thongsawat, Davidson-Shivers, & Chatphoomiphong, 2019). Finally, iBuddy mentors or other student leaders may also be invited to meet with new students before the program to answer any questions or simply befriend a new international student.

Challenge 5: Duration of International Student Orientation

In the International Student Orientation Satisfaction Surveys (see Artifact 3), three students had expressed that the duration of international student orientation program was too long. One contributing factor is that students may have difficulties maintaining focus and attention for three hours with few breaks while being seated the whole time, which makes the program feel long. Another factor might be that students might have already attended other orientation programs that were also three hours long. Therefore, attending yet another program for three hours was something that students found cumbersome and long.

Improvement 5: Shorten the Duration of International Student Orientation

A three-hour long orientation program that mimics that of a lecture may feel long. On the other hand, a three-hour orientation program that is interesting, interactive, and is clear about the purpose may not feel long and boring. Therefore, it is important to design and implement an orientation program that is engaging, useful, and has clear objectives. These goals will be achieved by providing a framework at the beginning of the program of what students can expect to learn at orientation so that each presentation or session has a clear purpose in supporting new students' transition and adjustment. Additionally, it is expected that addressing Challenge 2 of information overload by using a mix of different media can also contribute to making the program engaging for students. Finally, to minimize the risk of COVID-19 spread in a large in-person gathering, international student orientation will be limited to two hours.

Table E3 summarizes the challenges, improvement strategies, and evidence to support the changes in international student orientation program.

Table E29 Summary of Improvement Strategies

Challenges & Problems with Previous International Student Orientation	Ways to Operationalize Improvement Strategies	Evidence from Literature and Data to Support Changes
1. Too little information: Not enough topics are covered	<ol style="list-style-type: none"> 1. Additional print materials are given at international student orientation. Most important information is highlighted but the students can access the details later. 2. Linking international student orientation to extended orientation and fall semester programming. 3. Add “Before You Arrive” webinar series so that students have more time to digest information. 	<ol style="list-style-type: none"> 1. Needs Assessment Survey: Students had unresolved information concerns after attending international student orientation, such as on transportation, finances, and academics. 2. International Student Orientation Satisfaction Surveys: Not enough detail on specific topics were covered, such as off-campus employment authorization. 3. Chang et al., 2021: Spread information over an extended period of time.

Table E3 Continued

Challenges & Problems with Previous International Student Orientation	Ways to Operationalize Improvement Strategies	Evidence from Literature and Data to Support Changes
2. Information overload: Volume of information covered in PowerPoint presentations, with little interaction from the audience; too much irrelevant information.	<ol style="list-style-type: none"> 1. Select topics that are most useful and relevant for students. 2. Avoid duplication of topics that have been presented at other orientation programs. 3. Use of mixed media to convey information: videos, dialog, smartphone polling, and printed materials. 4. Reference to Before You Arrive webinar series and extended orientation and fall semester programming to balance the perception of too little information and the inclination of providing too much information during international student orientation. 	<ol style="list-style-type: none"> 1. International Student Orientation Satisfaction Surveys: Students reported that the information presented in the orientation was too much. Students find a selection of topics to be useful and relevant. 2. Forbes-Mewett & Sawyer, 2016: Students given too much information much too early in their program, resulting in information overload.
3. Orientation modality: Virtual orientation	Return to in-person orientation program.	International Student Orientation Satisfaction Surveys: Nine students expressed a desire for an in-person international student orientation. Some of the reasons cited included so that the program would be more interesting and so that there would be more socialization opportunities.

Table E3 Continued

Challenges & Problems with Previous International Student Orientation	Ways to Operationalize Improvement Strategies	Evidence from Literature and Data to Support Changes
4. Socialization: Too few socialization opportunities	<ol style="list-style-type: none"> 1. Modify seating arrangements to facilitate better socialization opportunities. 2. Design ice breakers to help students get to know each other using educational technology. 3. Involving iBuddy mentors and other student leaders to engage with new international students. 	<ol style="list-style-type: none"> 1. International Student Orientation Satisfaction Surveys: Three students have expressed the desire for more socialization events, while three others have also expressed the desire for more ice breakers. Zoom technology did not allow for effective socialization opportunities during orientation. 2. Althen (1990): An international student orientation program is a time to facilitate new students' interaction with peers, faculty, and staff.
5. Duration: Program is too long	<ol style="list-style-type: none"> 1. Design a program that is shorter in length. 2. Design sessions to incorporate engagement with students and use a mix of different media, so that the program does not feel too long or cumbersome. 	<ol style="list-style-type: none"> 1. International Student Orientation Satisfaction Surveys: Three students expressed how the program was too long and that there were few breaks.

To operationalize the improvement strategies for international student orientation, I created a draft schedule of the program, described in Table E4. Other components of the improved international student orientation program that are not included in the schedule, such as distributing printed materials with additional resources, are described in previous sub-sections.

Table E30 Draft Schedule of International Student Orientation for Fall 2022

Time	Agenda	How the Improvement Strategy is Operationalized
8:30 - 9:00 am	Arrival at Trabant, informal networking	Facilitating socialization by involving iBuddy mentors and other student leaders
9:00 - 9:05 am	Welcome	
	Connecting to UD wifi	Assessment
	Overview of international student orientation program	
	Pre-survey	
9:05 - 9:10 am	Welcome by Associate Provost, Ravi Ammigan	
9:10 - 9:15 am	Welcome by senior administration	Facilitating socialization
9:15 - 9:20 am	Ice breaker: Get to know your neighbors	

Table E4 Continued

Time	Agenda	How the Improvement Strategy is Operationalized
9:20 - 9:50 am	CGPS services and maintaining visa status	Mixed media to avoid information overload and balance too little information: role-playing, referring to future workshops
9:50 - 9:55 am	CGPS programming events and engagement opportunities	Mixed media to avoid information overload and balance too little information: referring to future workshops. Printed fall programming calendar provided at orientation.
9:55 - 9:56 am	Transition	
9:56 - 10:06 am	Academic preparedness	Mixed media to avoid information overload and balance too little information: video, interaction with students, referring to future workshops
10:06 - 10:07 pm	Transition	
10:07 - 10:27 pm	Health and wellness panel	Mixed media to avoid information overload and balance too little information: dialog, interaction with students by soliciting questions, referring to Before You Arrive webinar series, referring future workshops and events.
10:27 - 10:30 am	Buffer time	

Table E4 Continued

Time	Agenda	How the Improvement Strategy is Operationalized
10:30 - 10:40 am	Game	Facilitating socialization. Use of educational technology.
10:40 - 10:50 am	Career readiness	Mixed media to avoid information overload and balance too little information: dialog, interaction with students by soliciting questions, referring future workshops, and other printed material provided at orientation
10:50 - 10:55 pm	Post-survey	Assessment
10:55 - 11:00 am	Closing	
	Announcement: boxed lunches	
	Announcement: Welcome Coffee Hour at 4 pm	Facilitating socialization

REFERENCES

- Althen, G. (1990). *Orientation of foreign students*. NAFSA Field Service Working Paper #13.
- Chang, S., Gomes, C., & McKay, D. (2021). The digital information ecology of international students: Understanding the complexity of communication. In S. Chang & C. Gomes (Eds.), *Digital experiences of international students: Challenging assumptions and rethinking engagement*. Routledge.
- Forbes-Mewett, H., & Sawyer, A. M. (2016). International students and mental health. *Journal of International Students*, 6(3), 661–677. <https://doi.org/10.32674/jis.v6i3.348>
- Fox, J. M. (2020). Chinese students' experiences transitioning from an intensive English program to a U.S. university. *Journal of International Students*, 10(4), 1064–1086. <https://doi.org/10.32674/jis.v10i4.1191>
- Jean-Francois, E. (2019). Exploring the perceptions of campus climate and integration strategies used by international students in a US university campus. *Studies in Higher Education*, 44(6), 1069–1085. <https://doi.org/10.1080/03075079.2017.1416461>
- Kovtun, O. (2011). International student adaptation to a U.S. college: A mixed methods exploration of the impact of a specialized first-year course at a large Midwestern institution. *Journal of Student Affairs Research and Practice*, 48(3), 349–366. <https://doi.org/10.2202/1949-6605.6336>
- Mayhew, M. J., Vanderlinden, K., & Kim, E. K. (2010). A multi-level assessment of the impact of orientation programs on student learning. *Research in Higher Education*, 51(4), 320–345. <https://doi.org/10.1007/s11162-009-9159-2>
- Meyer, J. D. (2001). A conceptual framework for comprehensive international student orientation programs. *International Education*, 31(1), 56–79.
- Moogan, Y. J. (2020). An investigation into international postgraduate students' decision-making process. *Journal of Further and Higher Education*, 44(1), 83–99. <https://doi.org/10.1080/0309877X.2018.1513127>

- Nassim, S. Z. (2011). *The world is knocking on our doors: Examination of the experience of first-year undergraduate international students and support services programs available to them at the University of Delaware*. (Publication No. 3465811) [Doctoral dissertation, The University of Delaware]. ProQuest Dissertations Publishing.
- Reid, A. (2013). Arrival and orientation. In M. Morgan (Ed.), *Supporting student diversity in higher education: A practical guide*. Routledge.
- Thongsawat, S., Davidson-Shivers, G., & Chatphoomiphong, B. (2019). Designing an interactive student orientation to build social connectedness. *Journal of Education Multimedia and Hypermedia*, 28(1), 99–112.
- Young, N. E., & Althen, G. (2013). *The handbook of international student advising* (3rd ed.). Intercultural Interaction LLC.

Appendix E1

Sample of Improved International Student Orientation Materials and Plans

A. Fall 2022 Programming Calendar

Date	Event	Time	Location	Collaborators & Sponsors	Status
8/24/2022	CPT workshop	12:00 - 1:00 pm	Virtual	CGPS	Confirmed
8/24/2022	Hospitality Suite	9:30 am - 5:00 pm	Perkins Student Center	CGPS & Reslife & Housing	Confirmed
25-Aug	Hospitality Suite	9:30 am - 5:00 pm	Perkins Student Center	CGPS & Reslife & Housing	Confirmed
26-Aug	International Student Orientation	9:00 am - 12:00 pm	Trabant Student Center		Confirmed
26-Aug	Welcome Coffee Hour	4:00 - 6:00 pm	Trabant Student Center	CGPS, Student Life, & Catering	Confirmed
2-Sep	International Coffee Hour	4:00 - 6:00 pm	Trabant Student Center	CGPS, Student Life, & Catering	Confirmed
6-Sep	International Student Appreciation Night: Men's Soccer Game vs St. Joseph's	7:00 PM	Grant Stadium	UD Athletics	Confirmed
9-Sep	International Coffee Hour	4:00 - 6:00 pm	Trabant Student Center	CGPS, Student Life, & Catering	Confirmed
15-Sep	Student Wellness Discussion Series	4:00 - 6:00 pm	Wellness Center	Student Wellness and Health Promotion	TBD
16-Sep	International Coffee Hour	4:00 - 6:00 pm	Trabant Student Center	CGPS, Student Life, & Catering	Confirmed
19-Sep	OPT workshop	12:00 - 1:00 pm	Virtual	CGPS	Confirmed

20-Sep	J-1 International Scholar Orientation	12:00 - 1:00 pm	Virtual	CGPS	Confirmed
23-Sep	International Coffee Hour	4:00 - 6:00 pm	Trabant Student Center	CGPS, Student Life, & Catering	Confirmed
27-Sep	Social Security Bus trip	TBD	Social Security Office	CGPS/Social Security Office	TBD
30-Sep	International Coffee Hour	4:00 - 6:00 pm	Trabant Student Center	CGPS, Student Life, & Catering	Confirmed
7-Oct	International Coffee Hour	4:00 - 6:00 pm	Trabant Student Center	CGPS, Student Life, & Catering	Confirmed
7-Oct	International Coffee Hour	4:00 - 6:00 pm	Trabant Student Center	CGPS, Student Life, & Catering	Confirmed
9-Oct	International Heritage Day: Field Hockey Game vs. Old Dominion	1:00 PM	Rullo Stadium	UD Athletics	Confirmed
10-Oct	International Student Essay Contest Opens			CGPS	TBD
14-Oct	International Coffee Hour	4:00 - 6:00 pm	Trabant Student Center	CGPS, Student Life, & Catering	Confirmed
18-Oct	DMV Bus trip	TBD	Delaware DMV	CGPS	TBD
18-Oct	J-1 International Scholar Orientation	12:00 - 1:00 pm	Virtual	CGPS	Confirmed
20-Oct	Student Wellness Discussion Series	4:00 - 6:00 pm	Wellness Center	Student Wellness and Health Promotion	TBD
21-Oct	International Coffee Hour	4:00 - 6:00 pm	Trabant Student Center	CGPS, Student Life, & Catering	Confirmed
28-Oct	International Coffee Hour	4:00 - 6:00 pm	Trabant Student Center	CGPS, Student Life, & Catering	Confirmed
4-Nov	International Coffee Hour	4:00 - 6:00 pm	Trabant Student Center	CGPS, Student Life, & Catering	Confirmed
10-Nov	CPT workshop	12:00 - 1:00 pm	Virtual		Confirmed
11-Nov	International Coffee Hour	4:00 - 6:00 pm	Trabant Student Center	CGPS, Student Life, & Catering	Confirmed
12-Nov	Tailgate; Football game vs. Richmond	1:00 PM	The Barn; Bob Hannah Stadium	UD Athletics	Confirmed
14-Nov	International Student Essay Contest Closes			CGPS	TBD

15-Nov	OPT workshop	12:00 - 1:00 pm	Virtual	CGPS	Confirmed
15-Nov	J-1 International Scholar Orientation	12:00 - 1:00 pm	Virtual	CGPS	Confirmed
17-Nov	Student Wellness Discussion Series	4:00 - 6:00 pm	Wellness Center	Student Wellness and Health Promotion	TBD
2-Dec	International Coffee Hour	4:00 - 6:00 pm	Trabant Student Center	CGPS, Student Life, & Catering	Confirmed
9-Dec	International Coffee Hour	4:00 - 6:00 pm	Trabant Student Center	CGPS, Student Life, & Catering	Confirmed
6-Dec	International Coffee Hour	4:00 - 6:00 pm	Trabant Student Center	CGPS, Student Life, & Catering	Confirmed
12-Dec	J-1 International Scholar Orientation	12:00 - 1:00 pm	Virtual	CGPS	Confirmed
15-Dec	Student Wellness Discussion Series	4:00 - 6:00 pm	Wellness Center	Student Wellness and Health Promotion	TBD

B. Draft Plans for Sessions

- a. Academic Preparedness, presented by the Office of Academic Enrichment

Guiding questions to workshop with students:

1. What are your goals for your academic journey at UD?
2. How should students set academic achievement expectations? What are some benchmarks that students can use, in additional grads?
3. When the academic journey does not go as planned, when should students seek help? From whom or from which resources?
4. What is the value of getting an education in the US? Are there other things that can contribute to a students' academic goals that they can pursue outside of the classroom and the lab?

Education technology to use: Mentimeter

- b. Health and Wellness Panel, presented by Student Health Services, Counseling Center and Student Development, and Student Wellness and Health promotion

Format: Targeted questions asked by iBuddy mentor to the panel, then solicit question from the audience

Guiding questions:

1. What are some tips and advice to maintain healthy during the first semester? How do the three units play a role in supporting students' health and wellness and what kinds of resources would they recommend students to access or avail themselves to early on in the semester?

2. The transition to a new academic culture and a new environment can be an exciting journey, but there may be challenges along the way. What is your advice on when and how to seek help? Who can students go to if they are experiencing pressure with their academic program or other issues that affect their experience? How can using these resources be helpful for students' academic program?

Education technology to use: Mentimeter

- c. Career Readiness, presented by the Career Center

Guiding questions to workshop with students:

- a. How should someone mentally prepare for a job search? What type of mindset do you find most helpful?
- b. At what point should people start preparing for job applications, and why?
- c. Does the career center help with on-campus employment?
- d. What skills should students be developing during their time as a student that maybe isn't on everyone's radar, or that they might not think about?

Education technology to use: Mentimeter

Appendix F

ARTIFACT 6 – FIRST-YEAR SEMINAR SYLLABUS AND EVALUATION

Introduction

The improvement goal of the present ELP is to increase the quantity and quality of orientation programming to better meet the needs of new international students. To achieve this goal, one of the improvement strategies is to provide an extended orientation for new international students, namely the First Year Seminar (FYS) course, which I co-instructed with a peer mentor in Fall 2022. This artifact includes a description of how the improvement strategy was implemented, which focuses on the syllabus and details of the course instruction, and an evaluation of the improvement strategy, which assessed whether the course supported students' transition and adjustment.

The FYS course is considered an extended orientation that aims to aid the transition and adjustment of new students (Skipper et al., 2010). The benefit of an extended orientation is that it allows more time to explain information topics compared to an upon-arrival orientation program, where information is oftentimes condensed in a short period of time. It also covers topics that are more relevant to the phase of students' transition, where they have started their academic program and have generally moved beyond the immediate upon-arrival needs. Additionally, compared to an optional pre-arrival webinar, since this is a required class, students are more incentivized to attend each session, thereby increasing the likelihood of absorbing the information.

The literature on first-year seminars specifically designed for international students suggests that there are three main objectives:

- a) Strengthen students' academic preparation, expectations, and skills (Andrade, 2006; Cox et al., 2006; Dorsett, 2017; Kovtun, 2011; Snyder & Chesire, 2002; Yan & Sendall, 2016);
- b) Increase students' knowledge and familiarity with campus support services (Andrade, 2006; Fletcher-Anthony & Efthymiou, 2017); and
- c) Facilitate students' inter-cultural communication (Brunsting et al., 2018; Senyshyn, 2019; Snyder & Chesire, 2002).

These three objectives, as well as the required sessions prescribed by the University, guided the design of the syllabus, learning activities, and assignments of UNIV101-119D.

Purpose of Artifact

This artifact serves two purposes: (a) to describe how the class was instructed as part of the improvement strategy; and (b) to evaluate the course. In the section on course implementation, I describe the course participants, structure of the course, and schedule of course instruction. In the section on the evaluation, I describe the data sources, how the data were analyzed, the findings, and discussion of the data.

Implementation of FYS Course

This section describes how the improvement strategy of the FYS course was implemented. Information about the course participants, course structure, and weekly schedule of course instruction is provided. Furthermore, a description of the course assessment is also included within the weekly schedule of course instruction.

However, not all course assessments were used to evaluate the improvement strategy. See Appendix 1 for the course syllabus.

Course Participants

Incoming international undergraduate students were pre-registered into this class, yielding an initial total of twenty-six students. However, during the first week of class, several students had switched to a different section and other non-international students had enrolled into the section. After the end of the free drop/add deadline, the final class enrollment was twelve students, including three non-international students. Nonetheless, this composition did not hinder the level of engagement in class. Instead, the mixed enrollment enriched the diversity of backgrounds, opinions, and experiences that were shared throughout the course. However, data from the three non-international students were excluded from analysis. Table F1 outlines the countries of origin of the nine international students whose data were used to evaluate the FYS course. Students' names were not included in the analysis, but a student code was given to protect confidentiality.

Table F31 Enrolled Student Codes and Countries of Origin

Student Code	Country of origin
Student A	Barbados
Student B	Canada
Student C	China
Student D	China
Student E	Dominican Republic
Student F	India
Student G	Kazakhstan
Student H	Nigeria
Student I	South Korea

Structure of the Course

The class met every Tuesday and Thursday between 2:00 p.m. and 2:50 p.m. at Gore Hall room 306. The course was planned as an eight-week course, between August 30 and October 20, 2022. The majority of the class sessions were co-instructed with the FYS peer mentor, who was from India. Three class sessions on wellbeing, namely alcohol awareness and harm reduction, sexual misconduct, and bystander intervention, were instructed solely by the peer mentor. These topics were considered sensitive, and the FYS office recommended that the instructor not be present in order to facilitate an open dialogue among the students. The syllabus and course schedule were also co-developed with the peer mentor.

Schedule of Course Instruction and Assignment

This section provides a description of what was taught each week, including descriptions of assignments that were given during that week.

Week 1

The first class of the first week included introductions, a review of the syllabus, and a review of the course assignments, including the passport video activity. Groups for the passport video activity were created.

After the first class, students were given an out-of-class assignment to complete the first reflection paper. The students were asked to respond to the following prompts:

1. Thinking about your journey as a new international student at UD, how are you feeling at the beginning of the semester? Explore some of the thoughts and feelings that have come to your mind since you arrived on campus and started class. Are they positive? Are you bewildered by your new surroundings? Be thorough in your reflection.

2. Thinking about your journey as a new international student at UD, talk about at least one new thing that you've experienced or accomplished. How does that make you feel?
3. What are the three goals you'd like to accomplish by the end of the semester? This can include goals related to academics, social, cultural, or anything else. If you have space, begin talking about what kinds of resources you will need to accomplish those goals.

The second class of the first week focused on an introduction to campus resources. First, I introduced the students to nine wellness dimensions from the website of Student Wellness and Health Promotion, which they use as part of their wellness education. These nine wellness dimensions are social, emotional, financial, environmental, creative, physical, intellectual, career, and spiritual wellness. I considered these nine wellness dimensions an appropriate framework through which campus resources could be introduced. Then, students were divided into small groups and asked to find resources for each of the nine wellness dimensions.

During this class, students were also assigned the Passport Activity assignment, which asked them to work in groups to create a virtual campus tour. Each group was assigned to create a video of between six to seven locations and events on campus.

At the end of the second class, the students were asked to complete an exit ticket. Exit Ticket 1 included the following prompts:

1. You worked on finding on-campus resources that will support the different wellness dimensions. What are three of the resources you think you will access during this semester?
2. You listed different resources based on the 9 Wellness Dimensions. Are there other dimensions that you think should be added? If yes, please list them

below. If no, type in NA.

3. You listed different on-campus resources that will support the different wellness dimensions. What other resources do you think are important to know about, that were not discussed in class?

Week 2

Both class sessions during the second week focused on UD academic policies and procedures, including information about class registration and deadlines, GPA calculations, and advising resources.

At the end of the first class of the second week, students were asked to complete Exit Ticket 2, which included the following prompts:

1. Name three academic resources available at UD
2. Which of those academic resources do you think you will take advantage of this semester? Why do you think you would use those resources?
3. Please type in your academic advisor's name below
4. UNIV 101 is a Pass/Fail course. Getting a fail in this class will not impact your GPA. True or false?

At the end of the second class of the second week, students were asked to complete Exit Ticket 3, which included the following prompts:

1. Please type your UDID:
2. Students need to earn a semester GPA of 3.5 to be on the Dean's list. Is this true or false?
3. What are the criteria to be on academic probation?
4. What are some strategies that you will employ to avoid a poor GPA in your semester? Name two strategies.

5. Name two resources that you will use this semester to support your academic success. These resources do not have to be academic.
6. What is the date for dropping or changing classes without academic penalty?

The purposes of both exit tickets were to assess students' comprehension of the academic policies and procedures and encourage them to think about using the different resources to support their academic success.

Week 3

The first session of Week 3 focused on academic honesty. A presentation about the UD Student Code of Conduct and academic honesty policies were provided. Students were then divided into small groups to discuss case studies of academic dishonesty and decide what they would have done differently in those situations. At the end of the first class, students were asked to complete Exit Ticket 4, which assessed their understanding of the class topic. The prompts for Exit Ticket 4 are below:

1. Please type your UDID:
2. Type in the link to the UD Student Code of Conduct
3. Choose one of the policies under the Code of Conduct. Mention two prohibited activities of that policy.
4. What is one of the sanctions for an academic dishonesty conduct case?
5. Name two strategies you will use this semester to avoid issues with academic dishonesty in your courses.

The second class of Week 3 was on the topic of alcohol awareness and harm reduction, which was the first section of a three-part series on safety and wellness. The

purpose of this session was to introduce students to the potential risks and dangers related to alcohol and drug use as well as to introduce students to thinking critically about their wellness choices. This class session was instructed solely by the peer mentor.

The assignment that was given to the students at the end of this class session was a survey provided by Student Wellness and Health Promotion. Since I do not have access to the results of this survey, it was not included in the analysis for this artifact.

Week 4

Week 4 consisted of the second and third sessions on safety and wellness, both of which were instructed solely by the peer mentor. The first class session covered the topic of sexual misconduct. The purpose of this topic was to introduce the pyramid of harm, provide different examples of each level of the pyramid of harm, and introduce resources to respond to and mitigate sexual misconduct. Students were also given resources for self-care while going through the class material.

The exit ticket that was given to the students at the end of this class session was a survey provided by Student Wellness and Health Promotion. Since I do not have access to the results of this survey and the results were not pertinent to the evaluation, the results were not included in the analysis for this artifact.

The second session of Week 4 covered the third topic on safety and wellness, namely bystander intervention. In this class session, students were introduced to the concept of bystander intervention, which are actions that a bystander can use to intervene. Students were presented with various scenarios and asked to discuss what actions they would take in each scenario and the impact of each choice.

At the end of the class, students were asked to complete a survey given by the Student Wellness and Health Promotion. Since I do not have access to the results and they were not pertinent to this evaluation, the results were not included in the analysis of this artifact.

Week 5

The first class of this week examined the topic of managing stress and the academic workload, which included a presentation on stress management and campus support services. Additionally, a guest international student was invited to share her experiences with managing stress related to the academic workload. The purpose of this class was to equip the students with resources and strategies to manage workload as the workload became heavier over the course of the semester.

At the end of the class, students were asked to complete Exit Ticket 5, which was aimed at reviewing their familiarity with campus resources. The prompts for Exit Ticket 5 are listed below:

1. Please type your UDID
2. Thinking about the different types of resources that you might need in your first semester at UD, which of the following resources are you familiar with? Select all that apply.*

Healthcare resources
Academic resources
Immigration resources
Registered student organizations
Transportation
Health insurance
Finances
Social activities
Shopping

3. Thinking about the different types of resources that you might need in your first semester at UD, which of the following resources have been most helpful to you? Rank the top three resources.*

Healthcare resources
Academic resources
Immigration resources
Registered student organizations
Transportation
Health insurance
Finances
Social activities
Shopping

4. In addition to the resources that you are unfamiliar with above, what other resources would you like to learn more about this semester that would help you in your first semester?

The second session of this week was a discussions-based class, where the students discussed two books: (a) the Common Reader, *While the Earth Sleeps We Travel: Stories, Poetry, and Art from Young Refugees Around the World*, which was written by Ahmed Badr; and (b) *Cross Cultural Narratives: Stories and Experiences of International Students*, a collection of essays from former international students and edited by Dr. Ravi Ammigan. Students were asked to reflect about the experiences of the refugees in the Common Reader. They were also asked to read some of the essays in *Cross Cultural Narratives* that resonated the most with them and discuss their thoughts on the essays and asked to compare their own experiences to those in the essays.

No exit ticket was assigned at the end of the second session of this week. However, a second reflection paper was assigned to students, with the following prompts:

1. Thinking about your journey as a new student at UD, how are you feeling at this point of the semester? Talk about *why* you feel the way that you do about your journey as a new student.
2. Thinking about your journey as a new student at UD, what are some of the concerns you have, if any? Concerns could include those related to your academics, social life, personal development, spiritual, etc.
3. Recall the three goals you outlined in your first reflection paper at the beginning of the semester. At this point of the semester, how close are you in accomplishing the goals you set out at the beginning of the semester?
 1. What are the resources do you need to accomplish those goals?
 2. What are any challenges you are encountering to accomplish those goals, if any?
4. What support do you need from your instructor or peer mentor to help you accomplish these goals?

Week 6

In Week 6, the focus was on cross-cultural communication. Although the syllabus listed the topic as being Navigating American Culture for the class session, I decided to shift the topic towards inter-cultural communication, as I believed it would create a richer discussion than solely about American culture. Moreover, considering the composition of the class that included both international and non-international students, I thought it would be more beneficial for the class to discuss strategies about how to navigate cross-cultural situations.

A variation of the game Bafá-bafá was introduced to visualize cultural differences. Bafá-bafá is a simulation game that was created by Dr. R. Garry Shirts in 1974 to improve participants' inter-cultural awareness and competence. Students are divided into two groups, and each group is provided with a scenario of a specific culture; each culture is diametrically different from the other. They are then asked to encounter the different culture in the simulation. A debriefing session typically

follows the simulation to reflect about how they felt while interacting with people from a different culture and how they could use inter-cultural communication skills to have a positive interaction. No exit ticket or reflection paper was assigned at the end of this class.

The second session of this week discussed diversity at UD, the presentation for which was based on a slide deck that was prepared by the Student Diversity and Inclusion Office. This topic is one of the required topics to be included in the FYS course.

Exit Ticket 6 was assigned at the end of this class, with the following prompts:

1. Please type your UDID:
2. Think about your social wellness at UD thus far. In the space below, please mention up to three resources that you have found helpful to support your social wellness.
3. This week, we have been talking about cross-cultural communication. In three to four sentences, please describe any recent cross-cultural experience you have encountered. What was the encounter? How did you react? How did it make you feel? What cross-cultural communication skill did you use, if any?
4. Think about your social wellness dimension and your new awareness of cross-culture communication. Which aspect of cross-culture communication would you consider MOST USEFUL for you? Refer to the slides from class as a refresher (Canvas>Files>Class slides).

Week 7

The first class of Week 7 included two topics: career readiness and social media. Both slide decks were created by the Career Center. The peer mentor and I presented on the topic of career readiness, and the social media presentation was

presented by the communications specialist at the Center for Global Programs and Services (CGPS).

At the end of the class, an assignment about social media was assigned to the students. However, the results of this assignment were not analyzed in this artifact, as it did not contribute towards answering the evaluation questions. No other exit ticket was assigned to the students.

During the second class of Week 7, class time was used to allow students to work in their groups to prepare for the passport video activity. No other assignment was given at the end of this class.

Week 8

The first class of Week 8 was slated to be a student panel, whereby current UD students provided advice and guidance to the students. However, neither I nor my peer mentor were able to gather enough students in time to have a student panel. Therefore, this class session was converted into a discussion on how students find information before arriving at UD. The purpose of this discussion was to better understand undergraduate international students' preferences of information seeking.

No exit ticket was given, but the final reflection paper was assigned. The final reflection paper asked students to report on the extent to which the FYS course helped them achieve their goals. The prompts of the third reflection paper are:

1. Thinking about your journey as a new international student at UD, how are you feeling at this point of the semester?
2. At this point of the semester, how close are you in accomplishing the goals you set out at the beginning of the semester?
 - What are the resources do you need to accomplish those goals?
 - What are any challenges you are encountering to accomplish those goals, if any?

3. What is one of the biggest lessons you've learned this semester? How will that help you accomplish your goals, if any?
4. How has this FYS class helped you with accomplishing your goals this semester, if any? Please be specific.

In the final class of the course, a watch party of the passport video activity was held. The video projects of all four groups were displayed. Time was also set aside for any verbal feedback from the students about the course and assignments. Finally, while no exit ticket was given, a final in-person evaluation was distributed and completed at the end of the class. The purpose of the final evaluation was to obtain information about students' preference in terms of the class topics and their sense of belonging at UD. The in-class final evaluation was not analyzed for this artifact as it did not contribute towards answering the evaluation questions.

In summary, the course assignments included: (a) four reflection papers; (b) six exit tickets; (c) one final in-person evaluation; and (d) one passport activity project. However, for the purposes of evaluating the course as an improvement strategy for this ELP, not all course assessments were analyzed. Some course assessments, such as the passport activity project, and some exit ticket and reflection prompts were not analyzed because they were not relevant for answering the evaluation questions.

Evaluation of the FYS Course

The literature outlined three major objectives of an FYS course for international students, namely: (a) to strengthen students' academic preparation, expectations, and skills' (b) to increase students' familiarity with campus support services; and (c) to facilitate inter-cultural communication skills. Based on these three objectives, this artifact evaluated the FYS course through the following questions:

1. Did the FYS course contribute towards strengthening students' academic preparation, expectations, and skills?
2. Did the FYS course contribute towards increasing students' knowledge and familiarity with campus support services?
3. Did the FYS course facilitate students' inter-cultural communication skills?

To answer questions 1 and 2, I used two data sources: select prompts from the exit tickets and select prompts from the reflection papers. To answer question 3, the course instruction on inter-cultural communication skills introduced students to the topic, and the influence of this class instruction was measured through Exit Ticket 6.

Findings

This section describes the results of data analyses for each question and the data sources used to answer each of the questions, which are described in Table F2.

Table F32 Prompts and Data Sources for Evaluating Objectives

Data sources	Objective 1: Contribute towards strengthening students' academic preparation, expectations, and skills	Objective 2: Contribute towards increasing students' knowledge and familiarity with campus support services	Objective 3: Facilitate students' inter-cultural communication skills
Exit Ticket 1: Exploring campus resources.		You worked on finding on-campus resources that will support the different wellness dimensions. What are three of the resources you think you will access during this semester?	
Exit Ticket 2: Identifying academic resources, identifying which resources will be used, identifying academic advisor's name, and comprehension of academic regulations.	Name three academic resources available at UD. UNIV 101 is a Pass/Fail course. Getting a fail in this class will not impact your GPA. True or false?	Name three academic resources available at UD.	
Exit Ticket 3: Comprehension of academic regulations, identifying academic strategies to support academic success.	Students need to earn a semester GPA of 3.5 to be on the Dean's list. Is this true or false? What are the criteria to be on academic probation?	Name two resources that you will use this semester to support your academic success. These resources do not have to be academic.	
	What is the date for dropping or changing classes without academic penalty?		

Table F2 Continued

Data sources	Objective 1: Contribute towards strengthening students' academic preparation, expectations, and skills	Objective 2: Contribute towards increasing students' knowledge and familiarity with campus support services	Objective 3: Facilitate students' inter-cultural communication skills
Exit Ticket 4: Comprehension of Code of Conduct and academic honesty policies and identifying strategies to avoid violation of academic honesty policies.	Type in the link to the UD Student Code of Conduct.		
	Choose one of the policies under the Code of Conduct. Mention two prohibited activities of that policy.		
	What is one of the sanctions for an academic dishonesty conduct case?		
	Name two strategies you will use this semester to avoid issues with academic dishonesty in your courses.		
Exit Ticket 5: Identifying familiarity with campus resources, ranking those that have been most useful, and providing feedback on additional campus resources.		Thinking about the different types of resources that you might need in your first semester at UD, which of the following resources are you familiar with? Select all that apply.*	

Table F2 Continued

Data sources	Objective 1: Contribute towards strengthening students' academic preparation, expectations, and skills	Objective 2: Contribute towards increasing students' knowledge and familiarity with campus support services	Objective 3: Facilitate students' inter-cultural communication skills
Exit Ticket 6: Identifying social resources, reflecting on inter-cultural encounter, and improving inter-cultural communication skills.		Think about your social wellness at UD thus far. In the space below, please mention up to three resources that you have found helpful to support your social wellness.	Think about your social wellness dimension and your new awareness of cross-culture communication. Which aspect of cross-culture communication would you consider MOST USEFUL for you?
			This week, we have been talking about cross-cultural communication. In three to four sentences, please describe any recent cross-cultural experience you have encountered. What was the encounter? How did you react? How did it make you feel? What cross-cultural communication skill did you use, if any?

Table F2 Continued

Data sources	Objective 1: Contribute towards strengthening students' academic preparation, expectations, and skills	Objective 2: Contribute towards increasing students' knowledge and familiarity with campus support services	Objective 3: Facilitate students' inter-cultural communication skills
Reflection Paper 3: End of course.	How has this FYS class helped you with accomplishing your goals this semester, if any? Please be specific.	How has this FYS class helped you with accomplishing your goals this semester, if any? Please be specific.	

Question 1: Did the FYS course contribute towards strengthening students' academic preparation, expectations, and skills?

Academic preparation and expectations in this question were defined as students' ability to identify academic resources that they believe would support their transition, their understanding of academic rules and regulations, and the extent to which students demonstrated their use of the academic resources. I used data from select prompts of the exit tickets to assess students' ability to identify academic resources and understand academic rules and regulations. I used data from one prompt in Reflection Paper 3 to assess the extent to which students used the academic resources they learned during the FYS class. See Table F4 for a summary of the results.

Exit Tickets

1. Exit Ticket 2

After the first class session on UD academic policies and procedures, which also included information about academic resources, students were asked to complete Exit Ticket 2, which included four prompts. Two prompts were used in this analysis. The first one asked students to name three academic resources available at UD. All nine students responded to this exit ticket. Eight students (88.88%) were able to name three academic resources, while one student (11.11%) named only two. After having learned about academic resources in class, students' ability to identify some of them in the exit ticket demonstrates the beginning of their awareness of the different support services. The top three cited academic resources were academic advisor ($n = 7$, 26.9%); the Center for Counseling and Student Development ($n = 6$, 23.07%), and the Writing Center ($n = 5$, 19.23%).

The second prompt of Exit Ticket 2 tested students' knowledge of the UD grading system. This prompt asked: "UNIV 101 is a Pass/Fail course. Getting a fail in this class will not impact your GPA. True or false?" Six students (66.66%) answered this prompt correctly (the correct answer is False), while three (33.33%) did not. Being able to answer this prompt correctly suggests students understood an example of some of the different grading procedures.

2. Exit Ticket 3

After the second class session on UD academic policies and procedures, which also included information about academic resources, students were asked to complete Exit Ticket 3, which included six prompts. Three prompts were used in this analysis. The first prompt assessed students' knowledge about the grade point average (GPA) system. Specifically, it asked: "Students need to earn a semester GPA of 3.5 to be on the Dean's list. Is this true or false?" All nine students responded to this exit ticket prompt. Four students (44.44%) answered this question correctly (the correct answer is True) while six of them (66.66%) did not. Being able to answer this prompt correctly suggests students understood or could recall the class material on the GPA.

The second prompt assessed students' understanding of academic probation. Specifically, it asked: "What are the criteria to be on academic probation?" Seven students (77.77%) answered this question correctly (the correct answer is having a cumulative GPA of 2.0) while two of them (22.22%) did not. These two students answered, "struggling in class" and "[getting an] F," which were incorrect. This result suggests that most of the students understood the influence of their GPA on their academic standing.

The third prompt assessed students' understanding of the free drop/add and academic penalty deadline. Specifically, this prompt asked: "What is the date of dropping or changing classes without academic penalty?" Students could answer either the free drop/add deadline (September 13, 2022) or the academic penalty deadline (November 14, 2022) to receive a correct answer. Eight students (88.88%) answered this question correctly; while one student gave a slightly incorrect date (September 12, 2022). This result suggests that most of the students knew the deadlines that were important for their semester enrollment. These dates are particularly important for international students since they would not have as much flexibility to drop below a full-time course load compared to domestic students. Dropping below a full-time course load influences their immigration status in the U.S.

3. Exit Ticket 4

After the class session on academic honesty policies, students were asked to complete Exit Ticket 4, which included four prompts, all of which were used in this analysis. Eight students completed this exit ticket. The first prompt asked students to type in the link to the UD Student Code of Conduct, which assessed whether students were able to find it. Seven students (87.5%) were able to insert the correct link to the UD Student Code of Conduct while one student (12.5%) did not cite the correct link. Finding the Code of Conduct was the first step that the students needed in order to answer the second prompt.

The second prompt asked students to identify one policy under the Code of Conduct and select two prohibited activities of that policy. All eight respondents (100%) selected the Academic Honesty policy, and all respondents (100%) were able to identify two prohibited activities with Academic Honesty. This finding suggests

that all respondents either read the information about policy violations in the Code of Conduct, recalled the information from the class instruction, or both. Answering the prompt correctly suggests an understanding of the policy. The most frequently cited prohibited activity was plagiarism ($n = 6$, 37.5%), followed by cheating ($n = 4$, 25%) and fabrication ($n = 3$, 18.75%).

The third prompt of Exit Ticket 4 assessed respondents on their understanding of the sanction for an academic dishonesty conduct case. Seven (87.5%) out of the eight respondents were able to cite a correct example of a sanction, which included repeating any of the work, receiving an X on the transcript for the course, and a suspension. This finding suggests that most students were able to either read the information about sanctions for Academic Honesty policy violations, recall from the class instruction, or both. Answering the prompt correctly suggests an understanding of the consequences of academic honesty violations.

Finally, the fourth prompt of Exit Ticket 4 asked students to identify two strategies that they would use during the semester to avoid issues with academic dishonesty in their classes. All eight respondents (100%) answered this prompt, each with two strategies. Being able to identify personal strategies to mitigate issues with academic honesty suggests that students are aware of how they could avoid any academic honesty violations. Table F3 summarizes the strategies that the students mentioned they would use to avoid academic honesty violations and the frequency that each of the strategies were mentioned.

Table F33 Frequency of Cited Strategies to Avoid Academic Honesty Violations

Strategy	Frequency (%) <i>N</i> = 16
Double check work and citations	3 (18.75%)
Visit professors or teaching assistants	3 (18.75%)
Work harder	2 (12.5%)
Avoid procrastination	2 (12.5%)
Visit the Writing Center	2 (12.5%)
Visit the Wellbeing Center	1 (6.25%)
Submit work on time	1 (6.25%)
Better time management	1 (6.25%)

Reflection Paper 3

One of the prompts of Reflection Paper 3 asked student how “this FYS class helped you with accomplishing your goals this semester, if any?” Six out of the nine students submitted Reflection Paper 3. However, only one student stated specifically how the FYS course was helpful for them academically. Student H stated: “I also learned a lot about the academic side of UD, vital information and tips that have helped me succeed in my journey so far, especially regarding understanding my GPA.”

Other students stated that the FYS helped them understand the available campus resources and how those resources were helpful, however, they did not specify that those resources were academic resources.

Summary

The findings based on the exit tickets demonstrated that the students learned some of the academic policies and procedures taught in the FYS course. A little over half of all students (66.66%) were able to correctly understand the grading policy of a pass/fail course, but only half of the students (44.44%) were able to correctly

understand the GPA criterion to be on the Dean's list. Almost all students (88.88%) were able to correctly identify the academic penalty deadline and 77.77% were able to correctly identify the criteria for academic probation. In terms of comprehending academic honesty policies, almost all students (87.5%) were able to correctly find the UD Student Code of Conduct and correctly identify a sanction for an academic honesty violation. In terms of the extent to which the FYS course helped the students academically by the end of the course, it is unclear since many of them did not specify this. Table F4 summarizes all the responses.

Table F34 Summary of Exit Tickets and Reflection Paper Responses for Question 1

Data sources	Prompt	Correct responses
Exit Ticket 2: Identifying academic resources, identifying which resources will be used, identifying academic advisor's name, and comprehension of academic regulations. <i>N</i> = 9	Name three academic resources available at UD.	8 (88.88%) students named 3 resources 1 (11.11%) student named 2 resources
	UNIV 101 is a Pass/Fail course. Getting a fail in this class will not impact your GPA. True or false?	6 (66.66%) students answered correctly
Exit Ticket 3: Comprehension of academic regulations, identifying academic strategies to support academic success. <i>N</i> = 9	Students need to earn a semester GPA of 3.5 to be on the Dean's list. Is this true or false?	4 (44.44%) students answered correctly
	What are the criteria to be on academic probation?	7 (77.77%) students answered correctly
	What is the date for dropping or changing classes without academic penalty?	8 (88.88%) students answered correctly
Exit Ticket 4: Comprehension of Code of Conduct and academic honesty policies and identifying strategies to avoid violation of academic honesty policies. <i>N</i> = 8	Type in the link to the UD Student Code of Conduct.	7 (87.5%) students answered correctly
	Choose one of the policies under the Code of Conduct. Mention two prohibited activities of that policy.	8 (100%) students answered correctly

Table F4 Continued

Data sources	Prompt	Correct responses
Exit Ticket 4: Comprehension of Code of Conduct and academic honesty policies and identifying strategies to avoid violation of academic honesty policies. <i>N</i> = 8	What is one of the sanctions for an academic dishonesty conduct case	7 (87.5%) students answered correctly
	Name two strategies you will use this semester to avoid issues with academic dishonesty in your courses.	8 (100%) students answered correctly
Reflection Paper 3: End of course. <i>N</i> = 6	How has this FYS class helped you with accomplishing your goals this semester, if any? Please be specific.	I also learned a lot about the academic side of UD, vital information and tips that have helped me succeed in my journey so far, especially regarding understanding my GPA.

Question 2: Did the FYS course contribute towards increasing students' knowledge and familiarity with campus support services?

Knowledge and familiarity with campus support services refer to students' ability to identify resources on campus that they believe would support their transition and adjustment at UD and in the U.S. Throughout the course, I dedicated many class sessions to introduce and explore campus support services and resources to students, as well as encourage them to access them throughout the semester. I used data from select prompts of the exit tickets to assess students' ability to identify support resources and assess their familiarity with those resources. I used data from one prompt in Reflection Paper 3 to assess the extent to which students used the resources they learned during the FYS class. See Table F10 for a summary of the results.

Exit Tickets

1. Exit Ticket 1

In the second class of the course, a number of campus resources were introduced, including the Center for Counseling and Student Development, the Career Center, and the Center for Global Programs and Services. Students were asked to find different resources based on nine different wellness dimensions. After the second class, students were asked to complete Exit Ticket 1, which included three prompts. One prompt was used in this analysis: "You worked on finding on-campus resources that will support the different wellness dimensions. What are three of the resources you think you will access during this semester?" All nine students (100%) were able to name three resources that they believe they would access during the semester. The top three cited resources are the gym (18.7%), the Career Center (11.1%), and Perkins

Student Center (11.1%). The full list of resources that students cited is listed in Table F5.

Table F35 Frequency of Cited Resources

Resource	Frequency (%) <i>N</i> = 27
Gym	5 (18.5%)
Career Center	3 (11.1%)
Perkins Student Center	3 (11.1%)
Registered Student Organizations	3 (11.1%)
International Coffee Hour	2 (7.4%)
Student Health Services	2 (7.4%)
Counseling Center and Student Development	2 (7.4%)
Office of Academic Enrichment	1 (3.7%)
Library	1 (3.7%)
Tutoring	1 (3.7%)
Writing Center	1 (3.7%)
Office Hours	1 (3.7%)
TEDx UD	1 (3.7%)
Student Wellness Center	1 (3.7%)

2. Exit Ticket 2

After the first class session on UD academic policies and procedures, which also included information about academic resources, students were asked to complete Exit Ticket 2, which included four prompts. One prompt was used in this analysis, which asked students to name three academic resources available at UD. All nine students responded to this prompt, and their answers are outlined in Table F6. Eight students (88.88%) were able to name three academic resources while one student (11.11%) named only two. After having learned about academic resources in class,

students' ability to identify some of them in the exit ticket demonstrates the beginning of their awareness of the different academic support services.

Table F36 Frequency of Cited Academic Resources

Resource	Frequency (%) <i>N</i> = 26
Academic advising	7 (26.9%)
Center for Counseling	7 (26.9%)
Writing Center	6 (23.06%)
Tutoring	3 (11.53%)
Library	3 (11.53%)
Math Lab	2 (7.69%)
Office Hours	2 (7.69%)
Physics Tutoring	1 (3.84%)
Student Success Center	1 (3.84%)
Workshops	1 (3.84%)
Academic Coaching	1 (3.84%)

3. Exit Ticket 3

After the second class session on UD academic policies and procedures, which also included information about academic resources, students were asked to complete Exit Ticket 3, which included six prompts. One prompt was used in this analysis. Specifically, it asked: “Name two resources that you will use this semester to support your academic success. These resources do not have to be academic in nature.” All nine students (100%) were able to mention two resources that they thought they would use during the semester. Being able to answer this prompt suggests that students were familiar with the available resources and understood how they would potentially be useful for their academic success. Table F7 outlines the frequency of academic resources that students mentioned they might use during the semester.

Table F37 Frequency of Potentially Used Academic Resources

Resource	Frequency (%) N = 18
Library	3 (16.66%)
Math Lab	3 (16.66%)
Academic Advising	2 (11.1%)
Center for Counseling	2 (11.1%)
Office Hours	2 (11.1%)
Tutoring	2 (11.1%)
Writing Center	2 (11.1%)
Chemistry Resource Center	1 (5.55%)
TedX Talks	1 (5.55%)

4. Exit Ticket 6

After the first class of Week 6, students were asked to complete Exit Ticket 6, which included four prompts. One prompt was used in this analysis, which asked students to mention up to three resources that students found helpful to support their social wellness. Six students responded to this exit ticket. Five students (83.3%) responded with three resources while one student (16.6%) responded with one social resource. Table F8 outlines the types of resources and frequency that students cited as those they have used.

Table F38 Frequency of Cited Social Resources

Social resources	Frequency (%) <i>N</i> = 16
Student clubs	4 (25%)
Classes	4 (25%)
Student centers	2 (12.5%)
International Coffee Hour	2 (12.5%)
Wellness Center	1 (6.25%)
Newark/community	1 (6.25%)
Dorm activities	1 (6.25%)
UD sports events	1 (6.25%)

Reflection Paper 3

In Reflection Paper 3, one of the prompts asked students how the FYS class helped them accomplish their goals during the semester, if any. Six (66.66%) out of nine students submitted Reflection Paper 3 and all six students outlined how the FYS class helped them in terms of introducing them to resources. These responses are described in Table F9.

Table F39 What Resources Students Learned from the FYS Course

Student Code	Responses
Student A	This FYS class has help me accomplish my goals because if it wasn't for this class I don't [think] I would've known about all the resources that we have on campus that early in the semester. And for that I am very grateful because it helped me a lot and it bettered my experience a little this semester.
Student B	This FYS class has helped me learn what resources are available, and how I can get help if needed. There are resources for mental health that I have learned about via this class, and will turn to if needed.
Student D	I can know what resources are available to me and what are available to me and what will help me. For example, library, shuttle bus, and the canteen.

Table F9 Continued

Student Code	Responses
Student E	This class has helped me reach my goals in some ways since I learned many valuable things like intercultural communication, diversity, plagiarism etc. I've learned many important things that will help me in the future.
Student H	I also learned a lot about the academic side of UD, vital information and tips that have helped me succeed in my journey so far, especially regarding understanding my GPA.
Student I	This class has helped me navigate my life as an international student in UD. I've left the classroom with many resources and responsibilities. Learning about the resources available to UD students has been the most helpful.

The data suggests that many of the students found that the FYS class had provided them with information about various campus support services. Although many of the responses merely cited resources in a general sense, there were some students who had cited specific resources, such as mental health resources (Student B), the library (Student D), and academic policies (Student H).

Summary

The findings based on the exit tickets demonstrated that the students have been able to become familiar with some of the campus resources to support both their academic and social adjustment. Across exit ticket prompts, almost all students (88.88%) were able to identify different campus resources, including academic and social resources. The responses in Reflection Paper 3 also suggest that the students found the FYS course to be helpful in understanding the various campus support services. Table F10 summarizes all of the responses.

Table F40 Summary of Exit Tickets and Reflection Paper Responses for Question 2

Data sources	Prompt	Top 3 Responses
Exit Ticket 1: Exploring campus resources. $N = 9$	You worked on finding on-campus resources that will support the different wellness dimensions. What are three of the resources you think you will access during this semester?	9 (100%) students named 3 resources Top three mentioned resources: 1. Gym (18.5%) 2. Career Center (11.1%) 3. Perkins Student Center (11.1%)
Exit Ticket 2: Identifying academic resources, identifying which resources will be used, identifying academic advisor's name, and comprehension of academic regulations. $N = 9$	Name three academic resources available at UD.	8 (88.88%) students named 3 resources 1 (11.11%) student named 2 resources Top three mentioned resources: 1. Academic Advising (26.9%) 2. Center for Counseling (26.9%) 3. Writing Center (23.06%)
Exit Ticket 3: Comprehension of academic regulations, identifying academic strategies to support academic success. $N = 9$	Name two resources that you will use this semester to support your academic success. These resources do not have to be academic.	9 (100%) students named 3 resources Top three mentioned resources: 1. Library (16.66%) 2. Math Lab (16.66%) 3. Academic Advising (11.1%)
Exit Ticket 6: Identifying social resources, reflecting on inter-cultural encounters, and improving inter-cultural communication skills. $N = 6$	Think about your social wellness at UD thus far. In the space below, please mention up to three resources that you have found helpful to support your social wellness.	5 (83.33%) students mentioned 3 resources 1 (16.66%) student mentioned 1 resource Top three mentioned resources: 1. Student clubs (25%) 2. Classes (25%) 3. Student Centers (12.5%)
Reflection Paper 3: End of course. $N = 6$	How has this FYS class helped you with accomplishing your goals this semester, if any? Please be specific.	All students (100%) reported how they learned about various resources that helped them in achieving goals they set out at the beginning of the course.

Question 3: Did the FYS course facilitate students' inter-cultural communication skills?

In terms of assessing the extent to which students gained inter-cultural communication skills through the class, students' responses to two prompts of Exit Ticket 6 were analyzed. The first prompt in this exit ticket was: "This week, we have been talking about cross-cultural communication. In three to four sentences, please describe any recent cross-cultural experience you have encountered. What was the encounter? How did you react? How did it make you feel? What cross-cultural communication skill did you use, if any?" Six students responded to this prompt. Four (67%) of the students' responses reflect how they were able to use inter-cultural communication skills in their cross-cultural encounter. For example, Student G's described how he used active listening skills to better understand the cross-cultural encounter:

A cross cultural experience I have encountered is with my roommate and seeing his habits. Sometimes I get discomforted because I feel he is too focused on the United States and doesn't know much about the world. He also loves American football too much and I sometimes feel it is unnecessary, but I try to understand how he grew up differently and I usually try to be open minded. Sometimes I ask him about football or things about his life to be more understanding. A skill I used was active listening and trying to understand his culture more. (Exit Ticket 6)

Student E provided another example of how he exercised an open mind to react in cross-cultural encounters and in his adjustment to his new environment:

Being an international student you always come across other cultures. At start it was a little difficult to adjust to that but over time it became better. I learned

to keep an open mind whenever I talk to someone else and understand that are human just like me but have had a different upbringing. (Exit Ticket 6)

I also analyzed a second prompt in Exit Ticket 6, namely: “Think about your social wellness dimension and your new awareness of cross-culture communication. Which aspect of cross-culture communication would you consider MOST USEFUL for you?” Six students responded to this exit ticket. Two students (33.33%) mentioned that they found the skill of understanding verbal communication in their cross-cultural situations most useful. Student E mentioned that it “helps me understand the way the people [in the US] speak, so it helps me speak in a way that would make them understand me better, but without completely changing the way I communicate.” Two other students (33.33%) mentioned that time culture was an aspect that they found most useful. For example, Student A stated that “time culture is really important since it can be highly disrespectful to get somewhere late and sometimes knowing how time works in a country is really useful to get things done appropriately.” One student (Student I) mentioned that she found being “curious with respect” as an aspect that was useful for her in navigating cross-cultural encounters. Finally, one student (Student C) stated that understanding personal space as an aspect that was useful for them. In summary, data from Exit Ticket 6 revealed that respondents to the exit ticket were able to describe at least one intercultural skill as well as provided specific details about how students found those skills to be useful in their daily social interactions.

Discussion of Findings

The purposes of this artifact were to provide a description of the course instruction of the First Year Seminar course and evaluate the course as an

improvement strategy for new international students' transition. The analysis for the evaluation was conducted through answering three questions.

Question 1: Did the FYS course contribute towards strengthening students' academic preparation, expectations, and skills?

There were at least three class sessions that were dedicated to introducing students to academic policies, procedures, and resources. These class sessions included an introduction to understanding how to calculate their GPA, registration deadlines, enrollment requirements, and the academic honesty policy. Students were asked to discuss different academic honesty cases and how they would use different strategies to avoid violating the academic honesty policy.

Then, students were asked to respond to a number of exit ticket prompts to assess their understanding of the class instruction. In exit ticket prompts that assessed their comprehension of academic regulations (Exit Tickets 2 and 3), there were some prompts that most students were able to answer correctly and some prompts where about only half of the students were able to answer correctly. Specifically, when it came to prompts that asked students to answer questions about policies on the GPA, the data suggest that students struggled with these questions. For example, in the prompt assessing their understanding about the minimum GPA to be on the Dean's List, only half of the students (44.44%) were able to answer correctly. A little over half of all students (66.66%) were able to correctly understand the grading policy of a pass/fail course.

In terms of their understanding of academic honesty policies (Exit Ticket 4), the data suggested that students understood this topic and the policies quite well. Almost all students (87.5%) answered all four prompts correctly.

Additionally, in Reflection Paper 3, six students identified the usefulness of the FYS class in supporting their goals during the semester. However, only one student specifically credited the FYS in supporting their academic success.

Based primarily on the data from prompts of the exit tickets, it can be concluded that the FYS course was able to contribute towards strengthening students' academic preparation, expectations, and skills. However, the data also suggest the FYS could improve course instruction related to grading policies. Relative to other academic policy-related prompts, there were more students who answered prompts around the GPA and grading policies incorrectly. These results suggest that there might have been some concepts or vocabulary, such as the Dean's List, that students were not immediately familiar with. Further, the cultural aspect of grading policies and understanding GPA might also be a factor in explaining the results. Therefore, it may be important to unpack some of the cultural assumptions of academic policies and procedures, so that the information can be better contextualized and understood.

These results might have been strengthened had there been a pre-test prior to the start of the course and a post-test after the course to assess the impact of the course instruction on students' academic understanding and preparation.

Question 2: Did the FYS course contribute towards increasing students' knowledge and familiarity with campus support services?

The FYS course was designed with a focus on introducing various campus resources and encouraging students to utilize them. Several class sessions were dedicated to introducing and discussing campus support services, such as class sessions on knowing campus resources (in Week 1), academic resources (in Week 2 and 3), safety and wellness resources (in Weeks 3 and 4), strategies on managing

stress (in Week 5), and social media and career readiness (in Week 7). Additionally, one of the course assignments, the Passport Video Activity, required students to create a video of different offices and resources on campus. This assignment allowed students to learn more about and visit these support services, such as the Wellness Center, the Library, the UD Shuttle, and reflection rooms.

Findings from the select prompts of the exit tickets indicated that students had become aware of the various campus support services by their ability to identify the resources and their uses. For example, in Exit Ticket 1, all nine students (100%) were able to identify at least three resources on campus. The three most frequently cited resources were the gym (18.5%), the Career Center (11.1%), and the Perkins Student Center (11.1%).

In terms of academic resources, most students (88.88%) were able to identify three resources, while one student (11.11%) identified only two resources. The three most frequently cited academic resources were academic advising (26.9%), center for Counseling (16.9%), and the Writing Center (23.06%).

In terms of social resources, most students (83.33%) were able cite three social resources that they found helpful in supporting their social wellness, whereas one student (16.66%) only mentioned one resource. The three most frequently cited social resources were student clubs (25%), classes (25%), and student centers (12.5%).

Additionally, in Reflection Paper 3, six students (100%) credited the FYS class in supporting their goals during the semester, specifically in providing them with information about the different campus support services. For example, Student H stated the following: “This class has helped me navigate my life as an international student in UD. I’ve left the classroom with many resources and responsibilities.

Learning about the resources available to UD students has been the most helpful” (p. 2).

Based on the data from prompts of the exit tickets and Reflection Paper 3, it can be concluded that the FYS course was able to contribute towards increasing students’ knowledge and familiarity with campus support services. These results might have been strengthened had there been a pre-test prior to the start of the course and a post-test after the course to assess the impact of the course instruction on students’ awareness and understanding of the different campus support services.

Question 3: Did the FYS course facilitate students’ inter-cultural communication skills?

During the FYS class, one class session was dedicated to introducing inter-cultural communication skills to the students. In this class, students learned about some of the different cultural aspects that influenced communications in different cultures, such as time culture, non-verbal and verbal communication, personal space, and eye contact. The students also discussed various scenarios and instances where inter-cultural communication skills were useful. Their understanding of these skills and the extent to which they were useful in their daily activities were assessed in Exit Ticket 6.

Additionally, through the Passport Video Activity and various other class discussions with the non-international students in the class provided the students with opportunities to exercise inter-cultural communication skills.

Overall, although the FYS course introduced inter-cultural communication skills to students, and Exit Ticket 6 suggested that they were able to practice these skills, the data were not rich enough to conclude if the FYS facilitated students’ inter-

cultural communication skills. There were no assessment tools designed to measure the quality of their inter-cultural communication skills or the extent to which the FYS course helped them better navigate these inter-cultural situations.

Limitations

The current study measured students' learning and understanding after the topic was taught. While the data suggest that the FYS course contributed towards strengthening students' academic preparation and skills, it is difficult to conclude whether the FYS course *strengthened* their academic preparation, expectations, and skills from the beginning of the class to the end of the class, because there was no baseline measure of students' academic preparation and skills.

Similarly, it is also difficult to conclude whether the FYS effectively facilitated students' inter-cultural communication skills. As the instructor, I observed students' demonstration of inter-cultural communication skills during class discussions. For example, when discussing different aspects of American culture, the international students and non-international students shared their individual perspectives of them. After having learned some of the inter-cultural communication guidance, students were able to have a constructive and respectful conversation about it. Neither the exit tickets nor the reflection papers were able to capture this class interaction.

Future assessments should be designed to specifically include a method of measuring this objective, such as ethnographic research methods that include recording interactions between students as well as interviewing students on their experiences in inter-cultural encounters. For example, international students could be paired with domestic students and asked to engage in weekly conversation meet ups with their partner. A sample of the conversations could be analyzed to explore the

inter-cultural dynamics and discourse that occurred between the students.

Additionally, students could be interviewed to discover what they learned throughout this structured activity.

Furthermore, not all of the exit ticket prompts were sufficient to measure all areas of academic preparation. Alternative prompts could have included asking students to identify some of the different grading options or assessing their understanding of calculating quality points of a course.

Finally, the evaluation was done only at the end of the course, which ended after eight weeks. Students could have continued to use the skills and knowledge that they gained through the FYS course throughout the end of the semester. So, an end of semester evaluation might have been beneficial to evaluate whether those skills and knowledge were helpful to the students as the semester progressed and in preparing to face final exams and papers.

Recommendations

In terms of future course design, based on evaluation of the data, I propose three recommendations.

First, there was only one class session to introduce inter-cultural communication skills. If facilitating inter-cultural skills is one of the objectives of an FYS course, then more class sessions should be dedicated to discussing and practicing inter-cultural communication skills. For example, the FYS section for international students could have one or two class sessions together with another FYS section that enroll domestic students. In these class sessions, students could be prompted to discuss inter-cultural topics or getting to know American culture.

Second, to improve students' academic understanding of grading practices and policies, future FYS courses could consider presenting this topic in a more hands-on, interactive way. For example, students could be presented with scenarios of different course loads and potential grades and be asked to project how those course loads and grades would influence the GPA. If the GPA were to pose a problem for the student, such as being put on probation, the students would be asked to determine the next course of action. In this way, students could practice what they are hearing in the lecture and better understand how to connect the policies with resources available to them.

Additionally, it might also be important to review the different concepts and terms related to the American education system and academic policies that might not be familiar to international students. Class sessions that discuss academic policies might also need to include further explanation of these concepts, so that it is easier to relate to and understand. For example, a lecture that discusses the Dean's List, Breath requirements, and academic honesty policies could first unpack the underlying cultural assumptions as part of the explanation of the policy itself. This recommendation can also be applied to other topics in the course, including the safety and wellness sessions.

Third, since the American education system and learning environments might be new to many international students, it may be wise to incorporate topics that revolve around understanding the American classroom culture. These topics could include time management, note-taking, class participation and group work, and lab report writing. The FYS course could also become a place for students to debrief on

their experiences in other courses and a place to share tips and ideas on navigating the American classroom.

REFERENCES

- Andrade, M. S. (2006). A first-year seminar for international students. *Journal of the First-Year Experience & Students in Transition*, 18(1), 85–103.
- Brunsting, N. C., Smith, A. C., & Zachry, C. (2018). An academic and cultural transition course for international students: Efficacy and socio-emotional outcomes. *Journal of International Students*, 8(4), 1497–1521. <https://doi.org/10.5281/zenodo.1467805>
- Cox, M. F., Diefes-Dux, H., & Lee, J. (2006). Development and assessment of an undergraduate curriculum for first-year international engineering students. *Proceedings - Frontiers in Education Conference, FIE*, 15–18. <https://doi.org/10.1109/FIE.2006.322558>
- Dorsett, J. (2017). Exploring international student adaptation through a first-year experience course at Iowa State University. (Publication No. 15296) In *Graduate Theses and Dissertations*. <https://lib.dr.iastate.edu/etd/15296>
- Fletcher-Anthony, W., & Efthymiou, L. (2017). Assessment of a college orientation course for international students. *Journal of College Orientation, Transition, and Retention*, 24(1), 84–89. <https://doi.org/https://doi.org/10.24926/jcotr.v24i1.2911>
- Kovtun, O. (2011). International student adaptation to a U.S. college: A mixed methods exploration of the impact of a specialized first-year course at a large Midwestern institution. *Journal of Student Affairs Research and Practice*, 48(3), 349–366. <https://doi.org/10.2202/1949-6605.6336>
- Senyshyn, R. M. (2019). A first-year seminar course that supports the transition of international students to higher education and fosters the development of intercultural communication competence. *Journal of Intercultural Communication Research*, 48(2), 150–170. <https://doi.org/10.1080/17475759.2019.1575892>
- Snyder, V., & Chesire, D. K. (2002). A training model for extended orientation and cross cultural training for international students. *The Journal of College Orientation and Transition*, 10(1), 73–75.
- Yan, Z., & Sendall, P. (2016). First year experience: How we can better assist first-year international students in higher education. *Journal of International Students*, 6(1), 35–51.

Appendix F1
Course Syllabus

University of Delaware
UNIV 101-119D: International Student First Year Seminar
Fall 2022
Tuesday, 2:00 – 2:50 pm
Thursday, 2:00 – 2:50 pm
Location Gore Hall Room 306
Note that this is an eight-week course that meets twice a week

Instructor: Vina Titaley

Assistant Director for Special Programs, Center for Global Programs and Services

Email: titaley@udel.edu

Office location: Elliott Hall, 26 E Main Street, Newark, DE 19716

Office hours: by appointment (email or call 302-831-2115)

Peer Mentor: Yaswanth Mikkili

Junior University Studies with a minor in International Business

Email: yashmikk@udel.edu

Course Expectations

The UNIV 101 seminar is designed to assist you in adjusting to college life and to provide you with a unique learning experience. This seminar is led by faculty who will work closely with a peer mentor and others to help ensure that the first semester is successful and provide you with a strong foundation for your future success at UD.

It is an opportunity for you to form a meaningful relationship with a small group of your peers while exploring topics of your mutual interest. Peer mentors and others will work to provide important information related to specific transition and coping skills, which will help you address many of the concerns you may have when leaving home and entering college.

This seminar will also give you the opportunity to further develop skills to think critically, it will emphasize class discussion allowing for reflection and the sharing of opinions while utilizing the common reader, class assignments and university wide programming. It will also highlight our commitment at UD to being a community that recognizes and appreciates diversity and difference.

Course Outcomes

The faculty senate has recognized the FYS as an important experience for students with clearly articulated content aligned with best practices in helping students through the transition from

high school to college. Since it serves as your introduction to the University of Delaware, the FYS course should further the aims of General Education at UD and/or provide a foundation for student success. The FYS will introduce many of these topics to students, but it is understood that subsequent additional learning opportunities will occur through other general education requirements, courses students must take as a requirement of their college and/or major, and learning experiences outside the classroom.

- ***Ethics/Academic Honesty***

University of Delaware graduates should be able to explain the reasons behind the positions they hold on key ethical questions and to articulate the values that underlie their decisions.

- ***Responsible use of Internet/Social Media***

Understanding how to responsibly use social media, other technologies, and develop a positive digital identity is crucial for today's successful student.

- ***Academic Policies and Procedures***

Early in their academic careers at UD, students should be aware of the important policies and practices that will guide their progress and be familiar with those resources that will support their academic success.

- ***Diversity***

The development of skills to work independently and collaboratively across a variety of cultural contexts and a spectrum of differences ensures that students will understand the limitations of a single perspective and the value of diverse perspectives and cultures in creative problem solving of major challenges and discussion in debates, and establishment of an engaged society.

- ***Safety and Wellness:***

Three sessions of the FYS course will be designated to student wellness and safety with a defined significant emphasis on alcohol and other substance education, as well as sexual misconduct/violence prevention education, accomplished through the teaching of bystander intervention theory and practice, which must be taught by qualified, trained personnel or prevention staff.

Accommodations

This course is open to all students who meet the academic requirements for participation. Any student who has a documented need for accommodation should contact the Office of Disability Support Services (DSS) and the instructor to discuss the specific situation as soon as possible. The Office of Disability Support Services can be reached at 302-831-4643, or dssoffice@udel.edu. DSS staff will coordinate accommodations for students.

The Safety of Our Learning Environment

Student learning can only occur when students and their instructors feel safe, respected, and supported by each other. To ensure that our learning environment is as safe as possible, and in keeping with CDC guidelines to slow the transmission of COVID-19 and the University of

Delaware's Return to Campus Guidelines (Health and Safety Section), we will adhere to the practice of wearing face masks in all classrooms during the first two weeks of the fall semester (August 30 - September 9, 2022).

If you test positive for COVID-19, you must isolate yourself for five days, then wear a mask for five days. On-campus students are encouraged to isolate at their home residence, if possible.

If you are exposed to someone with COVID-19, you must wear a mask for 10 days, get tested five days after exposure, and monitor for symptoms for 10 days.

As necessary, the University may announce modifications to these practices. In that event, these guidelines will be updated to reflect those modifications.

Required Readings:

- **Common Reader:** The shared Common Reader is a unique opportunity to engage in a meaningful conversation with your fellow students and to begin to share in the intellectual life of the entire UD community. All students are required to read this year's book, *While the Earth Sleeps We Travel*, by Ahmed Badr and to be prepared to participate during class in dialogue and activities focused on individual and collective cultural learning.
- **Cross-Cultural Narratives: Stories and Experiences of International Students:** This free e-book contains stories of your fellow current and former international students at the University of Delaware. We will review selected essays from this free e-book. [Download your free copy here.](#)

Resources

- We will use Canvas as the online platform for this course. Visit the [University's Tech at UD website](#) for technology-related requirements and resources. See [this link](#) for orientation materials to UD's Canvas system with contact information if you have questions and/or need assistance.
- Students are encouraged to explore and take advantage of resources early on provided by the Office of Academic Enrichment. Visit www.ae.udel.edu/other-resources/.

Class Schedule: Due dates may change and additional assignments may be added at instructor's discretion.

Week	Tuesday	Content	Thursday	Content
1	30-Aug	Introductions & icebreakers Review syllabus Review assignments Review Readings Assignment of class buddies	2-Sep	Activity: Knowing your resources on campus Group Activity Discussion with peers
		Assignment: Reflection 1		Assignment: Exit ticket
2	6-Sep	Academic policies & procedures	8-Sep	Academic policies & procedures
		Assignment: Exit ticket		Assignment: Exit ticket
3	13-Sep	Academic honesty Discussion with peers about academic honesty	15-Sep	Safety and Wellness pt1: Alcohol awareness and harm reduction
		Assignment: Exit ticket		Assignment: Exit ticket
4	20-Sep	Safety & Wellness pt2: Sexual Misconduct	22-Sep	Safety and Wellness pt3: Bystander Intervention
		Assignment: Exit ticket		Assignment: Exit ticket
5	27-Sep	Strategies on managing stress and workload Discussion with peers	29-Sep	Discussion on Common Reader and Cross Cultural Narratives Discussion with peers
		Assignment: Exit ticket		Assignment: Reflection 2
6	4-Oct	Navigating American culture Discussion with peers	6-Oct	Diversity at UD

		Assignment: Exit ticket		Assignment: Exit ticket
7	11-Oct	Social Media	13-Oct	Final project preparation
		Assignment: Exit ticket		Assignment: Exit ticket
8	18-Oct	Student Panel	20-Oct	Final project presentation Group discussion about the final project
		Assignment: Reflection 3		

Course Requirements:

This is a pass/fail one-credit course; there will be no exams, but there are specific requirements for receiving a passing grade.

Attendance

Students should attend every class unless they have an excused absence, as defined by University policies. You must attend regularly if you expect to pass the course. If you have a problem and need special consideration, please contact one of us as soon as possible. If you have an emergency, let one of us know as soon as you reasonably can. More than two absences that have not been officially excused will result in a failing grade.

Participation

The First Year Seminar is a discussion-based course that aims to improve students' participatory skills. Students are expected to raise questions, make comments, and answer the questions that are asked by the instructor and/or their peers. The Peer Mentor will monitor the students' participation in class discussions. Students who choose not to participate voluntarily, will be called upon to do so.

Assignments

- 1. Exit Tickets:** At the end of each class, you will be required to submit a short exit ticket, which is a short assessment to gauge your comprehension of the class and feedback on certain topics.
- 2. Reflection Papers:** At three points of the course and one time at the end of the semester, you will write a short reflection paper, between one to two pages, 12-point font. The topics of the reflection papers will be described on your Canvas page.
- 3. Passport Activity:** All students are expected to engage in various extracurricular activities and complete your University of Delaware “passport.” Throughout the duration of the course (and longer if you wish), you will record in this passport all of your participation in campus activities. You are required to participate in the activities as listed below, but you certainly can participate in more. The purpose of this passport is to introduce you to the richness of life at the University and expose you to events that you might not otherwise have thought about. Doing so will help integrate you into campus life and, who knows, may even introduce you to something new you would not otherwise have experienced.

In your groups, you are tasked with creating a virtual campus tour for future incoming international students. The final product of the class will be a collection of all of the groups’ short videos and will be shown at the international student orientation in the next semester.

Below are the locations or activities that you will be assigned (each group will receive between four and five locations or activities)

- Your residence hall commons
- A UD athletics game
- A ride on the UD shuttle bus and the bus stops
- Attendance at Coffee Hour, including short conversation with attendee
- A tour of the Wellness Center (Warner Hall)
- Perkins Hen Zone
- A tour of the Green
- Morris Library
- UDairy Ice Cream
- Roselle Center for the Arts
- Mineralogical Museum at Penny Hall
- UD Bookstore
- Meditation spaces
- Study spaces: Daugherty Hall
- A meal at a Dining Hall
- The Old College steps and gallery
- Mentor Circle
- STAR campus and the Living Wall
- Harrington Turf activities
- A meeting at a Registered Student Organization

- A walk down Main Street
- A walk through White Clay Creek
- UD Botanical Garden
- UD Stadium
- UD Fountain
- ISE Lab
- MakerGym
- UD Safety features: LiveSave App, Blue Lights
- Ordering food from the food court
- Center for Global Programs and Services
- One of your favorite spots on campus or events not on the list above

The task: You will be assigned between four and five locations or activities on campus. For each location, you must work with your group to record the location, provide a brief description of the location or event (where it is on campus, what's going on, what students typically do there, etc), and a quick commentary of the location or event. You do not need to shoot all the videos in one continuous shoot, but may have several short scenes. You will then need to stitch them together to create one final video as your final submission.

Content of video: As you think about shooting your video, think about your own experience as a new international student. What would you like to have known about the UD campus and the surrounding area before arriving? What would be useful for new international students to know about the UD campus locations and events? Be creative with your video. Perhaps you can talk about your own experience with these locations or activities.

Quality of video: Please use professional language and grammar in your presentation. You will need to produce a relatively high-quality video, so please be clear in your speech and make sure that the surrounding area is not noisy (e.g., avoid lawn mowers, reshoot if a fire truck is passing by, etc). Since there will be one person who records the video for each location, take turns recording so that everyone in the group gets some “face time” in front of the camera.

Some considerations: Be mindful of your surroundings when shooting. Some bystanders might not be comfortable being part of your video, especially if you are in a public venue. If needed, please ask for permission and explain what you are shooting the video for. Safety first, so always work with your group mates to complete the project and avoid unsafe situations.

Getting support: You are encouraged to consult with your instructor and/or peer mentor with any questions or concerns as you plan out your project. Some places might need special permission to shoot videos. If you encounter any issues in getting this permission, contact your instructor as soon as possible.

Final product: In addition to the recorded videos, you will also write a two double-spaced reflection paper on your experience of creating this virtual campus tour. The videos and reflection paper are due on the last day of class on 10/20.

Student Mental Health & Wellbeing

In addition to impacting your overall wellbeing, diminished mental health can interfere with optimal academic performance. If this course is causing or contributing significant mental or emotional stress, then please reach out to me directly. However, problems with other parts of your life can also contribute to decreased academic performance. UD's Center for Counseling & Student Development (CCSD) provides cost-free and confidential mental health services to help you manage personal challenges that threaten your emotional or academic well-being. Remember, getting help is a smart and courageous thing to do -- for yourself and for those who care about you.

- Contact me
 - If you are struggling with this class, please check-in during office hours or contact me by email at titaley@udel.edu or your peer mentor, Yaswanth, at yashmikk@udel.edu
- Check-in with your academic advisor
 - If you are struggling in multiple classes, unsure whether you are making the most of your time at UD, or unsure what academic resources are available at UD.
- UD's Center for Counseling & Student Development and UD Helpline
 - CCSD is open and available remotely, and 24/7 mental health support remains available on the UD Helpline at 302-831-1001 for any student in need of someone to talk to. Visit [CCSD's website](#) for additional information and resources.
- UD's Crisis Text Line
 - Text "UDTEXT" or "STEVE" at 741741 connect with a professional who specializes in supporting students of color via a confidential text message.
- Division of Student Life
 - Explore the Student Life's [Wellbeing webpage](#) for a comprehensive listing of well-being resources, activities, and services available to all students.

Appendix G

ARTIFACT 7 – EVALUATION OF PRE-ARRIVAL ORIENTATION WEBINARS

Introduction

The improvement goal of the present ELP is to increase the quantity and quality of orientation programming to better meet the transition needs of new international students at UD. To achieve this goal, one improvement strategy is to enhance the pre-arrival orientation programming, which is called the Before You Arrive Pre-Arrival Webinar Series.

The Before You Arrive Pre-Arrival Webinar Series (henceforth referred to as the Pre-Arrival Webinar Series) is a series of live webinars and pre-recorded videos that covered a variety of information topics, and these took place one to two months before international students arrived at UD. It was created to address the information gaps identified in a needs assessment (See Artifact 2) and in previous satisfaction surveys of international student orientation (See Artifact 3). The Pre-Arrival Webinar Series consisted of seven live webinars and three pre-recorded videos, which were broadcasted and posted to the Center for Global Programs and Services (CGPS) website throughout June and July 2022. Table G1 describes the schedule of the Pre-Arrival Webinar Series, which includes information about the topic of each webinar, the purpose and description of the topic, the medium that was used to convey the information, and any supplemental resources that were posted on the website. These supplemental resources included documents that outlined website links and contact

information of other resources shared during the webinar as well as website links to other resources. Live webinars that were recorded were also posted on the Before You Arrive webpage within two days of the live webinar.

Table G41 Detailed Description of Each Session of the Before You Arrive Webinar Series

No.	Date	Title	Purpose and content	Medium	Supplemental Resources Posted on the Website
1	Thursday, June 2, 2022	Welcome to UD and CGPS	To introduce UD campus (through virtual tour); introduction to what a Blue Hen is; introduce CGPS; introduce immigration documents; and an overview of the webinar series.	Live webinar	Recording of the live webinar.
2	Thursday, June 9, 2022	Understanding Healthcare in the U.S.	To provide an overview of services provided by Student Health Services; introduction to local healthcare providers; and introduction to how health insurance interacts with healthcare providers.	Pre-recorded video	Link to required immunization forms; link to UD's COVID-19 dashboard; link to CGPS webpage on healthcare and health insurance.
3	Thursday, June 16, 2022	Understanding Health Insurance in the U.S.	To introduce health insurance terms; case samples of how health insurance works; summary of benefits of the UD health insurance plan; and how to contact health insurance provider.	Pre-recorded video	Link to the UD health insurance plan; glossary of health insurance terms; link to CGPS webpage on healthcare and health insurance.
4	Thursday, June 23, 2022	Housing (for Graduate students)	To introduce tools and resources for searching off-campus housing; considerations to make when conducting search; case samples of how to assess housing options; understanding the lease; and suggested next steps.	Live webinar	Recording of the live webinar, PDF of resources and links mentioned in the webinar; link to CGPS webpage on housing.
5	Thursday, June 30, 2022	Social Security Number	To introduce the concept of Social Security Number; an overview of when an SSN might be needed; how to obtain an SSN; how it's related to a driver's license; and future SSN webinar in the fall semester.	Live webinar	Recording of the live webinar, link to a CGPS webpage on the Social Security Number.

Table G1 Continued

410	6	Thursday, July 7, 2022	Academics in the U.S.: Understanding professors' expectations (graduate students)	To introduce the relationship with faculty, advisors, and mentors for graduate students. Graduate student iBuddy Council members talk about their experiences.	Live webinar	Recording of the live webinar.
			Academics in the U.S.: Understanding the U.S. classroom	To introduce some expectations for the American classroom, including class schedules, etiquette in addressing professors, and understanding the syllabus; introduce academic honesty policies; and introduce services of Office of Academic Enrichment.	Live webinar	Recording of the live webinar.
	7	Thursday, July 14, 2022	Managing Your Finances	To provide information on how to open a bank account; how to create a budget; how to manage finances; and how to protect accounts from fraud.	Pre-recorded videos, link to PNC Bank website and PDFs	None.
	8	Thursday, July 21, 2022	Living in the U.S.	To introduce transportation options and how to access them; local grocery and general shopping options; tips on communication options and electronics (universal adaptor); and engagement opportunities. Students shared their experiences during the Q&A session.	Live webinar	Recording of the live webinar, PDF of resources and links mentioned in the webinar; link to CGPS webpage on Living in the U.S.
	9	Thursday, July 28, 2022	Pre-arrival Information Session	To explain immigration documents to prepare and carry for travel to the U.S.; explain COVID-19 regulations for travel to the U.S.; prepare a contingency plan in case of delay; provide packing tips and clothing needed for the four seasons in the U.S.; and prepare for international student orientation.	Live webinar	Recording of the live webinar, PDF of resources and links mentioned in the webinar.

This artifact describes the evaluation of the Before You Arrival Pre-Arrival Webinar Series and the extent to which the topics that were presented and methods of conveying information were helpful. The results of the evaluation will determine whether this improvement strategy, the Pre-Arrival Webinar Series, was effective in improving the problem stated in the ELP proposal.

This document includes four main sections. The first section describes the key questions that the evaluation answered. The second section describes the research design and methodology of the evaluation. In this section, information about the participants, data collection procedures, and analysis plan are described. The third section describes the results of the analysis. Finally, the last section describes how the findings relate to the ELP and their implications. The survey instrument is included in Appendix 1.

Key Questions

This artifact seeks to answer the following questions:

1. To what extent did new international students find the Pre-Arrival Webinar Series prepared them for their arrival to the U.S.?
2. To what extent did new international students find the Pre-Arrival Webinar Series helpful for their transition and adjustment to the U.S. and UD?
3. Which information channel did new international students prefer to obtain information?
4. Were new international students satisfied with the Pre-Arrival Webinar Series?

Research Design and Methodology

Procedure

A survey was used to answer the key questions of this artifact in order to reach a large number of respondents. The self-reported survey consisted of fourteen items and was designed and administered through the survey tool, Qualtrics. Institutional Research Board (IRB) authorization was granted on November 28, 2022 (See Appendix 2). A recruitment email (see Appendix 3), which included the purpose of the study and a link to the survey, was sent to all 549 new international students who had checked in through the Terra Dotta Systems on November 29, 2022. One week later, a reminder email was sent to the students. Another reminder email was sent again a week after the first reminder email. A final email was sent on the last day that the survey was open on December 16, 2022.

The email addresses of the sample were obtained through the immigration database that the Center for Global Programs and Services (CGPS) uses, which is called Terra Dotta Systems. New international students who had arrived in the U.S. were required to complete a check-in process upon their arrival. Using the Terra Dotta Systems, a list of email addresses was generated.

To increase the response rate, I included an incentive for respondents to be eligible to win one of ten \$10 gift cards from the UD bookstore. A separate linked survey was created for respondents who opted to be included in the drawing for the gift card, so that they could include their names and email addresses. The separate survey link did not correspond to their responses on the main survey, thereby safeguarding confidentiality of the respondents' identity. Within a few days of the survey closing, I randomly chose ten names from the secondary survey and notified the respondents who were chosen.

Measures

Demographic

Information about the respondents' level of education (undergraduate, master's, or doctoral) was obtained. In addition, the survey asked for the respondents' country of origin.

Participation

One survey item measured the attendance of each of the webinars: "Which of the following webinars did you attend and/or which pre-recorded videos did you watch? Select all that apply."

Effectiveness for Preparation and Transition

Respondents indicated the extent to which they felt that the Pre-Arrival Webinar Series prepared them for travel to the U.S. and make a smooth transition in the U.S. There were three survey questions, namely:

- a) To what extent has attending the webinars and/or watching the videos above answered questions or concerns you had about those topics? Response choices included: (a) did not answer any of my questions/concerns; (b) answered some of my questions/concerns; answered all of my questions/concerns; and (c) did not attend or watch.
- b) Thinking about your first few weeks in the U.S., to what extent has attending the webinars or watching the videos helped you in adjusting to life in the U.S. and to UD? Response choices included: (a) unhelpful; (b) somewhat unhelpful; (c) somewhat helpful; (d) very helpful; and (e) did not attend or watch.
- c) To what extent do you agree or disagree with the following statements? I have used the information I learned from the Before You Arrive Pre-Arrival Webinar Series in my daily life in the U.S., and The information in the Before You Arrive Pre-Arrival Webinar Series helped me prepare what to expect about life in the U.S. Response choices included: (a) strongly disagree; (b) somewhat disagree; (c) somewhat agree; (d) strongly agree; and (e) no opinion.

Quality of Webinars

Three survey questions were asked to evaluate the quality of respondents' perceptions of the webinars:

- a) The way the information was presented in the Before You Arrive Webinar series was clear. Response choices included: (a) strongly disagree; (b) somewhat disagree; (c) somewhat agree; (d) strongly agree; and (e) no opinion.
- b) The presenters of the webinars and videos were clear in their explanation of the topics. Response choices included: (a) strongly disagree; (b) somewhat disagree; (c) somewhat agree; (d) strongly agree; and (e) no opinion.
- c) The length of each webinar or video was appropriate. Response choices included: (a) strongly disagree; (b) somewhat disagree; (c) somewhat agree; (d) strongly agree; and (e) no opinion.

Information Channels

Respondents indicated their preferred medium, also known as information channels, of accessing the webinar through three survey items. After they indicated which webinar they attended, they were then asked whether they attended a live webinar, watched a recording of the webinar, or did both. Then, respondents were asked about why they attended a live webinar or watched a recording. Finally, respondents were also asked to rank their preferred media of receiving information by ranking the options from one through eight. The options were:

- a) Live Zoom webinars
- b) Reading information on a website
- c) Short videos (5-10 minutes)
- d) Long videos (15-30 minutes)
- e) Reading a document
- f) Social media posts (such as Facebook, Instagram, Twitter)
- g) Talking to current international students
- h) Other, type in the text box

Participants

Of the 219 respondents, only 168 respondents provided an answer to their country of origin, resulting in 38 countries of origin. Of these 168 respondents, 26.7% were from India, 15.4% were from China, 7.1% from Nigeria, and 5.9% were from Bangladesh. In terms of level of education, 20.5% ($n = 45$) respondents were undergraduate students, 32.8% ($n = 72$) respondents were Masters students, and 46.5% ($n = 102$) respondents were doctoral students.

Analysis

Excel was used to analyze quantitative and qualitative data. The quantitative data came from the questions about their participation of different webinar topics, the extent that each webinar helped respondents prepare for arrival and transition in the U.S., level of satisfaction with the webinar series, and preferences of information channels. Frequency tables and graphs were produced during analysis. The only qualitative data involved information about reasons for attending either a live webinar or recorded video. Excel was used to code the qualitative data.

The survey was sent to 549 new international students who had completed the government check-in application for Fall 2022 semester. Of the 549 students, a total of 252 students accessed the survey. Respondents who only answered the first survey question about the level of education were dropped from analysis. As a result, 219 respondents completed most, if not the entire survey, resulting in a 39.8% response rate. That said, there were many respondents who answered only the first few survey items, including questions asking about which webinars the respondents participated in as well as items asking about the information channel they used. The latter set of items asked respondents to evaluate their perception of the extent to which the

webinars were useful or helpful, such as “To what extent has attending the webinars and/or watching the videos above answered questions or concerns you had about those topics?” If the respondent did not answer the attendance question (i.e., “Which of the following webinars did you attend and/or which pre-recorded videos did you watch? Select all that apply.”) but answered the evaluative questions, then the responses to the evaluative questions were dropped from analysis. Responses to an evaluative question of a webinar or video were not analyzed because the respondent did not report having accessed the webinar or video.

Results

Participation Level of Webinars

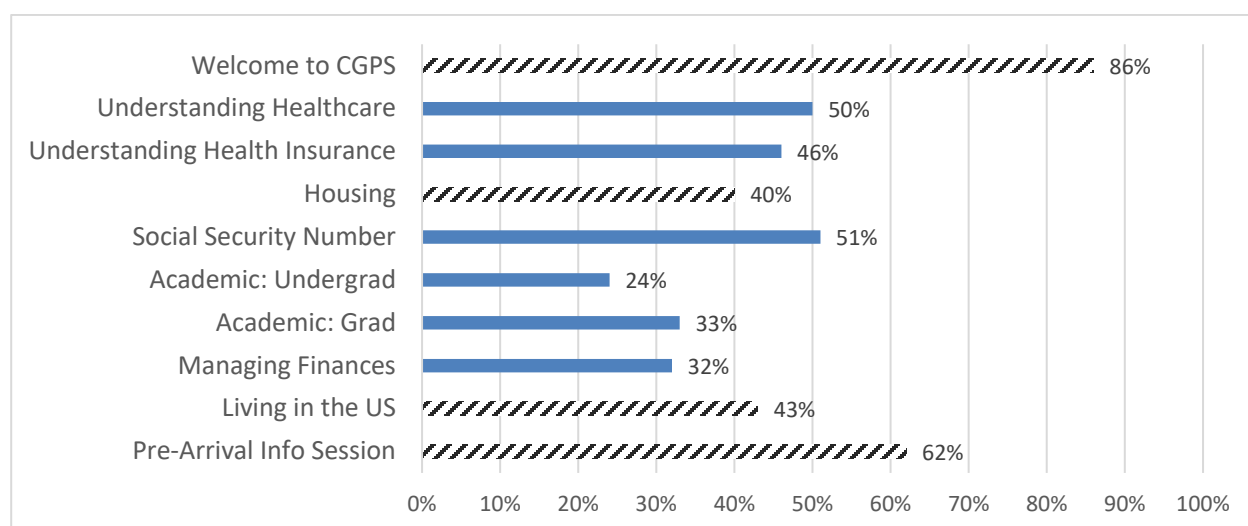
Some webinars and videos contained topics that were aimed at preparing international students for their arrival in the U.S., including information about things they would need upon arrival. Four webinars fell into this category, namely (a) Welcome to CGPS; (b) Housing (for graduate students); (c) Living in the U.S.; and (c) Pre-Arrival Information Session. The other webinars and videos contained topics that were aimed at preparing international students for their transition and adjustment after arriving in the U.S. The time period for which these webinars and videos are relevant is within the first few weeks and months after arriving in the U.S. These transition webinars and videos included: (a) Understanding Healthcare in the U.S.; (b) Understanding Health Insurance in the U.S.; (c) Social Security Number; (d) Academic Preparedness (one webinar each for undergraduate and graduate students); and (e) Managing Finances.

Before evaluating the effectiveness of the webinar and videos in preparing international students for their arrival and transition in the U.S., it is first helpful to

describe the level of participation in each of the webinars. Participation includes attending a live Zoom webinar and/or watching the webinar recording or the pre-recorded videos.

The results to the survey question, “Which of the following webinars did you attend and/or which pre-recorded videos did you watch? Select all that apply,” indicated the participation level of each webinar. Figure 1 illustrates the participation levels of all the webinars of the series in chronological order. Moreover, the bars shaded in diagonal stripes indicate webinars that contained topics on arrival preparation topics, while the solid bars indicate webinars or pre-recorded videos that contained topics on transition preparation.

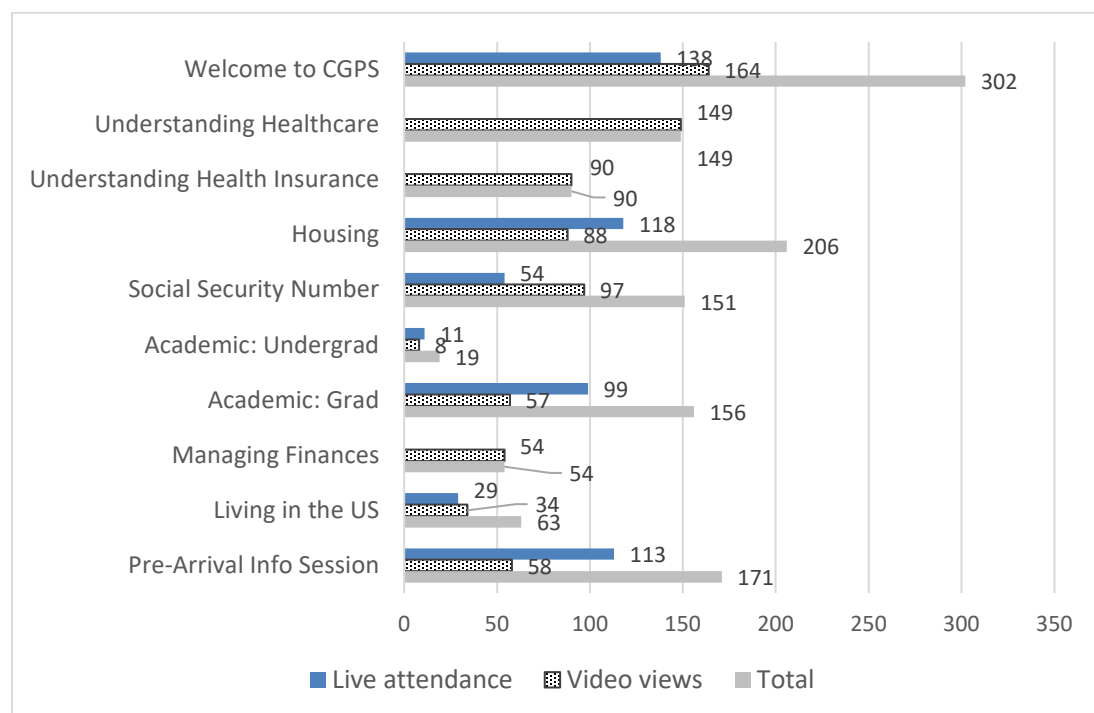
The average participation level among all ten webinars was 46%. Based on survey data, Figure G1 shows that the first and last webinars are two of the most highly attended webinars of the series, at 86% and 62%, respectively.



Note. N = 219

Figure G11 Participation Levels of Webinars (%)

However, data from Zoom records for the live attendance levels and data from UD Capture (where the videos are stored) paint a slightly different picture, as illustrated in Figure G2. Consistent with the survey data, the first webinar about Welcome to CGPS was the highest attended webinar, both via Zoom and video views ($n = 302$). The second most highly attended webinar was the webinar on Housing (for graduate students) ($n = 206$). This is followed by the Pre-Arrival Information Session ($n = 171$), and Academic Preparedness for Graduate Students ($n = 156$).



Note. There were no live Zoom webinars for Understanding Healthcare, Understanding Health Insurance, and Managing Finances.

Figure G12 Zoom Attendance Levels and UDCapture Video View Levels

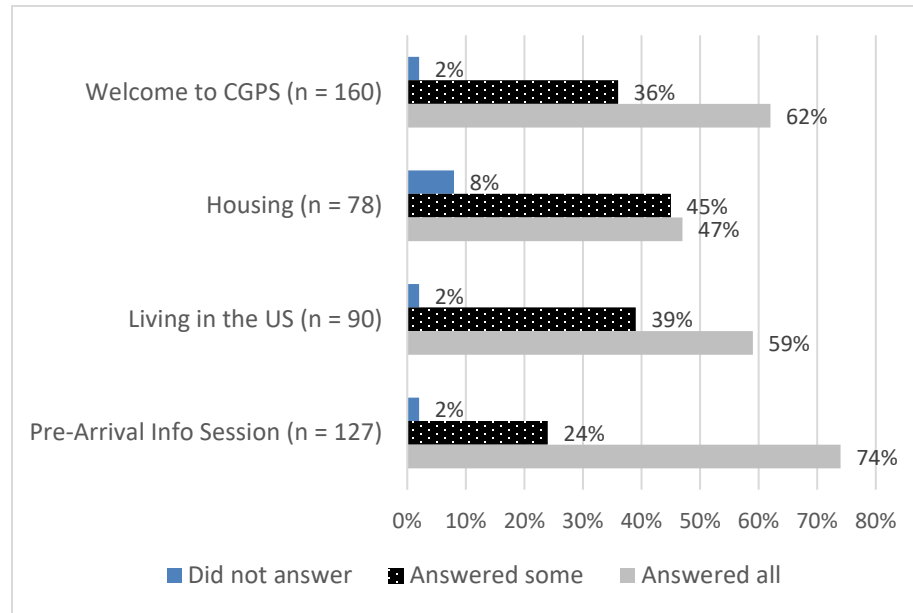
After describing the participation levels of each of the webinars, the following sections describe the evaluative data to answer the four questions.

Question 1: To what extent did new international students find the Pre-Arrival Webinar Series prepared them for their arrival to the U.S.?

The results of one survey item were analyzed to answer the first question:

- a. To what extent has attending the webinars and/or watching the videos above answered questions or concerns you had about those topics?

This survey item measured respondents' perception of the extent to which participating in four webinars containing topics about arrival preparation answered their questions. These four webinars included: (a) Welcome to CGPS; (b) Housing (for graduate students); (c) Living in the U.S.; and (d) Pre-Arrival Information Session. Figure G3 displays the extent to which respondents felt that attending the webinar and/or watching the videos of the four webinars related to arrival in the U.S. were helpful in answering their questions or concerns of those topics. For three of the webinars, more than fifty percent of the attendees of those webinars agreed that all of their questions about the topic were answered. For the webinar on housing, less than fifty percent of the attendees reported that all of their questions were answered through the webinar.



Note. N = 219

Figure G13 Extent to which Attending Webinar/Watching Videos Answered Questions (%)

Question 2: To what extent did new international students find the Pre-Arrival Webinar Series helpful for their transition and adjustment to the U.S. and UD?

Four survey items were analyzed to answer the second question:

- To what extent has attending the webinars and/or watching the videos above answered questions or concerns you had about those topics?
- Thinking about your first few weeks in the U.S., to what extent has attending the webinars or watching the videos helped you in adjusting to life in the U.S. and to UD?
- To what extent do you agree or disagree with the following statements? I have used the information I learned from the Before You Arrive Webinar series in my daily life in the U.S.

- d) To what extent do you agree or disagree with the following statements?
The information in the Before You Arrive Webinar series helped me
prepare what to expect about life in the U.S.

The first survey item measured respondents' perception of the extent to which participating in six webinars containing topics about transition preparation answered their questions on the topics of:

- a. Understanding Healthcare in the U.S.
- b. Understanding Health Insurance in the U.S.
- c. Social Security Number
- d. Academics in the U.S.: Understanding the U.S. classroom (for undergraduate students)
- e. Academics in the U.S.: Understanding professors' expectations (graduate students)
- f. Managing Finances in the U.S.

Figure G4 illustrates the extent to which respondents felt that attending the webinar and/or watching the videos of the six webinars related to transitions and adjustment in the U.S. helped answered their questions or concerns. For all six webinars, more than fifty percent of the attendees of each webinar reported that all of their questions on the topic were answered. Very few attendees of each webinar (less than three percent each) reported that the webinar did not answer their questions on the topic.

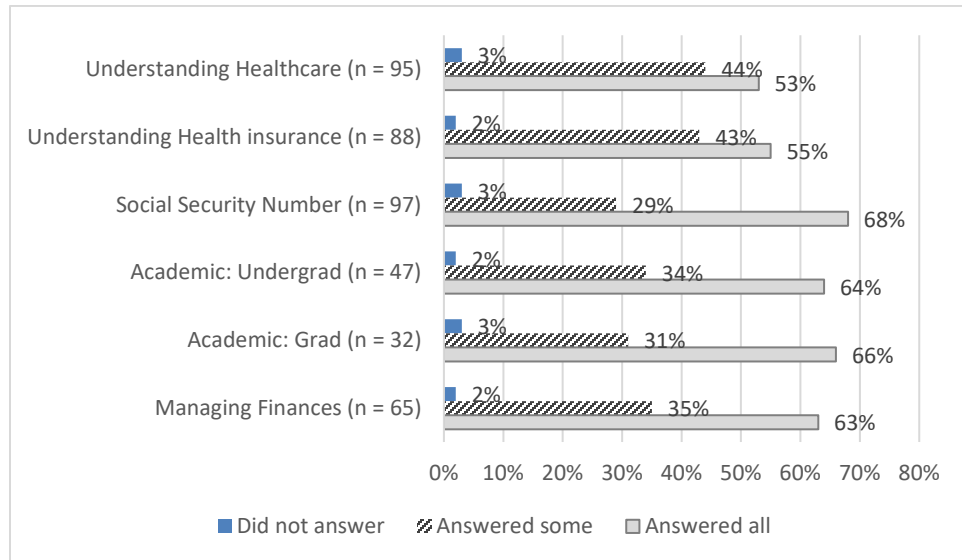


Figure G14 Extent to which Attending Webinar/Watching Videos Answered Questions (%)

The second survey item asked about the extent to which the six webinars were helpful in the respondents' transition and adjustment to life in the U.S. The data, as shown in Figure G5, showed that the majority of respondents expressed that the webinars were very helpful. The two webinars that respondents found the most helpful were the webinars on Social Security Number (83%) and Managing Your Finances in the U.S. (70%).

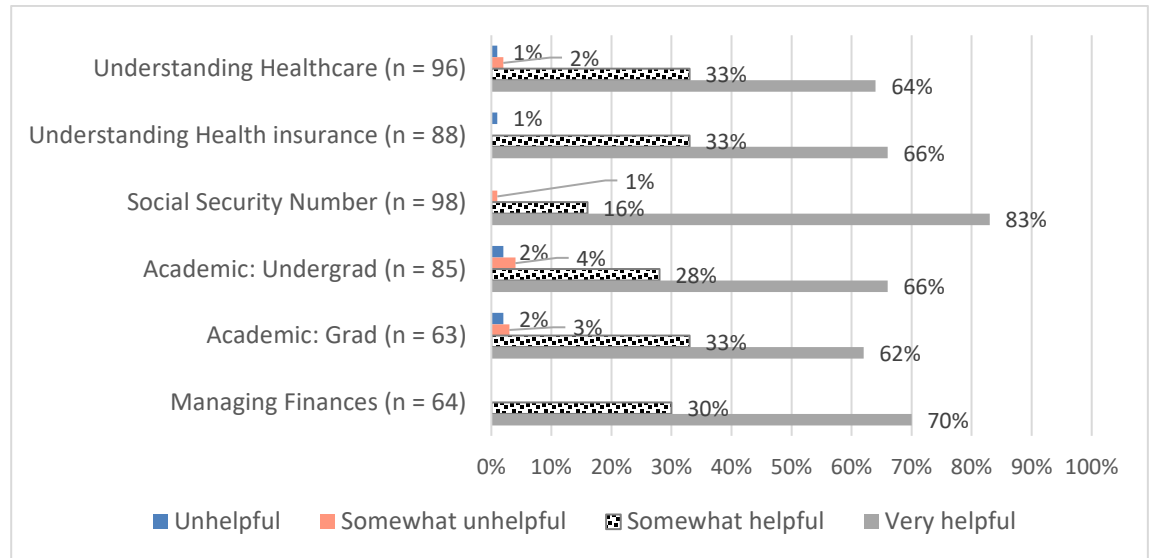
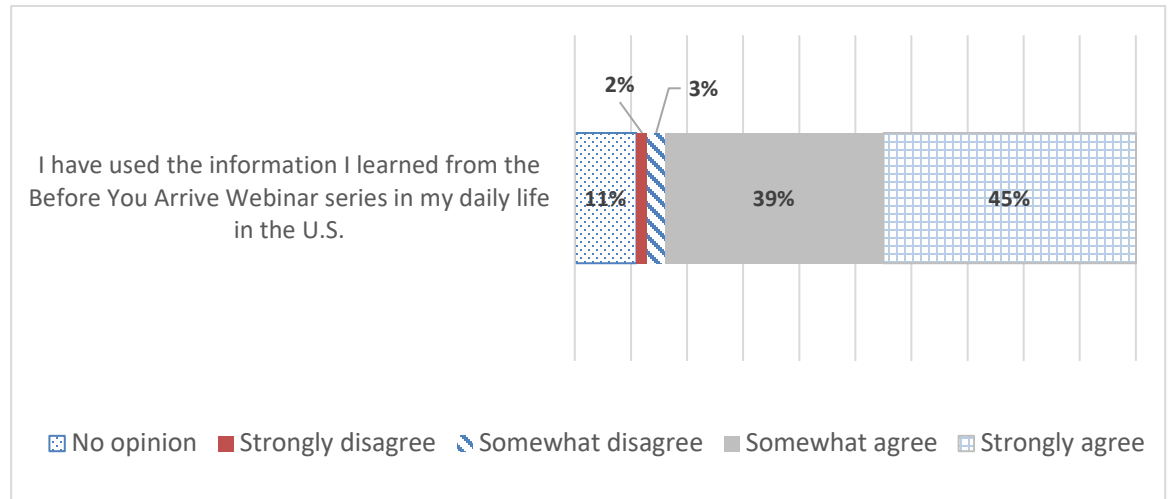


Figure G15 Helpfulness of Webinars in Transition and Adjustment in the U.S. (%)

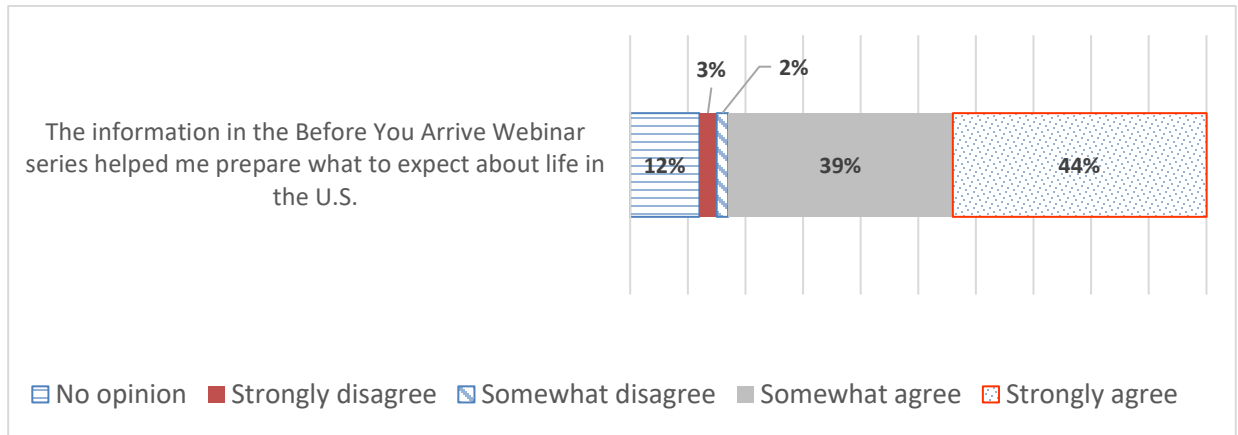
The third survey item asked about whether the respondents had used information in the Pre-Arrival Webinar Series in their daily lives in the U.S. The data showed that the majority of respondents (84%) stated that they had used information they learned in the Pre-Arrival Webinar Series in their daily lives. Forty-five percent of the respondents stated they strongly agreed with this statement, and 39% somewhat agreed with that statement.



Note. $n = 169$

Figure G16 Information in Pre-Arrival Webinars were Used in Respondents' Daily Lives

Finally, the last survey item asked respondents about the extent to which participating in all the webinars prepared them for expectations of life in the U.S. The data showed that the majority of the respondents (83%) found the webinar series to be helpful, as shown in Figure G7. Forty-four percent of the respondents stated that they strongly agreed that the information in the webinars helped them prepare for life in the U.S., and 39% of the respondents somewhat agreed with that statement.



Note. n = 169

Figure G17 Extent to which Webinars Prepared Students for Expectations of Life in the U.S.

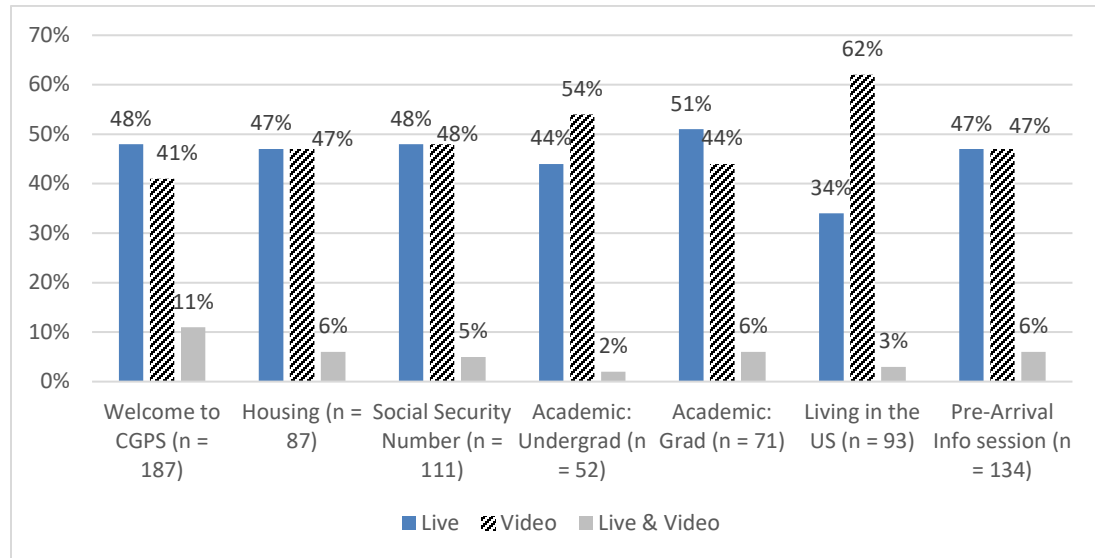
Question 3: Which information channels did new international students prefer to obtain information?

Three survey items were analyzed to answer this question:

- a) Did you attend a live webinar on (title of webinar), watch the recording of the webinar, or did you do both? Check all that apply.
- b) For the times that you attended a webinar, why did you attend a live webinar? For the times that you watched a recording of the webinar, why did you watch the recording of the webinar, instead of attending the live webinar?
- c) Based on your experience of gathering information to help you get ready to go to the U.S., which of the following METHODS of information delivery do you prefer? Please rank the different information delivery methods based on order of preference with 1 being the MOST PREFERRED and 8 being the LEAST PREFERRED by dragging and dropping each method.

Seven webinars were presented as both a live Zoom webinar and a recorded video of the Zoom webinars. Only three topics were not presented as a live Zoom webinar, namely: (a) Understanding healthcare in the U.S.; (b) Understanding Health Insurance in the U.S.; and (c) Managing Your Finances in the U.S. Understanding Healthcare and Health Insurance in the U.S. were presented as pre-recorded videos that were posted on the CGPS website. This decision was a tactical, rather than a strategic one, in order to accommodate conflicting schedules of CGPS staff and other presenters. The topic of Managing Your Finances in the U.S. included a series of short videos and additional resource documents linked from the PNC Bank website.

The first survey item measured how respondents accessed each of the webinar topics, that is whether they attended the live webinar and/or if they watched a recording of the webinar. Figure G8 indicates that respondents attended the live Zoom webinars almost at the same rate as watching the video recordings, with an average of 47%. There was one webinar where respondents accessed a video at a higher rate compared to the other webinars, namely the webinar on Living in the U.S. (62%).



Note. Understanding Healthcare, Understanding Health Insurance, and Managing Finances were presented only as videos and are not included in the figure.

Figure G18 Information Channels Used to Participate in Pre-Arrival Webinar Series (%)

The second survey item explored the reasons why respondents preferred one information channel over the other. Respondents provided information about why they chose to access the webinars via the live Zoom webinar or through the video. I performed qualitative coding of the data in two rounds: initial coding and axial coding. Responses that appeared to be unrelated or unclear were dropped from analysis. For example, one response to the question of why they watched a video was “It is funny.” Responses like these were not included in the analysis.

Table G2 summarizes the different themes that emerged from the qualitative data. Four major themes emerged from the data about why respondents watched the live webinar: (a) to get questions answered live (Live Answers); (b) better quality; (c) the interactive format of the live webinar (interactive); and (d) time. The first theme

refers to the fact that the question-and-answer session of each webinar was not recorded. Therefore, if participants wanted to ask a question and get a live answer, they would have to attend the webinar live. This finding is related to the theme of interactive, where respondents stated that they attended the live webinars to interact with people. One respondent reported that “Meeting with people from the campus before even coming to the campus was nice. It gave me an understanding of how the community at the UD is always helpful and welcoming.” Finally, with regards to the theme of time, 28 respondents (26.16%) reported that they attended the live webinars because they were able to do so and that they fit within their schedules.

Table G42 Reasons for Attending a Live Webinar Versus Watching a Video

Information channel	Theme	Sub-theme	Frequency (%)	Sample of quotes
Live Zoom webinar (<i>n</i> = 107)	Live answers		28 (26.16%)	Because it is easier to ask questions and obtain answers at the time of the webinar
	Better quality		4 (4.73%)	Because it is easier to stay focused
	Interactive		8 (7.47%)	It feels good to see and interact with people in a live webinar
	Time	Had time	28 (26.16%)	Webinar had fit perfectly within my schedule
	Motivation*		39 (36.44%)	To receive critical information before coming to the US; Housing was the major blockage I faced in transitioning to UD. Since I couldn't find suitable resources by myself, I attended the webinar to help me get more information.
Video (<i>n</i> = 106)	Convenience		5 (4.71%)	It was more convenient and I could skip parts I felt were not important.
	In depth understanding		3 (2.83%)	I attended the live webinar and watched the recorded videos again to have better understanding.
	Time	Time conflict	52 (49.05%)	It was an important topic for me and i could see the information as many times i want. Besides, i was working and i was not able to attend the webinars
		Missed live	22 (20.75%)	I wasn't able to attend the live one or I have forgotten it.
		Time difference	15 (14.15%)	I decided to watch the recordings due to the time difference and due to the fact that I could decide when to watch them and take more thorough notes.
	Motivation*		9 (8.49%)	Wanted to know specific information.

Note. *The Motivation theme was not directly related to discovering why respondents preferred one information channel over the other, but rather why respondents attended the Pre-Arrival Webinar series itself.

In terms of the reasons for watching the video, three major themes emerged from the data. The first one was convenience; respondents felt watching a video enabled the respondents to skip to parts that were relevant or important to them, compared to sitting through an entire presentation. The second theme was to gain an in-depth understanding of the topic because watching the video allowed the respondents to re-check information that they gained during the live webinar.

Finally, the third theme was time. Specifically, almost half of the respondents (49.05%) reported that they did not attend the live webinar due to time conflicts, including having to work, go to class, or having other engagements at the time of the live webinar broadcast. Other reasons for watching the video included missing the webinars (20.75%) because they forgot about them or were unable to access them, and due to the time difference (14.15%).

In analyzing the qualitative data, an additional, albeit unintentional, theme emerged. This theme was motivation. Respondents stated why they attended the live Zoom webinar was to get information (36.44%). Among these respondents, approximately half of them (53.84%) reported that they wanted to gain general information while 25% of the respondents stated that they wanted to find more information about UD. Three respondents (7.6%) reported they wanted to learn more about housing. The responses under this theme appear to suggest that respondents thought they were being asked about why they accessed the Pre-Arrival Webinar Series in general as opposed to why they attended the live webinar versus the video recordings, which was the intended purpose of this question.

The third survey item described respondents' preferences of information channels for gathering information. The options provided in this survey item are:

- a. Live Zoom webinars ("Live Zoom")
- b. Reading information on a website ("Website")
- c. Short videos (5-10 minutes) ("Short video")
- d. Long videos (15-30 minutes) ("Long video")

- e. Reading a document (“Article”)
- f. Social media posts (such as Facebook, Instagram, Twitter) (“Social media”)
- g. Talking to current international students (“Peers”)
- h. Other, type in the text box (“Other”)

In this analysis, I first calculated the frequency and percentage with which each information channel was ranked first, second, third, and so on. These results are described in Table G3.

Table G43 Frequency of Information Channel Preference Ranking

Information channel	First preference (%)	Second preference (%)	Third preference (%)	Fourth preference (%)	Fifth preference (%)	Sixth preference (%)	Seventh preference (%)	Last preference (%)
Articles	5 (3%)	4 (2.4%)	15 (8.9%)	36 (21.4%)	44 (26.2%)	16 (21.4%)	19 (16.7%)	0 (0%)
Live Zoom	78 (46.4%)	31 (18.5%)	17 (10.1%)	15 (8.9%)	8 (4.8%)	12 (7.1%)	5 (3%)	2 (1.2%)
Long video	3 (1.8%)	19 (11.3%)	29 (17.3%)	37 (22%)	43 (25.6%)	16 (9.5%)	19 (11.3%)	2 (1.2%)
Other	1 (0.6%)	0 (0%)	0 (0%)	0 (0%)	3 (1.8%)	2 (1.2%)	3 (1.8%)	159 (94.6%)
Peers	21 (12.5%)	24 (14.3%)	18 (10.7%)	15 (8.9%)	14 (8.3%)	19 (11.3%)	54 (32.1%)	3 (1.8%)
Short video	38 (22.6%)	38 (22.6%)	51 (30.4%)	23 (13.7%)	9 (5.4%)	7 (4.2%)	2 (1.2%)	0 (0%)
Social media	9 (5.4%)	9 (5.4%)	15 (8.9%)	17 (10.1%)	20 (11.9%)	48 (28.6%)	48 (28.6%)	2 (1.2%)
Website	13 (7.7%)	43 (5.6%)	23 (13.7%)	25 (14.9%)	27 (16.1%)	28 (16.7%)	9 (5.4%)	0 (0%)

Note. $n = 168$

Next, I examined the top three preferred information channels, by looking at (a) the most frequently cited information channels that respondents chose as their first preference, (b) the combination of their first and second preference, and (c) the combination of the first, second and third preference. The “other” option asked respondents to type in other types of information channels that were not on the list of options. However, since only three respondents typed a response of other options, data from “other” were excluded from the analysis. At the end of this sub-section, I provide the qualitative responses from the three respondents.

Top three preferences

The most frequently chosen information channel that respondents indicated as their first preference is a live Zoom webinar (46.4%), while the second most frequently chosen information channel was a short video (22.6%). The third most frequently chosen information channel was talking to peers (12.5%).

In terms of the top two preferences, the most frequently chosen information channel that respondents indicated as their first or second preference was live Zoom webinars (64.9%). The second most frequently chosen information channel that respondents indicated as their first or second preference was a short video (45.2%). However, the third most frequently chosen information channel that was indicated as the first or second preference was reading information on a website (33.3%). When combined between the total of those who chose a first and second preference (335 total responses), 28% of respondents did not select live Zoom, short videos, or reading information on a website as their first or second preference.

In terms of the top three preferences, the most frequently chosen information channel that respondents indicated as their first, second, or third preference in

receiving information was a short video (76.5%). The second most frequently chosen information channel that respondents indicated as either their first, second, or third preference was live Zoom webinars (75%). The third most frequently chosen information channel that respondents indicated as their first, second, or third preference was reading information on a website (47%). When combined between the total of those who chose a first, second, and third preference (503 total responses), 34% of respondents did not select live Zoom, short videos, or reading information on a website as their first, second, or third preference.

Least preferred preferences

Excluding the “other” option in the analysis, the information channel that was most frequently chosen as least (seventh) preferred was talking to peers (32.1%). The information channel that was chosen as the second least preferred was social media (28.6%), which was followed by the third least preferred, reading articles (16.7%).

Approximately 57% of respondents ranked social media in the bottom two of their preferences (ranked as sixth or seventh). The second most frequently chosen information channel that respondents indicated as their seventh or sixth preference was talking to peers (43.5%). The third most frequently chosen information channel that respondents indicated as their seventh or sixth preference was reading articles (38.1%).

In terms of the bottom three preferences (ranked fifth, sixth, or seventh), the most frequently chosen information channel was social media (69%). The second most frequently chosen information channel that respondents indicated as their seventh or sixth preference was reading articles (64%). The third most frequently

chosen information channel that respondents indicated as their seventh or sixth preference was talking to peers (51.8%).

Summary

Based on the above analyses, it can be concluded that the top three preferred information channels were live Zoom webinars, short videos, and information on a website, as shown in Figure G9.

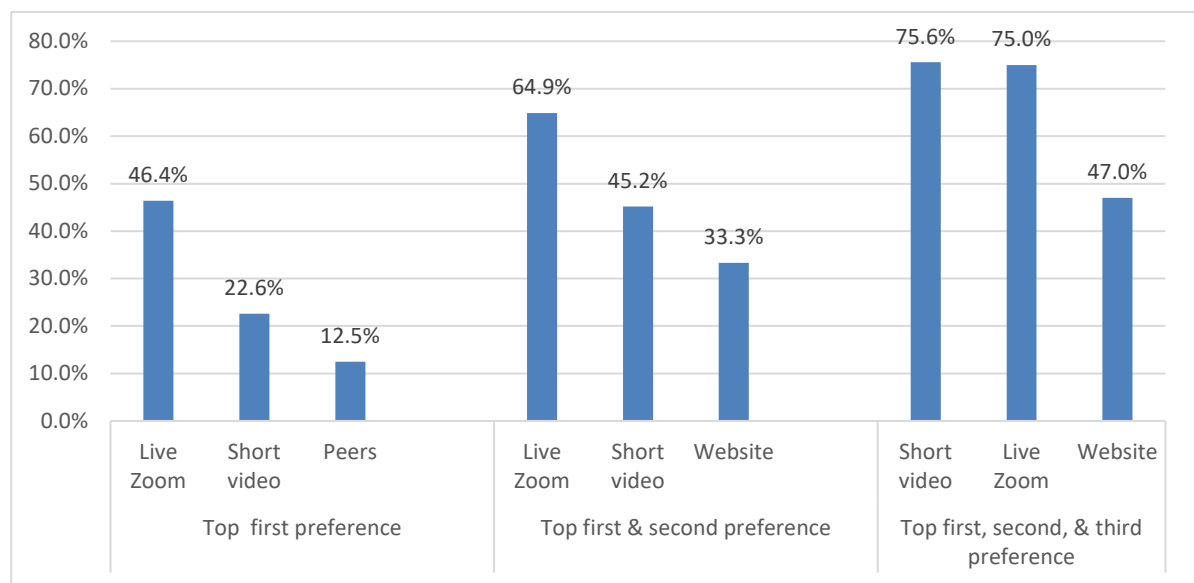


Figure G19 Top Three Preferred Information Channels

Meanwhile, the three least preferred information channels were social media, reading articles, and talking to peers, as shown in Figure G10.

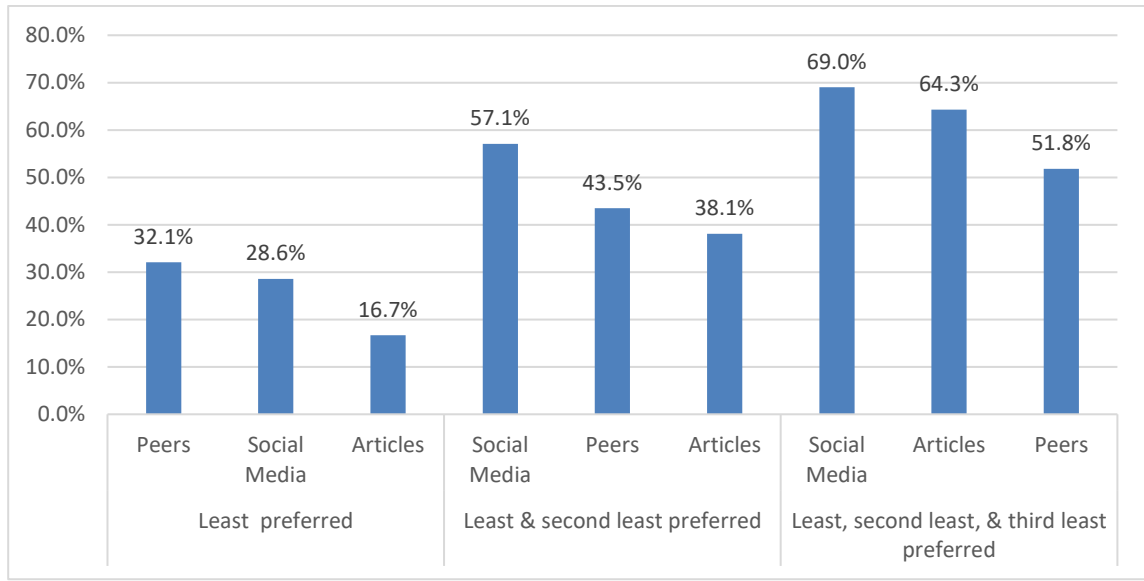


Figure G20 Bottom Three Preferred Information Channels

“Other” options

Three respondents provided a response when they chose the “other” option.

These responses are:

1. “Having a checklist”
2. “Making a catalog available with like slides and videos for everything. You don't want to cancel the webinars you do as I'm sure they are so invaluable. But add like a catalog that is easy to go through for ppl to get what they want without wandering and emailing and waiting. This is just an idea, and I'm sure you'd be able to utilize it and improve it”
3. “Video of a typical day of an international student who has no car, lives with roommates, works part-time on-campus, studying full-time would help us prepare mentally and decide housing and other choices in a better way”

Question 4: Were new international students satisfied with the Pre-Arrival Webinar Series?

The results of three survey items were analyzed to answer the fourth question:

- a) To what extent do you agree or disagree with the following statements? The way the information was presented in the Before You Arrive webinar series was clear
- b) To what extent do you agree or disagree with the following statements? The length of each webinar or video was appropriate
- c) How satisfied are you overall with the Before You Arrive Webinar series in terms of helping you to adjust to the U.S.?

The first two survey items above measured the respondents' assessment of the quality of the clarity of information and length of the webinars. More than half of the respondents stated that they strongly agreed that the way information was conveyed in the webinars was clear (54%) and the length of the webinars or videos was appropriate (55.5%), as shown in Table G4. Few respondents somewhat disagreed or strongly disagreed that the information presented was not clear (4%) and that the duration was not appropriate (4%).

Table G4 Rating of Quality of Webinars (%)

	Strongly disagree	Somewhat disagree	Somewhat agree	Strongly agree	No opinion
The way the information was presented in the Before You Arrive Webinar series was clear	2%	2%	33%	54%	9%
The length of each webinar or video was appropriate	3%	1%	32%	55.5%	8.5%

Note. $n = 169$

The third survey item asked respondents about their satisfaction with the overall webinar series. One hundred and sixty-one respondents answered this question. The data showed that more than half of the respondents ($n = 97$, 60.2%) were very satisfied with the Pre-Arrival Webinar Series and 32.3% ($n = 52$) were somewhat satisfied with the webinar series. Very few students ($n = 8$, 5%) were very dissatisfied with the webinar series.

Discussion of Results

The Pre-Arrival Webinar Series was designed as an improvement strategy to increase the quantity and quality of orientation programming for new international students. The webinar series sought to provide information to prepare new international students to travel to the U.S. and to make a smooth transition in the U.S. and at UD. I conducted an evaluation to assess the effectiveness of the Pre-Arrival Webinar Series in achieving these two objectives as well as measuring participants' satisfaction with the webinar series. The evaluation also sought to understand the information channels that new international students preferred. The evaluation was guided by four questions, which are discussed in the next section.

Question 1: To what extent did new international students find the Pre-Arrival Webinar Series prepared them for their arrival to the U.S.?

There were four webinars that were designed to convey information related to preparing for arrival in the U.S., namely Welcome to CGPS, Housing (for graduate students), Living in the U.S., and Pre-Arrival Information. In general, students found that the webinars that covered arrival preparation topics addressed their questions.

For three out of the four webinars, more than fifty percent of the attendees reported that all of their questions had been answered. Only for the webinar on

housing did less than fifty percent of the respondents report that all of their questions were answered during the webinar. One possible explanation for this is that the expectations of the attendees did not match with what was presented during the webinar. The webinar on housing did not directly provide students with housing options available in the community or recommendations on those options. Instead, the webinar introduced some housing terminology and concepts (for example, leases, security deposits, and utilities), discussed some guiding principles and advice for searching for housing in the community, and provided links and resources for housing options.

Question 2: To what extent did new international students find the Pre-Arrival Webinar Series helpful for their transition and adjustment to the U.S. and UD?

There were six webinars that were designed to convey information related to preparing students for their transition and adjustment to the U.S., including on topics related to understanding healthcare and health insurance in the U.S., preparing for academics, applying for a Social Security Number, and managing finances in the U.S. In general, respondents found that the webinars that covered these topics answered the questions they had about the topics.

Furthermore, respondents also reported that the information conveyed in the six webinars or videos were helpful in their transition and adjustment in the U.S. In particular, 83% of the attendees of the webinar on Social Security Number reported that it was very helpful in their transition and adjustment. One possible reason for this high rating is that 79.4% percent of the participants were graduate students, and many were likely employed as teaching or research assistants. Therefore, learning about the Social Security Number and knowing how to apply for it prior to arriving in the U.S.

was helpful in easing the transition after they arrived in the U.S. Finally, the data also showed that students felt that watching the webinar series was helpful to prepare them on what to expect about life in the U.S.

Overall, the results suggest that the webinar series was helpful in answering the respondents' questions and useful in practical. What might have made this finding stronger is if it was possible to know which specific topic was useful. In the future, it may be helpful to conduct a focus group to probe more deeply into which of the specific topics or points within each webinar was considered useful in their daily lives.

Question 3: Which information channels did new international students prefer to obtain information?

The data showed that there was an approximately equal proportion of students who attended a live webinar and watched the video across the different webinar topics. The one exception was the webinar on living in the U.S., where 62% of the respondents watched a video compared to 34% of the respondents who attended the live Zoom webinar. It is not obvious why this might be, but it is possible that towards the end of the series, students were experiencing fatigue and not as many students opted to attend a live webinar.

The qualitative data suggests that the timing of the webinars is important. On the one hand, 26.16% of respondents stated that they preferred the live webinar so that they could get live answers, knowing that the question-and-answer sessions were not recorded. The reason for not recording the question-and-answer sessions was to avoid recording any case-specific questions or answers that reference specific businesses or brands that could be interpreted as an endorsement by CGPS or UD. On the other hand, many respondents (49.05%) stated that they were not able to attend the live

Zoom webinar due to a time conflict or the time difference (14.15%). Therefore, the students who missed the live webinar due to the time conflict also missed the live question-and-answer session. This could be a disadvantage to those who could not attend the live webinar, especially if their questions could not be answered through the presentation alone. Future iterations of the webinar series may consider including the question-and-answer session in the recording but edit out or exclude mentions of personal advice or specific businesses. In this way, students who were not able to attend the live webinar could also benefit from the question-and-answer session.

Finally, it was important to understand which information channel international students preferred in receiving information, so that students could access the information in a way that resonates with them. Chang, Gomes, and McKay (2021) suggest that the information channel, or medium, with which international students seek and access information is just as important as the content of the information itself. Based on the most frequently chosen information channel that respondents indicated as their first, second, or third preference in receiving information, the data indicates that the top three preferred information channels were short videos (75.6%), live Zoom (75%), and information on a website (47%).

One possible explanation for the preference of short videos (5-10 minutes), where 75.6% chose it as their first, second, or third most preferred information channel, is the popularity and prevalence of videos on social media, such as TikTok and YouTube. Additionally, some studies have also shown the effectiveness of videos for international student learning, such as for library orientation (Li et al., 2016) and pre-arrival preparation (Zhou & Todman, 2009). In terms of short versus long videos,

one study suggested that students preferred shorter videos to longer videos (Manasrah et al., 2021).

That said, short videos might not always be appropriate for every topic. For example, the topic of understanding healthcare in the U.S. might not be best delivered via short five- to ten-minute video, but as a live Zoom webinar combined with additional articles or links on a website with an explanation of the different resources. On the other hand, the topic of understanding the Social Security Number might not need to be delivered via a live Zoom video, but rather through a 15- or 20-minute video. Therefore, it might be beneficial to obtain qualitative data on which information channel, or combination of information channels, would be appropriate for each of the information topics.

One possible explanation for the preference of Live Zoom webinars is that the live Zoom webinars allow for participants to gain a live answer to their question, which is in alignment with the qualitative results from the survey.

A possible explanation for the preference of reading information on a website is that unlike spoken language in videos or live webinars, the information is written. Written information would allow students to copy into a translation software, so that they could see the information in their native language. Information on a website might also include links to other websites, which can be difficult to portray or show in a video or live Zoom webinar.

In terms of the information channels that were not in the top three preferred options, the data indicated that respondents least preferred (ranked as seventh, sixth, or fifth preferred choice) social media (69%), reading articles (64.3%), and talking to peers (51.8%). One possible explanation why social media was not considered one of

the most preferred information channels is that respondents considered social media a means of communications for short pieces of information, such as announcements of events and dates. Meanwhile, in terms of reading articles, one possible explanation on why this option was not one of the most preferred information channels is that respondents considered reading articles as too cumbersome or long.

What is rather surprising is that talking to peers was one of the least preferred information channels, where a total of 51.8% respondents chose this option as their seventh, sixth, or fifth most preferred information channel. Given that many studies have touted the benefits of peer interacting and mentoring (e.g., Abe et al., 1998; Menzies et al., 2015; Pekerti et al., 2021), I would have expected that this option would be more frequently cited as the first, second, or third preferred option. One possible explanation is that respondents were not aware of these benefits during their search for information.

Question 4: Were new international students satisfied with the Pre-Arrival Webinar Series?

The data suggests that overall, students were satisfied with the Pre-Arrival Webinar Series. Over sixty percent of the respondents were very satisfied with the webinar series and an additional 32.3% were somewhat satisfied with the webinar series. In terms of the quality of the webinar series, the majority of respondents (87%) strongly agreed or somewhat agreed that the presentations were clear, and 87.5% respondents strongly agreed or somewhat agreed that the duration of each webinar or video was appropriate.

Summary

The data indicated that students found the Pre-Arrival Webinar Series to be helpful in answering their questions or concerns about arriving and transitioning in the U.S. Overall, through answering the four questions, the evaluation shows that the Before You Arrive Pre-Arrival Webinar Series met the information needs of new international students prior to and upon their arrival in the U.S. This is in alignment with the literature demonstrating that having prior knowledge of the culture of the new environment can aid in international students' transition and adjustment (Church, 1982; Garza, 2015). Having this information prior to international student orientation helps avoid information overload that typically occurs at upon-arrival orientation (Forbes-Mewett & Sawyer, 2016; Fox, 2020; Kovtun, 2011; Mori, 2000; Yu et al., 2016). Furthermore, conveying this information in a way that is accessible to students ensures that the information is useful for them in their preparation to arrive and transition after arriving in the U.S. and at UD. The choice of information channels might be an important consideration for future designs to ensure that information is well-received and useful for students' pre-arrival preparation.

Limitations

There are three main limitations to this evaluation. The first one is related to the survey instrument and distribution. The survey was distributed in November 2022, which was six months after the first webinar in early June and four months after the last webinar in late July. It is possible that the long gap between the webinars and distribution of the survey influenced respondents' memory of their participation in the webinars, especially with regards to details like whether they attended a live webinar or watched a recording. The large number of webinars and videos covering a total of ten topics could have also impacted the accuracy of the respondents' recollection.

Additionally, since students were also dealing with finals and exams at the time of the survey distribution, other competing priorities could have affected the response rate and their recollections.

The second limitation is related to the design of the webinar series in terms of ordering of the topics. The survey instrument did not include items that asked students to rank the topics of the webinars based on importance or urgency. Thus, is not possible to determine whether the order of the topics in the Pre-Arrival Webinar Series met the temporal priorities of new international students. Furthermore, respondents did not provide any feedback in the survey about which topics they wanted to learn about first. Although I was not able to find any literature discussing the order of pre-arrival information topics that are important to international students, based on theories such as Maslow's Hierarchy of Needs (1954), it may be assumed that there may be certain topics that new international students feel are more urgent than others. For example, understanding and finding housing options might be more important or urgent for new international students to know about first compared to understanding healthcare in the U.S. If it is possible to know which topics students felt were important to know earlier in the summer compared to later in the summer, then future webinar series could prioritize those topics first.

Finally, the evaluation instrument did not include sections that allowed me to explore which topic would be best delivered by which information channel. Understanding the ideal information channel or combination of information channels to deliver different topics could have improved the experience of gathering information and/or provided more clarity on the topics. Additionally, the list of information channels that were offered in the survey excluded an obvious option,

which is emails. In a study of communication preferences of international students at University of Delaware, Ammigan and Laws (2018) found that email was the most frequently information channel that international students preferred to receive and send information.

Recommendations for Future Programs

Despite the high level of satisfaction, there are three recommendations that can be made to further improve the webinar series design and evaluation. First, some preparation and transition topics might be more urgent than others. For example, the time needed to learn about finding and exploring off-campus housing options might be more urgent than understanding healthcare in the U.S. Therefore, topics with more urgency could be presented earlier in the series, such as off-campus housing and community resources (such as transportation). In that way, students have more time to prepare and are given information about expectations early on. One way to obtain this information is to conduct a focus group with newly arrived international students to better understand the order or urgency of information topics that students perceive in to prepare to travel to the U.S.

Second, a future improvement can be made to the information channel for future pre-arrival information. The data showed that many students were able to access the materials in the live Zoom and videos. The data also showed that respondents considered live Zoom webinars and *short* videos as two of the top three preferred information channels. Therefore, for future pre-arrival programs, planners could consider conveying some information topics in short videos instead of long videos. Additionally, many students also preferred receiving information by reading

information on a website. Therefore, for future pre-arrival programs, the links and pathways for those websites can be made more explicit and easier to access.

Finally, the third recommendation relates to the evaluation of future pre-arrival programs. To avoid recall issues in an evaluation study, it may be wise to reduce the amount of time between the end of the webinar series and completing the survey by distributing the survey earlier in the semester. For example, distributing the survey in early October may be ideal, as students do not yet have mid-term exams and papers and it will have been approximately a month since they arrived in the U.S. More students might be more inclined to complete the survey in its entirety at a time when they do not have many other pressing priorities.

REFERENCES

- Ammigan, R., & Laws, K. N. (2018). Communications preferences among international students: Strategies for creating optimal engagement in programs and services. *Journal of International Students*, 8(3), 1293–1315. <https://doi.org/10.5281/zenodo.1254584>
- Chang, S., Gomes, C., & McKay, D. (2021). The digital information ecology of international students: Understanding the complexity of communication. In S. Chang & C. Gomes (Eds.), *Digital experiences of international students: Challenging assumptions and rethinking engagement*. Routledge.
- Church, A. T. (1982). Sojourner adjustment. *Psychological Bulletin*, 91(3), 540–572.
- Forbes-Mewett, H., & Sawyer, A. M. (2016). International students and mental health. *Journal of International Students*, 6(3), 661–677. <https://doi.org/10.32674/jis.v6i3.348>
- Fox, J. M. (2020). Chinese students' experiences transitioning from an intensive English program to a U.S. university. *Journal of International Students*, 10(4), 1064–1086. <https://doi.org/10.32674/jis.v10i4.1191>
- Garza, D. D. (2015). *The acculturation needs of international students at U.S. universities: A call for online anticipatory orientation*. University of Kansas.
- Kovtun, O. (2011). International student adaptation to a U.S. college: A mixed methods exploration of the impact of a specialized first-year course at a large Midwestern institution. *Journal of Student Affairs Research and Practice*, 48(3), 349–366. <https://doi.org/10.2202/1949-6605.6336>
- Li, X., McDowell, K., & Wang, X. (2016). Building bridges: outreach to international students via vernacular language videos. *Reference Services Review*, 44(3), 324–340. <https://doi.org/10.1108/RSR-10-2015-0044>
- Manasrah, A., Masoud, M., & Jaradat, Y. (2021). Short videos, or long videos? A study on the ideal video length in online learning. *2021 International Conference on Information Technology, ICIT 2021 - Proceedings*, 366–370. <https://doi.org/10.1109/ICIT52682.2021.9491115>
- Mori, S. (2000). Addressing the mental health concerns of international students. *Journal of Counseling and Development*, 78(2), 137–144.

<https://doi.org/10.1002/j.1556-6676.2000.tb02571.x>

- Yu, X., Isensee, E., & Kappler, B. (2016). Using data wisely to improve international student satisfaction: Insights gained from International Student Barometer. In K. Bista & C. Foster (Eds.), *Exploring the social and academic experiences of international students in higher education insitutions* (pp. 212–232). IGI Global. <https://doi.org/http://doi:10.4018/978-1-4666-9749-2.ch012>
- Zhou, Y., & Todman, J. (2009). Effectiveness of an adaptation video viewed by Chinese students before coming to study in the UK. *Canadian Social Science*, 5(4), 63–71.

Appendix G1

Survey Instrument

Evaluation of Before You Arrive Webinar Series

The purpose of this survey is to learn more about your experience with the Before You Arrive Webinar series for new international students. Please be assured that your responses will be kept confidential, and this survey has been granted approval by UD Institutional Review Board (IRB). Although your email address will be collected, the results will be reported without using information that can specifically identify you.

The survey should take you around 15 minutes to complete. Your participation is voluntary. You have the right to withdraw at any point, for any reason, and without any consequence. If you would like to contact the researcher to discuss this survey, please e-mail Vina Titaley at titaley@udel.edu. A full copy of the survey consent form can be accessed [here](#).

If you submit a completed survey in its entirety, you will be entered into a raffle to win one of ten \$10 gift cards at the UD Bookstore.

By clicking below, you acknowledge that your participation is voluntary, you are at least 18 years of age, and you have the right to withdraw at any point, for any reason, and without any consequence.

☐ I consent to participate (1)

1. Are you an undergraduate, master's, or doctoral student?

☐ Undergraduate student (1)

☐ Master's student (2)

☐ Doctoral student (3)

The Center for Global Programs and Services (CGPS) launched a series of live Zoom webinars and pre-recorded videos to help new international students prepare for their arrival and transition in the U.S. This series is called the Before You Arrive Webinar series. Live Zoom webinars included a presentation and a Q&A session, whereby the

presentation was recorded and posted to the website. Other topics were presented via a pre-recorded video.

2. Which of the following webinars did you attend and/or which pre-recorded videos did you watch? Select all that apply.

- ☐ **Welcome to UD and CGPS!** (This webinar covered the following topics: introduction to UD, map of UD, what is a Blue Hen, introduction to CGPS services, outline of the webinar series) (1)
- ☐ **Understanding healthcare in the U.S.** (This pre-recorded video covered the following topics: Student Health Services, local healthcare providers, how healthcare and health insurance interact) (2)
- ☐ **Understanding health insurance in the U.S.** (This pre-recorded video covered the following topics: health insurance terms, the UD health insurance plan) (3)
- ☐ **Housing for graduate students** (This webinar covered the following topics: factors to take into account in searching for off-campus housing, resources to find off-campus housing) (4)
- ☐ **Social Security Number part 1** (This webinar covered the following topics: definition of Social Security Number, how to apply for Social Security Number and Letter of Ineligibility) (5)

If 2. Which of the following webinars did you attend and/or which pre-recorded videos did you watch?... = Welcome to UD and CGPS! (This webinar covered the following topics: introduction to UD, map of UD, what is a Blue Hen, introduction to CGPS services, outline of the webinar series)

2a. Did you attend a live webinar on **Welcome to UD and CGPS**, watch the recording of the webinar, or did you do both? Check all that apply.

- ☐ Attended a live webinar (1)
- ☐ Watched a recording of the webinar (2)

Display This Question:

If 2. Which of the following webinars did you attend and/or which pre-recorded videos did you watch?... = Housing for graduate students (This webinar covered the following

topics: factors to take into account in searching for off-campus housing, resources to find off-campus housing)

2b. Did you attend a live webinar on **Housing for graduate students**, watch the recording of the webinar, or did you do both? Check all that apply.

☐

Attended a live webinar (1)

☐

Watched a recording of the webinar (2)

Display This Question:

If 2. Which of the following webinars did you attend and/or which pre-recorded videos did you watch?... = **Social Security Number part 1** (This webinar covered the following topics: definition of Social Security Number, how to apply for Social Security Number and Letter of Ineligibility)

2c. Did you attend a live webinar on **Social Security Number part 1**, watch the recording of the webinar, or did you do both? Check all that apply.

☐

Attended a live webinar (1)

☐

Watched a recording of the webinar (2)

3a. For the times that you attended a live webinar, why did you attend a live webinar?

3b. For the times that you watched a recording of the webinar, why did you watch the recording of the webinar, instead of attending the live webinar?

4. To what extent has attending the webinars and/or watching the videos above answered questions or concerns you had about those topics?

	Did not answer any of my questions/ concerns (1)	Answered some of my questions/ concerns (2)	Answered all of my questions/ concerns (3)	Did not attend or watch (4)
Welcome to UD and CGPS! (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding healthcare in the U.S. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding health insurance in the U.S. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Housing for graduate students (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social Security Number Part 1 (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Thinking about your first few weeks in the U.S., to what extent has attending the webinars or watching the videos helped you in adjusting to life in the U.S. and to UD?

	Unhelpful (1)	Somewhat unhelpful (2)	Somewhat helpful (3)	Very helpful (4)	Did not attend or watch (5)
Welcome to UD and CGPS! (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding healthcare in the U.S. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding health insurance in the U.S. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Housing for graduate students (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social Security Number Part 1 (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Which of the following webinars did you attend and/or which pre-recorded video did you watch? Select all that apply.

- ☐ **Understanding the U.S. classroom for *undergraduate* students** (This webinar covered the following topics: time management, communicating with professors, syllabus, Office of Academic Enrichment) (1)
- ☐ **Understanding Professors' Expectations for *graduate* students** (This webinar covered the following topics: cultural expectations of graduate school, advisors vs mentors, maintaining a good relationship with advisor, managing conflict) (2)
- ☐ **Managing Your Finances** (This pre-recorded video covered the following topics: how to open a bank account, banking in the USA, creating a budget, and protecting your debit and credit card from fraud) (3)
- ☐ **Living in the U.S.** (This webinar covered the following topics: local transportation, groceries and shopping, electronics and communications, engagement opportunities) (4)
- ☐ **Pre-arrival Information Session** (This webinar covered the following topics: immigration documents to prepare, tips on entry to the U.S., understanding immigration documents, local housing and stores, UD support services, and orientation dates) (5)

Display This Question:

If 6. Which of the following webinars did you attend and/or which pre-recorded video did you watch?... = Understanding the U.S. classroom for undergraduate students (This webinar covered the following topics: time management, communicating with professors, syllabus, Office of Academic Enrichment)

6a. Did you attend a live webinar on **Understanding the U.S. classroom for undergraduate students**, watch a recording of the following webinars, or did you do both? Check all that apply.

☐

Attended a live webinar (1)

☐

Watched a recording of the webinar (2)

Display This Question:

If 6. Which of the following webinars did you attend and/or which pre-recorded video did you watch?... = Understanding Professors' Expectations for graduate students (This webinar covered the following topics: cultural expectations of graduate school, advisors vs mentors, maintaining a good relationship with advisor, managing conflict)

6b. Did you attend a live webinar on **Understanding Professors' Expectations for graduate students**, watch a recording of the following webinars, or did you do both? Check all that apply.

☐

Attended a live webinar (1)

☐

Watched a recording of the webinar (2)

Display This Question:

If 6. Which of the following webinars did you attend and/or which pre-recorded video did you watch?... = Living in the U.S. (This webinar covered the following topics: local transportation, groceries and shopping, electronics and communications, engagement opportunities)

6c. Did you attend a live webinar on **Living in the U.S.**, watch a recording of the following webinars, or did you do both? Check all that apply.

☐

Attended a live webinar (1)

☐

Watched a recording of the webinar (2)

Display This Question:

If 6. Which of the following webinars did you attend and/or which pre-recorded video did you watch?... = Pre-arrival Information Session (This webinar covered the following

topics: immigration documents to prepare, tips on entry to the U.S., understanding immigration documents, local housing and stores, UD support services, and orientation dates)

6d. Did you attend a live webinar on **Pre-Arrival Information Session**, watch a recording of the following webinars, or did you do both? Check all that apply.

☐

Attended a live webinar (1)

☐

Watched a recording of the webinar (2)

7a. For the times that you attended a live webinar, why did you attend a live webinar?

7b. For the times that you watched a recording of the webinar, why did you watch the recording of the webinar, instead of attending the live webinar?

8. To what extent has attending the webinars or watching the videos above answered questions or concerns you had about those topics?

	Did not answer any of my questions/ concerns (1)	Answered some of my questions/ concerns (2)	Answered all of my questions/ concerns (3)	Did not attend or watch (4)
Understanding The U.S. classroom (undergraduate students) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding Professors' Expectations (graduate students) (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing Your Finances (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Living in the U.S. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pre-arrival Information Session (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Thinking about your first few weeks in the U.S., to what extent has attending the webinars or watching the videos helped you in adjusting to life in the U.S. and to UD?

	Unhelpful (1)	Somewhat unhelpful (2)	Somewhat helpful (3)	Very helpful (4)	Did not attend or watch (5)
Understanding The U.S. classroom (<i>undergraduate</i> students) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding Professors' Expectations (<i>graduate</i> students) (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing Your Finances (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Living in the U.S. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pre-arrival Information Session (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. To what extent do you agree or disagree with the following statements?

	Strongly disagree (1)	Somewhat disagree (2)	Somewhat agree (3)	Strongly agree (4)	No opinion (5)
I have used the information I learned from the Before You Arrive Webinar series in my daily life in the U.S. (1)					
The information in the Before You Arrive Webinar series helped me prepare what to expect about life in the U.S. (2)					
The way the information was presented in the Before You Arrive Webinar series was clear. (3)					
The presenters of the webinars and videos were clear in their explanation of the topics. (4)					
The length of each webinar or video was appropriate. (5)					

11. How satisfied are you overall with the Before You Arrive Webinar series in terms of helping you to adjust to the U.S.?

- ☐ Very dissatisfied (1)
- ☐ Somewhat dissatisfied (2)
- ☐ Somewhat satisfied (3)
- ☐ Very satisfied (4)
- ☐ Did not attend a webinar or watch a video (5)

12. Based on your experience of gathering information to help you get ready to go to the U.S., which of the following METHODS of information delivery do you prefer? Please rank the the different information delivery methods based on order of preference with 1 being the MOST PREFERRED and 8 being the LEAST PREFERRED by dragging and dropping each method.

- _____ Live Zoom webinars (1)
- _____ Reading information on a website (4)
- _____ Short videos (5-10 minutes) (2)
- _____ Long videos (15-30 minutes) (3)
- _____ Reading a PDF document (5)
- _____ Social media posts (such as Facebook, Instagram, Twitter) (6)
- _____ Talking to current international students (7)
- _____ Other, type in the text box: (8)

13. In the text box below, please share any other feedback you might have on how CGPS can improve the transition experience of new international students. If you have no feedback, type NA.

14. What is your home country (nationality)? Choose from the list below.

Afghanistan
Albania
Algeria
Andorra
Angola
Antigua and Barbuda
Argentina
Armenia
Australia
Austria
Azerbaijan
The Bahamas
Bahrain
Bangladesh
Barbados
Belarus
Belgium
Belize
Benin
Bhutan
Bolivia
Bosnia and Herzegovina
Botswana
Brazil
Brunei
Bulgaria
Burkina Faso
Burundi
Cabo Verde
Cambodia
Cameroon
Canada
Central African Republic
Chad
Chile
China
Colombia
Comoros
Congo, Democratic
Republic of the
Congo, Republic of the
Costa Rica
Côte d'Ivoire
Croatia
Cuba
Cyprus

Czech Republic
Denmark
Djibouti
Dominica
Dominican Republic
East Timor (Timor-Leste)
Ecuador
Egypt
El Salvador
Equatorial Guinea
Eritrea
Estonia
Eswatini
Ethiopia
Fiji
Finland
France
Gabon
The Gambia
Georgia
Germany
Ghana
Greece
Grenada
Guatemala
Guinea
Guinea-Bissau
Guyana
Haiti
Honduras
Hungary
Iceland
India
Indonesia
Iran
Iraq
Ireland
Israel
Italy
Jamaica
Japan
Jordan
Kazakhstan
Kenya
Kiribati
Korea, North

Korea, South
Kosovo
Kuwait
Kyrgyzstan
Laos
Latvia
Lebanon
Lesotho
Liberia
Libya
Liechtenstein
Lithuania
Luxembourg
Madagascar
Malawi
Malaysia
Maldives
Mali
Malta
Marshall Islands
Mauritania
Mauritius
Mexico
Micronesia, Federated
States of
Moldova
Monaco
Mongolia
Montenegro
Morocco
Mozambique
Myanmar (Burma)
Namibia
Nauru
Nepal
Netherlands
New Zealand
Nicaragua
Niger
Nigeria
North Macedonia
Norway
Oman
Pakistan
Palau
Panama

Papua New Guinea
Paraguay
Peru
Philippines
Poland
Portugal
Qatar
Romania
Russia
Rwanda
Saint Kitts and Nevis
Saint Lucia
Saint Vincent and the
Grenadines
Samoa
San Marino
Sao Tome and Principe
Saudi Arabia
Senegal
Serbia
Seychelles

Sierra Leone
Singapore
Slovakia
Slovenia
Solomon Islands
Somalia
South Africa
Spain
Sri Lanka
Sudan
Sudan, South
Suriname
Sweden
Switzerland
Syria
Taiwan
Tajikistan
Tanzania
Thailand
Togo
Tonga

Trinidad and Tobago
Tunisia
Turkey
Turkmenistan
Tuvalu
Uganda
Ukraine
United Arab Emirates
United Kingdom
United States
Uruguay
Uzbekistan
Vanuatu
Vatican City
Venezuela
Vietnam
Yemen
Zambia
Zimbabwe

15. Would you like to enter the raffle to win a \$10 giftcard from the UD Bookstore?
Your response will remain anonymous.

☐ Yes (1)

☐ No (2)

Appendix G2

IRB Exempt Letter



Institutional Review Board
210H Hallsen Hall
Newark, DE 19716
Phone: 302-831-2137
Fax: 302-831-2828

DATE: November 28, 2022

TO: Vina Titaley
FROM: University of Delaware IRB

STUDY TITLE: [1980868-1] Evaluation of pre-arrival webinar series
SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF EXEMPT STATUS
EFFECTIVE DATE: November 28, 2022

REVIEW CATEGORY: Exemption category # (2)(i)

Thank you for your New Project submission to the University of Delaware Institutional Review Board (UD IRB). According to the pertinent regulations, the UD IRB has determined this project is EXEMPT from most federal policy requirements for the protection of human subjects. The privacy of subjects and the confidentiality of participants must be safeguarded as prescribed in the reviewed protocol form.

This exempt determination is valid for the research study as described by the documents in this submission. Proposed revisions to previously approved procedures and documents that may affect this exempt determination must be reviewed and approved by this office prior to initiation. The UD amendment form must be used to request the review of changes that may substantially change the study design or data collected.

Unanticipated problems and serious adverse events involving risk to participants must be reported to this office in a timely fashion according with the UD requirements for reportable events.

A copy of this correspondence will be kept on file by our office. If you have any questions, please contact the UD IRB Office at (302) 831-2137 or via email at hrb-research@udel.edu. Please include the study title and reference number in all correspondence with this office.

INSTITUTIONAL REVIEW BOARD

www.udel.edu

Appendix G3

Survey recruitment emails

First recruitment email sent on November 29, 2022

Dear (name),

Greetings!

I am reaching out to seek your participation in a survey, which will include questions about the Before You Arrive [pre-arrival webinar series](#) that Center for Global Programs and Services conducted this past summer. This study is separate from my role as Assistant Director of Special Programs, DSO/ARO at the Center for Global Programs and Services. I am also a student in the Doctorate of Educational Leadership (Ed.D.) Program. This research will be included in my Education Leadership Portfolio.

The purpose of the survey is to better understand the experience of new international students in attending these webinars and/or watching the videos. The information you provide can help me identify ways to improve this webinar series for future semesters. Please access the [Pre-Arrival Webinar Survey here](#).

This survey will take no more than 15 minutes to complete. Your responses will be anonymous. If you submit the survey in its entirety, you are eligible to enter a raffle to receive one of ten \$10 gift cards from the UD Bookstore.

Please complete the survey by **Friday, December 16, 2022**. Your participation is greatly appreciated!

Please let me know if you have any questions. Thank you in advance for your participation.

Sincerely,

Vina Titaley
(she, her, hers)
Assistant Director, Special Programs, DSO/ARO
Interim Assistant Director, Student Engagement
Center for Global Programs and Services
Elliott Hall, 26 E. Main St., Newark, DE 19716
University of Delaware
+1 302-831-2115

Second recruitment email sent on December 5, 2022

Dear (name),

Last week, you should have received an invitation to participate in the [Before You Arrive Pre-Arrival Webinar Survey](#). This survey is your opportunity to provide information on your experience in attending the Before You Arrive Pre-arrival webinars or watching the videos. The survey can be accessed [here](#).

If you have already completed the survey, thank you! I am very grateful.

If you have not already completed the survey, please take 15 minutes to complete [this survey](#). Your responses are anonymous. Complete the survey for a chance to receive a \$10 gift card from the UD Bookstore!

Please let me know if you have any questions. Thank you for your time and assistance.

Sincerely,

Vina Titaley
(she, her, hers)
Assistant Director, Special Programs, DSO/ARO
Interim Assistant Director, Student Engagement
Center for Global Programs and Services
Elliott Hall, 26 E. Main St., Newark, DE 19716
University of Delaware
+1 302-831-2115

Final reminder email sent on December 16, 2022:

Dear (name),

This is a final reminder that the [Before You Arrive Pre-Arrival Webinar Survey](#) is still open until today at 5 pm.

If you have already submitted your responses, forgive me for sending this reminder. I thank you very much for your time. Your participation is valuable!

If you have not already completed the survey, please take 15 minutes to complete [the short survey](#). Your input is needed so we can improve on our pre-arrival webinar offerings in the upcoming semesters.

Please let me know if you have any questions. I appreciate your time and participation. Have a great weekend and end-of-semester break!

Sincerely,

Vina Titaley
(she, her, hers)
Assistant Director, Special Programs, DSO/ARO
Interim Assistant Director, Student Engagement
Center for Global Programs and Services
Elliott Hall, 26 E. Main St., Newark, DE 19716
University of Delaware
+1 302-831-2115

Appendix H

ARTIFACT 8 – EVALUATION OF THE IMPROVED INTERNATIONAL STUDENT ORIENTATION

Introduction

The improvement goal of the present ELP is to increase the quantity and quality of orientation programming to better meet the needs of new international students at UD. To achieve this goal, one improvement strategy is to modify the international student orientation, which is also known as the upon-arrival orientation, to better meet the informational needs of new international students.

The improved international student orientation model involved two major components: content and design. Improving the orientation in terms of content involved aligning information topics that were a priority to international students, including information on academic preparation. The orientation program also covered other information topics that the literature (See Artifact 1) indicated students needed to begin their academic program and adjust to their new environment, including sessions on immigration responsibilities, academic preparedness, health services, and career services.

In terms of design, the improved international student orientation model, as described in Artifact 5, included five changes to the program. The first improvement was to provide targeted information that not only met the information needs of new international students, but also just enough without overloading them with too much

information. Information conveyed in the sessions were designed to be precise and interactive.

The second improvement was to use supplemental information materials during orientation to meet the information needs without causing information overload. Two documents were distributed to the attendees: a schedule of future workshops and programs in the fall semester and a resource sheet containing the contact information of different campus support services. The schedule of programs was related to pertinent information topics covered during orientation, such as employment workshops. This programming calendar was used as a secondary source of information that tied in with topics that could not be covered in depth during orientation. The resource sheet included contact information of the UD Police Department and UD Transportation, which were two resources that could not be covered during the orientation program but were referenced during the orientation program.

The third design improvement involved a return to an in-person program, which took place in the Multipurpose Rooms A, B, and C at the Trabant Student Center on August 26, 2022. The fourth design improvement involved socialization opportunities, which included a 30-minute networking event before the orientation program started and ice breakers that were included in the program. These are further outlined in Table H1. Finally, the fifth improvement was to shorten the program from a three-hour program to a two-hour program. Table H1 describes the improved international student orientation program components and how each component addressed a gap or addressed an information need.

Table H44 Schedule of Improved International Student Orientation Fall 2022

Time	Agenda	Description	Challenge or Gap that was Addressed
8:30 - 9:00 am	Arrival at Trabant, informal networking	Students are given the opportunity to socialize and network amongst each other before the program began.	Socialization opportunities
9:00 - 9:05 am	Welcome	Initial welcome by emcee	
	Connecting to UD wifi (eduroam)	Time provided to connect with the UD wifi in order to participate in the pre-session survey and online games	
	Overview of International Student Orientation Program	Emcee drawing attention to the printed agenda of the program provided on each chair. The agenda also included contact information of presenting offices and other resource offices, such as UDPD and UD Transportation.	Too little information: Providing additional information not presented at orientation, such as UD security and transportation.
	Pre-session Survey	A QR code was displayed on the screen, which attendees were asked to scan with their mobile phones. The QR code would bring them to the Google pre-session survey. The pre-session survey to measure level of preparedness and understanding of information topics.	Low response rate of assessment: Ensuring high response rate of program assessment.
9:05 - 9:10 am	Welcome by Associate Provost for International Programs, Dr. Ravi Ammigan	A pre-recorded video of Associate Provost providing a Welcome Speech was played.	
9:10 - 9:20 am	Ice breaker: Get to know your neighbors	CGPS staff facilitated a brief ice-breaker game using Mentimeter. Attendees were asked to introduce themselves with other attendees sitting next, in front, and/or behind them and asked them whether they preferred cats or dogs. The answer was entered on the Mentimeter platform using their mobile phones. The results of the poll were displayed on the screen.	Socialization opportunities

Table H1 Continued

Time	Agenda	Description	Challenge or Gap that was Addressed
9:20 - 9:50 am	Understanding CGPS Services and Maintaining Visa Status	The services provided by CGPS and students' responsibilities in maintaining their visa status were presented in a role-playing skit. A student volunteer acted as a new international student at UD and experienced or asked various questions about immigration that was answered by different CGPS staff.	Mixed media to avoid information overload and balance too little information: role-playing, referring to future workshops.
9:50 - 9:55 am	CGPS Programming Events and Engagement Opportunities	CGPS staff presented on different events and programs scheduled for the fall semester, such as Coffee Hour, immigration workshops, and a transition discussion series. Coffee Hour stickers were distributed to all attendees to invite them to the Welcome Event Coffee Hour later in the day.	Mixed media to avoid information overload and balance too little information: referring to future workshops. Printed fall programming calendar (see Appendix) provided at orientation. Coffee Hour stickers as an additional medium of information.
9:55 - 9:56 am	Transition	Transition time between speakers	
9:56 - 10:06 am	Session on Academic Preparedness	A question-and-answer style session presented by a staff from the Office of Academic Enrichment and two international student volunteers addressed different academic preparedness questions. Guiding questions can be found in the Appendix.	Mixed media to avoid information overload and balance too little information: interaction with students, referring to future academic-related workshops
10:06 - 10:07 am	Transition	Transition time between speakers	

Table H1 Continued

Time	Agenda	Description	Challenge or Gap that was Addressed
10:07 - 10:27 am	Panel on Health and Wellness Services	Content panel involved representatives from Student Health Services, Student Wellness and Health Promotion, and Counseling Center and Student Development. Each panelist addressed pre-submitted questions that are relevant for international students, as well as updated policies and regulations around COVID-19 and Monkey Pox. The panel also involved a question-and-answer style session with a student volunteer.	Mixed media to avoid information overload and balance too little information: dialog, interaction with students by soliciting questions, referring to Before You Arrive webinar series, referring future workshops and events.
10:27 - 10:30 am	Buffer time	Time provided in case extra time is needed due to delays.	
10:30 - 10:40 am	Game	CGPS staff facilitated brief game using Mentimeter as a break from the multiple sessions conveying information. The Mentimeter featured trivia around Delaware and University of Delaware.	
10:40 - 10:50 am	Session on Career Readiness	Presentation by representative from Career Center on career readiness resources, addressing specific concerns and questions of international student (see Appendix for guiding questions).	Mixed media to avoid information overload and balance too little information: dialog, interaction with students by soliciting questions, referring future workshops, and other printed material provided at orientation

Table H1 Continued

Time	Agenda	Description	Challenge or Gap that was Addressed
10:50 - 10:55 am	Post-survey	A QR code was displayed on the screen, which attendees were asked to scan with their mobile phones. The QR code would bring them to the Google post-session survey. The post-session survey to measure level of preparedness and understanding of information topics. It also asked for feedback and comments on the execution of the program. Results of the surveys are analyzed and discussed in the sections of this artifact.	
10:55 - 11:00 am	Closing	Closing remarks by emcee.	
	Announcement: Lunch		
	Announcement: Welcome Coffee Hour at 4 pm	Announcement about the Welcome Coffee Hour later in the day at 4 pm was made to invite attendees to the event.	Facilitating socialization

In addition to the improvements that are described in Table H1, other improvements were made based on previous orientation programs. We changed the seating arrangement of the room. Lecture-style seating arrangements were still used; however, seats were grouped into four seats per row, leaving a small aisle between every four seats. The intention of this seating arrangement was to facilitate more socialization opportunities amongst the attendees. Appendix 2 provides an image of how the room was configured.

The following sections describe the evaluation of the international student orientation program, including the design, measures, results, implications of the results for the ELP, and recommendations for future programs.

Purpose

The evaluation sought to answer the following questions:

1. Was there a change in attendees' perceptions of their preparedness and understanding of the information between the beginning and end of the program?
2. Did attendees have opportunities to meet other people during international student orientation?
3. Were attendees satisfied with the improved international student orientation?

Research Design and Methodology

Procedure

To answer the above questions, the evaluation utilized a pre-session and post-session survey instrument, which included quantitative and qualitative items. The quantitative questions were designed to measure whether students' perceptions of preparedness and perceptions of their understanding of the information differed from the beginning to the end of the orientation. The open-ended questions were designed

to obtain qualitative data on how the orientation program was executed. Specifically, these questions asked which aspects of the program that attendees liked and disliked, which measured attendees' satisfaction with the program.

The instrument was adapted based on a survey of a UD international student orientation in Fall 2019. The purpose of distributing the survey at the orientation event was to garner a high response rate as well as to obtain immediate program feedback from attendees. Prior to 2019, surveys were distributed either a day or two after the program and the response rates were relatively low. More importantly, the current instrument used a pre- and post-session format, which was designed to measure whether the attendees' perceptions of their preparedness and understanding of the information changed from the beginning to the end of the orientation program.

The survey instrument was designed using Google Forms. At the beginning of the international student orientation program, attendees were asked to scan a QR code, which led them to the survey. Attendees were given approximately five minutes to complete the survey. After the pre-session survey was completed, the orientation program began. Before the program officially ended, attendees were asked to complete the post-session survey.

Measures

Comprehension of information topics

Participants' perception of preparedness and understanding of the information were measured using six items (see Appendix 1). Two items asked about the students' preparedness in academics and career journey (e.g., "To what extent are you prepared to start your career journey at UD?"). Three items asked about students' perceptions of their understanding of services provided by Student Health Services, Counseling

Center and Student Development, and Student Wellness and Health Promotion (e.g., “To what extent do you understand the services provided by Student Health Services?”). The final item asked about students’ understanding of their immigration responsibilities as presented by the Center for Global Programs and Services (i.e., “To what extent do you understand your immigration responsibilities as an international student?”). In each item, a ten-point interval response format was provided ranging from 1 (*don’t understand or completely unprepared*) to 10 (*completely understand the services provided by this office or completely prepared*).

Socialization

Socialization with other new international students, current international students, and Center for Global Programs and Services staff members was measured through one question on the survey. Attendees were asked to select one or more options: “Select all statements that apply: At International Student Orientation: a) I met new people; b) I met other students who I can go to for help; and c) I met staff from the Center for Global Programs and Services.”

Satisfaction with the program

Satisfaction with the program was measured by asking students what they liked and disliked about the program. The qualitative data were coded to construct themes based on what the participants considered satisfactory about the program as well as what they considered unsatisfactory about the program.

Demographic information

Information about attendees’ level of education (undergraduate or graduate) was obtained. However, the item only differentiated between undergraduate and

graduate students, which means that the data could not be differentiated between master's and doctoral students' information. There is a loss of granularity of information within the graduate student population.

Participants

Participants included first-year international students enrolled in undergraduate and graduate degree programs at the University of Delaware who attended international student orientation program in Fall 2022. A total of 350 students attended the program. Among the attendees, a total of 228 students completed the pre-session survey, resulting in a response rate of 64%. Of pre-session respondents, 57 (25%) were undergraduate students and 171 (75%) were graduate students. In the post-session survey, a total of 259 students completed the survey, resulting in a response rate of 74%. Of the post-session respondents, 47 (18.15%) were undergraduate students and 212 (81.85%) were graduate students. Not all attendees were able to access the survey, perhaps due to issues related to getting connected to the university internet.

Unfortunately, many attendees did not include their ID number. Therefore, survey respondents whose data could not be matched between pre-session and post-session were excluded from the analysis of students' perceptions of their preparedness and understanding of the information. The final matched sample was 144 attendees, with 35 undergraduate (24.3%) and 109 graduate students (75.7%) and a final response rate of 41.1%.

The survey question that measured attendees' reports of social interaction at the end of the program did not require matched data. Therefore, all responses to this survey question were included ($n = 259$). Finally, two questions that asked about the

aspects about orientation that the attendees liked ($n = 250$) and disliked ($n = 211$) were also not matched, so all responses were included in analysis.

Analysis

Excel was used to analyze both quantitative and qualitative data. To answer the questions about attendees' changes in perception of their preparedness and understanding of the information between the beginning and end of the program, Excel was used to calculate the descriptive statistics, including mean and standard deviations, as well as to perform a t -test and calculate the effect sizes. An a priori power analysis was completed for the dependent-samples t -test using the GPower 3.0 program (Faul et al., 2007). Excel was also used to perform qualitative data coding.

Results

Question 1: Was there a change in attendees' perceptions of their preparedness and understanding of the information between the beginning and end of the program?

The descriptive statistics for the items that measured students' perceptions of their preparedness and perceptions of their comprehension of the information are presented in Table H2. The mean and standard deviation of each item were calculated for both pre-session and post-session. The difference between Time 1 and Time 2 perceptions of preparedness and comprehension was calculated by subtracting the post-session score by the pre-session score, which is then shown as a percentage change.

In order to determine the statistical significance of the changes in the means between the pre- and post-session scores, I used a paired sample t -test analysis. However, prior to conducting the t -test, it was also necessary to conduct a power analysis to determine if sample size of 144 had enough power. A one-tailed $p =$ values

was employed. I expected a large difference for the sample, using an effect size of $d = .80$ (Cohen, 1988). The power value ($1 - \beta$) was set to .95, meaning that there would be a 95% probability of reaching statistical significance if the sample differences were present in the population. The output from the power analysis resulted in a noncentrality parameter δ of 3.83, a critical t value of 2.07, a required total sample size of 23, and actual power value of .95. A sample size of 144 was therefore deemed as having sufficient power for this analysis.

The paired t -test analysis for each measure showed that students' perceptions of preparedness and understanding at the beginning of the orientation program were statistically different from their perceptions at the end of the orientation program ($p < 0.001$). The data revealed that overall, the students' perception of their preparedness in their academics and career journey and understanding of health services and immigration responsibilities increased after the orientation program.

Table H45 T-Test from Pre- and Post-Session Results

Measure	Sample (<i>n</i> = 144)	<i>M</i>	<i>SD</i>	Mean difference	Change (%)	<i>p</i>	<i>d</i>
Perception of being prepared to start academic journey	Pre-session	7.56	1.76	1.31	17%	<.001 *	0.87
	Post-session	8.88	1.21				
Perception of understanding of the services provided by Student Health Services	Pre-session	6.57	2.23	2.39	36%	<.001 *	1.32
	Post-session	8.96	1.24				
Perception of understanding of the services provided by Center for Counseling and Student Development	Pre-session	6.29	2.15	2.53	40%	<.001 *	1.43
	Post-session	8.83	1.30				
Perception of understanding of the services provided by Student Wellness and Health Promotion	Pre-session	6.33	2.21	2.62	41%	<.001 *	1.5
	Post-session	8.95	1.22				
Perception of being prepared to start career journey	Pre-session	7.17	2.15	1.61	22%	<.001 *	0.92
	Post-session	8.78	1.22				
Perception of understanding of immigration responsibilities	Pre-session	7.45	2.06	1.60	22%	<.001 *	0.96
	Post-session	9.06	1.13				

Note. *n* = 144, * = *p* < .001

In summary, the data revealed that students' perception of their preparedness and understanding of the information increased between the beginning of the orientation program and the end of the orientation program.

Question 2: Did attendees have opportunities to meet other people during international student orientation?

Attendees reported having different types of interactions by the end of international student orientation, as described in Table H3. By the end of the orientation program, all attendees had at least either met new people, other students they could go to for help, and/or staff from CGPS. Fifty-four percent (140) of the attendees had had an interaction with all three types of people during the orientation program. Meanwhile, seven attendees (2.7%) met with only other students they could go to for help and CGPS staff but did not meet any of their peer new international students. These results indicate that international student orientation had provided an opportunity for new international students to socialize with other students and staff.

Table H46 Socialization Moments at International Student Orientation

Type of interaction during orientation	Sample (%) (N = 259)
I met new people, I met other students who I can go to for help, and I met staff from CGPS	140 (54.05%)
I met new people and I met other students who I can go to for help	20 (7.72%)
I met new people and I met staff from CGPS	36 (13.89%)
I met other students who I can go to for help and I met staff from CGPS	7 (2.7%)
I met new people	30 (11.58%)
I met other students who I can go to for help	7 (2.7%)
I met staff from CGPS	19 (7.33%)

In summary, the data revealed that attendees experienced interactions with different groups during orientation. Approximately half of the respondents had interactions with both new students, current students, and staff from CGPS.

Question 3: Were attendees satisfied with the improved international student orientation?

The attendees were asked about the aspects that they liked and disliked about the international student orientation program in two survey items below:

1. Which aspects of the program did you like? If you liked nothing, answer nothing.
2. Which aspects of the program did you dislike? If you disliked nothing, answer nothing.

A total of 252 attendees provided an answer to the question of things they liked about the program and 218 attendees provided an answer to the question of things they disliked about the program. Overall, 92.1% of the attendees mentioned at least one thing they liked about the improved orientation program. When asked about what they disliked, 84.4% of the attendees said “nothing”. Table H4 provides a summary of the proportion of respondents who answered these two survey items.

Table H47 Proportion of Respondents’ Likes and Dislikes of International Student Orientation

Number of respondents who liked... (%) (N = 252)		Number of respondents who disliked... (%) (N = 218)	
At least one thing	228 (90.5%)	At least one thing	34 (15.5%)
Nothing	24 (9.5%)	Nothing	184 (84.4%)

To examine the specific aspects that the respondents liked and disliked, I conducted both initial and axial coding of the qualitative data summarized in Table H5. After four rounds of axial coding, I categorized the data into four major themes: a) components of the orientation; b) quality of the orientation; c) other; and d) overall perception. A total of 305 codes were generated for aspects that attendees liked, since some respondents provided more than one answer to the things they liked. A total of 218 codes were generated for aspects that attendees disliked.

Table H48 Themes of the Orientation that Attendees Liked and Disliked

Themes	What attendees liked (%) <i>N</i> = 305	What attendees disliked (%) <i>N</i> = 218
Theme: Components of the Orientation ("The What")		
Content	71 (23.3%)	3 (1.37%)
Games	53 (17.4%)	0 (0%)
Socialization Opportunities	12 (3.9%)	2 (0.91%)
Miscellaneous Components	7 (2.3%)	3 (1.37%)
Theme: Qualities of the Orientation ("The How")		
Quality of Information	48 (15.7%)	0 (0%)
Method of Conveying Information	34 (11.2%)	3 (1.37%)
Organization of the Orientation	15 (4.9%)	0 (0%)
Theme: Other	13 (4.3%)	23 (10.55%)
Theme: Overall Perception		
Everything	28 (9.2%)	0 (0%)
Nothing	24 (7.9%)	184 (84.4%)

I further drill down on the sub-themes and secondary sub-themes of each of the aspects that were liked and disliked to obtain a better understanding of detailed comments that the respondents provided.

Aspects that were Liked

Table H6 describes the specific sub-themes and secondary sub-themes that attendees liked about the orientation program. Components of the program, or “the what” of the program refers to the individual parts that were presented at the orientation program, including a) content (e.g., session on health services, session on immigration regulations, etc.), b) games, c) socialization opportunities, and d) miscellaneous components. The sub-theme of content is divided into several secondary sub-themes, including sessions on immigration regulations (5.2%), health and wellness (2.6%), and career Services (2.3%). When attendees said they liked “information” or “presentation,” these responses were categorized into the secondary sub-theme of general information (13.1%).

The sub-theme of games referred to the Mentimeter games and icebreakers that were presented during orientation program, which resulted in 17.4% of the liked comments. Socialization opportunities refer to the informal networking before the program began as well as one of the games that asked attendees to introduce themselves and with other new students during the orientation, for which there were 3.9% of the liked comments. Finally, the miscellaneous components refer to smaller parts of the program, such as the welcome speech, the pre- and post-session survey, and information about Coffee Hour, which generated 2.3% of the liked comments.

The theme “quality of orientation” or “the how” of the orientation program refers to how attendees qualified the things they liked about the program. The sub-themes include a) the quality of the information that was conveyed during orientation, b) the method of conveying information, and c) the organization of the program. Within the sub-theme of quality of information, two secondary sub-themes emerged:

a) information that was useful, helpful, and/or informative (11.8%) and b) information that was clear and/or detailed (3.9%). The method of conveying information was another sub-theme that emerged from the responses. Specifically, attendees remarked that they liked how the program was engaging, interactive, and/or fun (11.1%). The organization of the orientation program refers to how the program overall was managed, where some responses included remarks such as, “[it] was prepared very well for international students,” for which there were 3.3% of the liked comments.

The theme of other included a mix of different responses that could not be categorized in the other two themes (3.3%). Some examples included that attendees, “[liked] cultural diversity,” or that “everyone is so happy.”

Finally, there were 28 responses (9.2%) showing that the attendees liked everything about the orientation program, while 24 responses (7.9%) indicated that attendees like nothing about the orientation program.

Table H49 Categories of Aspects that were Liked and Examples of Comments

Theme	Sub theme	Secondary sub-theme	Number of comments (%)	Examples of comment: "I liked..."
Components of the Orientation	Content	Information, General	40 (13.1%)	Learning about the different student services at UD.
		Session on Immigration Regulations	16 (5.2%)	The resources available that was explained and also what I need to do to maintain my status as an F-1.
		Session on Health Services	8 (2.6%)	The health awareness portion of the orientation was informative.
		Session on Career Services	7 (2.3%)	The career information provided was very much interesting.
	Games		53 (17.4%)	I like the game section most; Games, icebreaker.
	Socialization Opportunities		12 (3.9%)	I got to meet other international students; Making new friends; It was good the meet the staff.
Quality of Orientation	Miscellaneous Comments		7 (2.3%)	I learned how to fill some forms on the website.
	Quality of Information	Informative/ helpful /useful information	36 (11.8%)	It was very informative; It was really helpful; A lot of useful information is provided.
		Clear/detailed information	12 (3.9%)	The clarity and detail with which everything was explained; Every explanation was so clear to understand.
	Method of Conveying Information		34 (11.1%)	It was delivered through a fun, engaging approach; I liked how it was made interactively and it was very informative; I liked the roleplay format to introduce the immigration status and responsibilities.
	Organization of the Orientation		10 (3.3%)	Well organized and cleared my queries.

Aspects that were Disliked

There were not many comments that reflected dissatisfaction with the program, as described in Table H7. There were six comments reflecting a dissatisfaction with the components of the orientation, including dissatisfaction with the socialization opportunities (0.9%) and the health and wellness sessions (0.9%). There were three comments reflecting a dissatisfaction with the quality of the orientation because they did not find it engaging. In the category of other, some notable comments included comments reflecting dissatisfaction with the lack of food and beverages during the orientation (4.1%) while others were critical of the duration of the program (2.7%). Finally, there were no responses showing that the attendees disliked everything about the orientation program, but 185 responses (84.1%) indicated that attendees disliked nothing about the orientation program.

Table H50 Categories of Aspects that were Disliked and Examples of Comments

Theme	Sub-theme	Secondary sub-theme	Number of comments (%)	Examples of comment: "I disliked..."
Components of orientation	Content	Session on Health and Wellness	2 (0.9%)	i just wanted to know a few more specifics about the wellness/counseling services, but everything was really good!
		Session on Career Services	1 (0.5%)	Consulting center has limited visiting times.
	Socialization opportunities		2 (0.9%)	A section could have included an opportunity to meet other students.
	Miscellaneous comments		3 (1.4%)	One long speech.
Quality of the orientation	Not engaging		3 (1.4%)	Possibly could've been slightly more engaging.

Table H7 Continued

Theme	Sub-theme	Secondary sub-theme	Number of comments (%)	Examples of comment: "I disliked..."
Other	Lack of food and beverages		9 (4.1%)	No breakfast or drinks served.
	Duration		6 (2.8%)	It would have been nice to have a longer session; Too long.
	Lack of breaks		3 (1.4%)	The lack of breaks in between.
	Environment		3 (1.4%)	Too crowdy.
	Insufficient prizes		2 (0.9%)	Not having prizes for the top 10 in the game activity.
Overall	Nothing		184 (84.4%)	Nothing.

Note. $N = 218$

In summary, the data indicated that the attendees overall liked the improved orientation program and suggests that they were satisfied with the orientation program.

Discussion of Results

The purpose of this artifact was to evaluate the improved international student orientation model and whether the improved model addressed the shortcomings identified in Artifact 5. The analysis for the evaluation was conducted through answering three questions.

Question 1: Was there a change in attendees' perceptions of their preparedness and understanding of the information between the beginning and end of the program?

Results from the pre- and post-session surveys (See Table H2) indicated that attendees reported feeling more prepared to start their academic and career journey at UD at the end of the program compared to the beginning of the program. Compared to the beginning of the program, attendees also reported greater perceived understanding

of the services provided by the health and wellness units on campus, as well as greater perceived understanding about their immigration responsibilities. These results suggest that the improved orientation program was able to provide new information to new international students to support their transition.

Question 2: Did attendees have opportunities to meet other people during international student orientation?

Socialization opportunities were embedded in the improved program as a response to one of the shortcomings of previous orientation programs. Three improvements were made to achieve this objective: a) we changed the seating arrangements to create small groups of eight attendees; b) we built in time before the program started for attendees to socialize with each other; and c) we included interactive ice breakers in the program for attendees to meet their neighbors. The aim of these improvements was to allow attendees to meet other new international students and current international students, the latter of whom were present as volunteers at the event.

Results from the survey indicated that all respondents had at least one type of social interaction, with 45% of respondents reporting having met new people, other students from whom they could ask for help, and staff from CGPS. However, these results only specify the types of interaction that the attendees encountered during the orientation program. What was lacking was a measure of the quality of those interactions and whether those interactions were components that respondents were satisfied with. The qualitative data that asked respondents about the things they liked about the program produced a sub-theme on Socialization, where 3.9% of the

comments mentioned that the respondents liked that they were able to meet new people.

Overall, the improved international student orientation program had met one of its objectives to include more socialization opportunities within the program.

Question 3: Were attendees satisfied with the improved international student orientation?

Satisfaction of the orientation program was obtained by asking respondents about aspects that they liked or disliked about the program. Close to 91% of the respondents mentioned something they liked about the program. In contrast, when asked about what they disliked, 15% said that there was something they disliked.

In terms of what the respondents liked, the components of the orientation, or “the what” were the most liked. These included the content (sessions and information) (23.3%), games (17.4%), socialization opportunities (3.9%), and other miscellaneous components (2.3%). In terms of the qualities of the orientation, participants found the information was useful, informative, and clear (15.7%). They also found the method of conveying information was engaging and interactive (11.2%).

The improved orientation program aimed to avoid information overload during the orientation by using a mix of media and ensuring that the way information was conveyed in an engaging and interactive manner. These findings suggest that respondents found the content and the delivery method of the content satisfactory.

In terms of the aspects that were disliked, there were very few codes that alluded to dissatisfaction. Of the 218 attendees that responded to this survey item, 218 codes were generated. Only 33 respondents (15.6%) indicated something that they were unhappy about. Some of the notable aspects that they did not like included that

there was a lack of food and beverages (outside of lunch) throughout the program (4.1%) and that the duration was either too long or too short (2.8%). The rest of the respondents (84.4%) stated that there was nothing that they disliked about the program.

Overall, the data showed that attendees liked many aspects of the improved international orientation program while very few comments were related to dissatisfaction with the program. These findings suggest that attendees were generally satisfied with the quality of the improved orientation program, where 90.5% respondents stated that they liked at least one thing about the program, and 84.4% respondents state that there was nothing that they disliked about the program. However, since the survey did not include an item asking attendees to rate their level of satisfaction, the extent to which attendees felt satisfied with the program could not be determined.

Summary

The improved international student orientation program involved two areas of improvement, namely the content and design. In terms of content, the program topics that were presented at the international student orientation were aligned with the specific information needs of new international students. Data suggest that attendees felt their understanding of the topics and preparedness in terms of academic and career increased between the start of the orientation program and the end. Having an increased sense of understanding of the campus services and feeling more prepared to begin their academic program provide students with tools to support them in their transition in the U.S. and at UD. For example, if students have an increased understanding of the types of services that the Health and Wellness units on campus

provide, how those services can be beneficial for them, and how they can access them, then there is increased likelihood that students could utilize the services to support their transition.

In terms of design, the improved international student orientation also sought to introduce a balance between providing too much information and not enough information through new ways of conveying information. Interactive methods of presenting information were one of the improvements introduced at this orientation program, particularly in the session on immigration regulations. The qualitative data suggests that the interactive method of conveying information was one of the aspects that attendees liked (11.2%). The data also showed that respondents liked the games (17.4%), which were interactive and created an engaging atmosphere in the program.

Another design aspect of the improved international student orientation was to facilitate more socialization opportunities during the program. Respondents indicated that they had one or more types of interactions during the orientation, including with fellow new students, current students, and CGPS staff.

Overall, the data suggests that the attendees were satisfied with the improved international student orientation. There were few comments reflecting dissatisfaction with the program. Through answering the three questions, the evaluation shows that the improved international student orientation program can begin to meet the three broad goals of international student orientation as outlined by Althen 1990), namely (a) to accelerate international students' adjustment to their new environments; (b) to help students learn to gather information about campus resources on their own; and (c) to facilitate new international students' interactions with domestic students, faculty, and staff, who include international student advisors.

Limitations

Although the findings suggest overall success in achieving the objectives of the improved international student orientation, the results are limited in some respects, namely with regards to the survey instrument and access to the instrument.

Survey instrument

There were two main limitations to the survey instrument. The first limitation was that it did not specifically ask about the attendees' level of satisfaction. Although the survey asked about aspects of the orientation program that attendees liked or disliked, the survey did not measure the level of satisfaction with the program. The second limitation is that the survey instrument did not measure the quality of the socialization. The instrument asked about different groups of people that participants met at orientation, but the questions did not capture the quality of those interactions.

Access to survey instrument

The implementation of the survey was conducted during the orientation program itself. Although this design was intentional, to capture attendees' perception of preparedness and understanding of the information before and after the orientation, it also meant that the attendees would have needed to be prepared to take the survey during the program. Not all attendees were able to access the survey, perhaps due to issues related to getting connected to the university's wireless network. Additionally, not all students included their UDID number in the survey, thereby limiting the ability to pair the pre-session and post-session responses. As a consequence, several responses were dropped from the analysis.

Recommendations for Future Programs

The results and limitations suggest a number of practical directions. In terms of the program design, there are three recommendations that could further improve the orientation program.

First, it may be advisable to add a component of community resources into the international student orientation program. The literature suggests that since many international students spend a considerable amount of time in the community (Arambewela & Hall, 2013), having information about community resources could support international students' transition into the community (Marangell et al., 2018). This information could be presented during international student orientation.

Second, it is important to continue collaborations with campus partners, as the improved international student orientation program could not have been successfully implemented without their collaboration. Campus partners hold expertise on different topics but are also part of the welcoming effort of students to campus. Therefore, continued partnerships and collaboration with campus partners remain vital and necessary to ensure a quality orientation program. Collaboration with members of the Newark community is also important and should be further explored.

Third, new international students have many priorities to attend to during their first few weeks in the United States. The literature has shown that many orientation programs tend to overload new international students with too much information (Forbes-Mewett & Sawyer, 2016; Jean-Francois, 2019; Mohamed et al., 2021; Yu et al., 2016). Ensuring that the content at international student orientation does not duplicate content from previous orientation programs could help in keeping the orientation relevant and accessible for international students. This strategy avoids information overload during international student orientation. Therefore, continued

coordination with New Student Orientation for undergraduate students and Graduate Student Orientation coordinators should be maintained.

In terms of the evaluation of international student orientation, there are three suggestions for future programs. First, new international students should be provided with enough time and the tools to prepare themselves to participate during orientation. One strategy might be to send instructions to new international students one or two days prior to orientation on how to connect to eduroam. Additionally, CGPS could host a station at Perkins or Trabant Student Center throughout the week prior to orientation to assist new international students with immediate needs, including getting connected to eduroam.

Second, the survey instrument can be further refined to include specific questions related to satisfaction with the program as well as questions to measure the quality of the socialization.

Finally, evaluations are meant to be used for future improvements (Giancola, 2021). Therefore, CGPS should continue to build in time for designing evaluations in the planning of international student orientation as well as time for analyzing the results after the program. In this way, the orientation program can continue to be improved based on feedback from international students.

REFERENCES

- Arambewela, R., & Hall, J. (2013). The interactional effects of the internal and external university environment, and the influence of personal values, on satisfaction among international postgraduate students. *Studies in Higher Education*, 38(7), 972–988. <https://doi.org/10.1080/03075079.2011.615916>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed). Lawrence Erlbaum Associates, Inc.
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175–191. <https://doi.org/10.3758/BF03193146>
- Forbes-Mewett, H., & Sawyer, A. M. (2016). International students and mental health. *Journal of International Students*, 6(3), 661–677. <https://doi.org/10.32674/jis.v6i3.348>
- Giancola, S. P. (2021). *Program evaluation: Embedding evaluation into program design and development*. SAGE Publications Inc.
- Jean-Francois, E. (2019). Exploring the perceptions of campus climate and integration strategies used by international students in a US university campus. *Studies in Higher Education*, 44(6), 1069–1085. <https://doi.org/10.1080/03075079.2017.1416461>
- Marangell, S., Arkoudis, S., & Baik, C. (2018). Developing a host culture for international students: What does it take? *Journal of International Students*, 8(3), 1440–1458. <https://doi.org/10.5281/zenodo.1254607>
- Mohamed, N., Schoen, S., Yu, X., & Kappler, B. (2021). Creating an online orientation course: The journey to internationalizing the campus. In S. Chang &

C. Gomes (Eds.), *Digital exeperiences of international students* (pp. 174–192). Routledge.

Yu, X., Isensee, E., & Kappler, B. (2016). Using data wisely to improve international student satisfaction: Insights gained from International Student Barometer. In K. Bista & C. Foster (Eds.), *Exploring the social and academic experiences of international students in higher education insitutions* (pp. 212–232). IGI Global. <https://doi.org/http://doi:10.4018/978-1-4666-9749-2.ch012>

Appendix H1

International Student Orientation Survey Instrument

*Required

1. Enter your survey number:
2. Is this the beginning of international student orientation or the end of the program? *
 - This is the beginning of international student orientation
 - This is the end of international student orientation
1. Are you an undergraduate or a graduate student? *
 - Undergraduate
 - Graduate
2. To what extent do you feel prepared to start your academic journey at UD? *

1 2 3 4 5 6 7 8 9 10

Completely unprepared ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ Completely prepared

3. To what extent do you understand the services provided by Student Health Services? *

Don't understand
services offered
or very confused

1 2 3 4 5 6 7 8 9 10

○ ○ ○ ○ ○ ○ ○ ○ ○ ○

Completely understand the
by this office

4. To what extent do you understand the services provided by Counseling Center and Student Development? *

1 2 3 4 5 6 7 8 9 10

Don't understand
services offered
or very confused

○ ○ ○ ○ ○ ○ ○ ○ ○ ○ Completely understand the
by this office

5. To what extent do you understand the services provided by Student Wellness and Health Promotion? *

Don't understand services offered or very confused 1 2 3 4 5 6 7 8 9 10
○ ○ ○ ○ ○ ○ ○ ○ ○ ○ Completely understand the
by this office

6. To what extent do you feel prepared to start your career journey at UD? *

Completely unprepared 1 2 3 4 5 6 7 8 9 10
○ ○ ○ ○ ○ ○ ○ ○ ○ ○ Completely prepared

7. To what extent do you understand your immigration responsibilities as an international student? *

Don't understand services offered or very confused 1 2 3 4 5 6 7 8 9 10
○ ○ ○ ○ ○ ○ ○ ○ ○ ○ Completely understand the
by this office

8. Select all the statements that apply: At International Student Orientation: *

- ☐ I met new people
- ☐ I met other students who I can go for help
- ☐ I met staff from the Center for Global Programs and Services

Feedback about the program

9. What did you like about today's international student orientation program? If you did not like anything, please write "nothing". *
10. What did you dislike about today's international student orientation program? If there was nothing that you disliked, please write "nothing". *

Appendix 2

International Student Orientation Room Diagram



Appendix I

ARTIFACT 9 – ELP PROPOSAL

Introduction

This Education Leadership Portfolio (ELP) will focus on the transition and adjustment programming for new international students at the University of Delaware (UD). In order to help new international students adjust and make a smooth transition, programs are needed before they are in the United States (U.S.), immediately after arriving in the U.S., and during their first few months in their new academic and cultural environments. Currently, there is programming for new international students at UD during the pre-arrival phase such as pre-arrival information sessions, and upon arrival phase, such as international student orientation and a peer mentoring program called the iBuddy Mentoring Program. The present ELP discusses and addresses the limitations of current programming at pre-arrival, upon-arrival, and during the first few months of the first year.

It is important to address program limitations for new international students, as it will lead to increased student satisfaction during their first semester, which supports overall satisfaction of their student experience (Koo, Baker, & Yoon, 2021). Ammigan (2019) found that international student satisfaction is correlated with their propensity to recommend the institution to other students. Research has also shown that students with a high level of satisfaction with their university experience are more likely to persist (Sanders & Burton, 1996 as cited in Ishler & Upcraft, 2005, p. 39-40).

The goal of this ELP is to increase the quantity and quality of orientation programming to better meet the needs of new international students at UD. This goal will be achieved by adding pre-arrival orientation programming, improving the quality of upon-arrival orientation, and improving extended orientation through the First Year Seminar class.

The rest of this proposal proceeds as follows. First, I describe the organizational context and role in which this problem occurs, which includes a review of existing programming for new international students. Then, I elaborate on the problem and evidence supporting the significance of the problem. Following that, I outline the improvement goals as a response to the problem. This section is accompanied with strategies I plan to implement to achieve the improvement goals. The last section of the proposal lays out a plan for producing artifacts that operationalize the strategies to achieve the ELP goals.

Organizational Context and Role

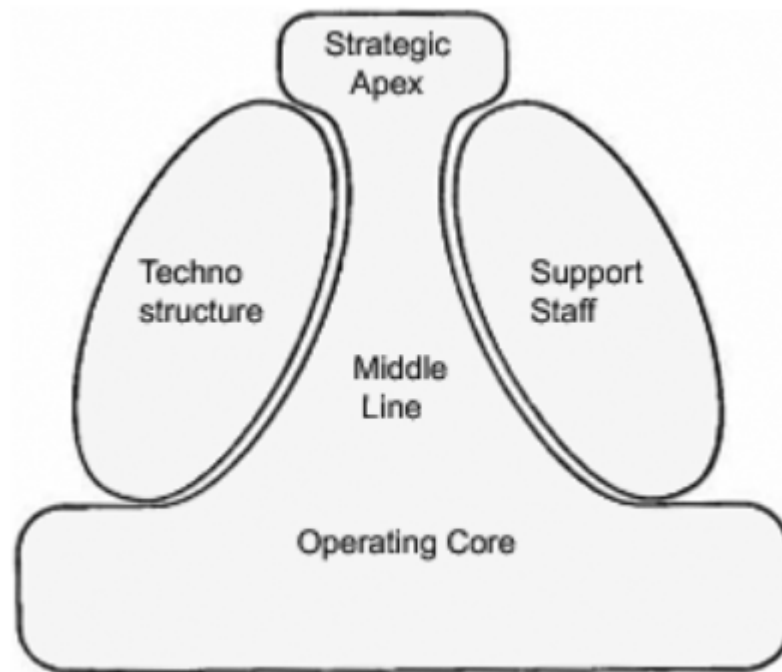
Organizational Context

The context in which this problem takes place is the Center for Global Programs and Services (CGPS), which is the designated office at UD to provide immigration advising and support services for international students and scholars at UD. As the Interim Assistant Director for Student Engagement at CGPS, my responsibilities include coordinating the planning and implementation of the international student orientation program, which occurs at the beginning of every major semester. As such, it is within my sphere of influence to improve the pre-arrival and upon arrival (i.e., international student orientation) programming for new international students.

The Center for Global Programs and Services at UD was formed in 2021 to merge two offices: Office for International Students and Scholars (OISS) and the Institute for Global Studies. The latter was home to Study Abroad, the World Scholars Program, Global Outreach, and Global Partnerships. The former served as the designated office for immigration advising and programming support for international students, scholars, and foreign employees.

One way to visually understand the structure of the organization is to view it based on the functions. In this instance, Mintzberg's (1979) five-sector organizational model is helpful (see Figure 1). Based on this model, *the operating core* is organized into three teams: (a) Study Abroad, (b) World Scholars Program and Global Outreach & Partnerships, and (c) International Student and Scholar Services (ISSS), which involve program coordinators (for Study Abroad and World Scholars Program and Global Outreach & Partnerships teams) and immigration advisors and program assistants (for the ISSS team). Leaders of these teams and sub-teams form *the middle line*, namely assistant and associate directors that provide supervision, coordination, and provide policy direction for each team or sub-team. Front desk staff, communications, outreach coordinators, and document processing staff make up the *support staff* within the model, which also consists of some elements of *the technostructure* (e.g., accounting). Finally, the Associate Deputy Provost serves as part of *the strategic apex*, which resides under the Deputy Provost for Academic Affairs.¹⁰ The following section will explore the International Student and Scholar Services unit, in which the context of this ELP is situated.

¹⁰ Other offices who report to the Deputy Provost for Academic Affairs are Student Success Initiative, Honors Program, Undergraduate Research, the Horn



Note. Adapted from Mintzberg (1979).

Figure I21 Mintzberg's Organizational Model

International Student and Scholar Services Unit

The International Student and Scholar Services unit of CGPS provides immigration advising and support to international students, scholars, and foreign employees along with coordinating programming and student engagement events. Within this unit, there are several sub-teams that are categorized by function (and/or

Entrepreneurship Program, the Center for Health Professions Studies, and the Center for Teaching and Assessment of Learning.

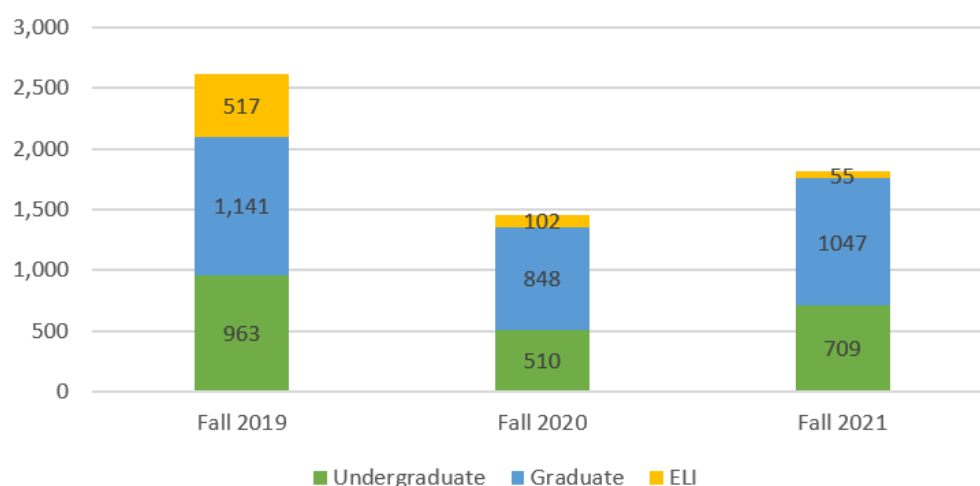
population): undergraduate advising, graduate advising, special programs (serving English Language Institute (ELI), sponsored students, and other non-degree programs), student engagement and programming, scholar services, and front desk operations. Full-time staff who provide immigration advising to international students or scholars are commonly known as *international student (or scholar) advisors*, which—for the purposes of this ELP—will henceforth be called international student advisors.

International Student Population at the University of Delaware

For the purposes of this ELP, international students are defined as degree and non-degree seeking students who are studying in the U.S. with an F-1 or J-1 visa. There are a number of other non-immigrant and immigrant visa categories that permit study in the U.S. and at UD, as well as Deferred Action for Childhood Arrivals status; however, these visa/immigrant categories are beyond the purview of CGPS' scope of immigration compliance. As such, students in these non-immigrant and immigrant categories are not included in the description and calculation of international students in this section.

Prior to the COVID-19 pandemic that affected student enrollment at UD in spring 2020, the international student population at UD had been relatively steady from academic year (AY) 2016-2017 through 2018-2019. The published data from Fall 2019 (a snapshot of data gathered between August 27, 2019 and December 31, 2019) indicate that CGPS served a total of 3,760 international students, scholars, and their dependents (e.g., spouses, children). Within this total, there were 2,621 international students studying in the F-1 and J-1 visa at the undergraduate, graduate, and ELI levels (CGPS, 2022).

Figure I2 illustrates the enrollment level of the international students at UD by education level: undergraduate, graduate, and ELI for the fall 2019, 2020, and 2021 semesters. The data indicate that at UD, the graduate international student population is on average about 30-40% the size of the undergraduate international student population. Figure 2 also shows that there was a decline in international student enrollment at UD in 2020 as a result of the COVID-19 pandemic.



Note. ELI = English Language Institute. Chart created from data from *CGPS Impact Report, 2021-2022*, by CGPS, 2022.

Figure I22 International Student Enrollment at UD by Level of Education, Fall 2019, 2020, and 2021 Semesters

When compared to makeup of international students across the United States (IIE, 2021) (see Figure I3), the undergraduate student population at the national level is almost on par with the graduate student population. The intensive English language students represent a much smaller proportion of the international student population

compared to graduate and undergraduate students. Except for the proportion of the undergraduate student population, UD’s international student makeup closely aligns with the international student makeup across the U.S. The COVID-19 pandemic has undoubtedly affected international student enrollments at both UD and in the U.S.

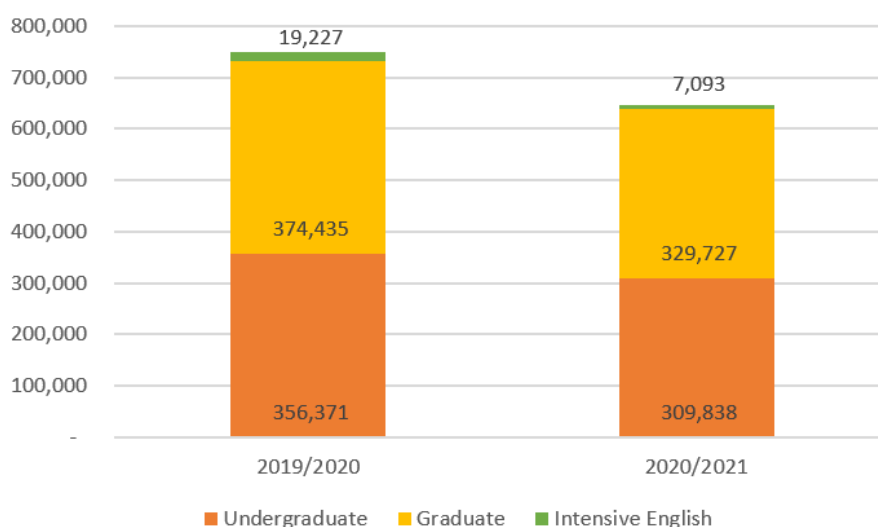


Chart created from data from *International Students by Academic Level, 1999/00 – 2020/21*, in Open Doors Report on International Education Exchange, by Institute of International Education, 2021. Retrieved from <http://www.opendoorsdata.org>

Figure I23 International Student Enrollment by Level of Education in the U.S., AY 2019-2020 and AY 2020-2021.

In terms of countries of origin of international students at UD, the most recent published data indicates that in Fall 2020, international students at UD represented 99 countries. Table I1 below illustrates the top five countries of origin of international students in Fall 2020, which have remained relatively the same for preceding three

academic years. This proportion includes students at all education levels: undergraduate, graduate, and ELI. It is useful to understand which countries of origin of the international student population, as the characteristics of the countries of origin may play a role in the transition and adjustment needs. For example, students coming from a country where English is not spoken as the main language may experience more challenges in adjusting to the language compared to students whose main language is English (Kimoto, 2009).

Table I51 Top Five Sending Countries of International Students at UD, Fall 2020

Country	Percentage of students
China	50.7%
India	9.2%
Saudi Arabia	24.2%
South Korea	2.7%
Iran	2.6%

Note. Table created from data from *Snapshot Statistics: 2020 Fall*, by CGPS, 2021.

International Student Support Provided by CGPS and its Partners

In 2017, CGPS (then OISS) launched the International Student Barometer (ISB), a survey that measures international students' satisfaction within an institution. This instrument is managed by i-graduate, a research company based in the United Kingdom. This company was chosen over other companies, as it was the only company that had collected and benchmarked satisfaction data from over 1,400 institutions in 33 countries. The survey sought to measure international student satisfaction with support services at UD with the goals of better understanding the overall experience of international students at UD, benchmarking (i.e., comparing)

with other schools, and improving the various support services across UD. Based on the contract signed with i-graduate, OISS distributed the survey each fall semester from 2017 to 2019.

One aspect of the survey assessed student satisfaction with the arrival process and orientation. The results of this scale from the 2018 survey indicated that 70% and 21% of respondents were satisfied or very satisfied, respectively, with their arrival and orientation experiences (i-graduate, 2019). However, a closer look at the various components of the arrival and orientation experiences illustrates that there are certain aspects that students were less satisfied with, compared to other universities in the U.S.,¹¹ which is the primary benchmark. Compared to the primary benchmark, there were a number of areas with which international students at UD were less satisfied, for example: pre-arrival information (-0.8% less satisfied), welcome/pickup at airport (-8.1% less satisfied), and orientation on living in the U.S. (-7.5% less satisfied) (i-graduate, 2019).

As a result of these findings, OISS created several new programs to improve the arrival process and orientation experiences of new international students, including establishing a peer mentoring program called the i-Buddy Mentoring Program¹² and

¹¹ At the time of this survey in 2018, there were 13 other U.S. universities against which UD's results were benchmarked, including DePaul University, Kent State University, University of California, Davis, University of Michigan-Flint, University of Minnesota, University of Nebraska-Lincoln, and University of Texas at San Antonio. Meanwhile, the North American benchmark group consisted of seven additional universities from Canada, and the global benchmark group included in addition of at least over 100 universities outside of North America, including universities in the United Kingdom and Australia.

¹² The iBuddy Mentoring Program was started by CGPS in 2018 with the aim of enhancing support for new international students through a peer mentoring

improving pre-arrival information through virtual workshops. FigureI 4 below illustrates the timeline of new international student support programming created since 2017, some of which are a result of the ISB survey results and others because of the necessity to adapt to the COVID-19 pandemic. Programs in red text in Figure 4, such as the pre-departure orientation, indicate that they were implemented in collaboration with other support offices on campus. Some of these programming, along with other existing support services and programming that facilitate the transition and adjustment of new international students at UD will be further elaborated below.

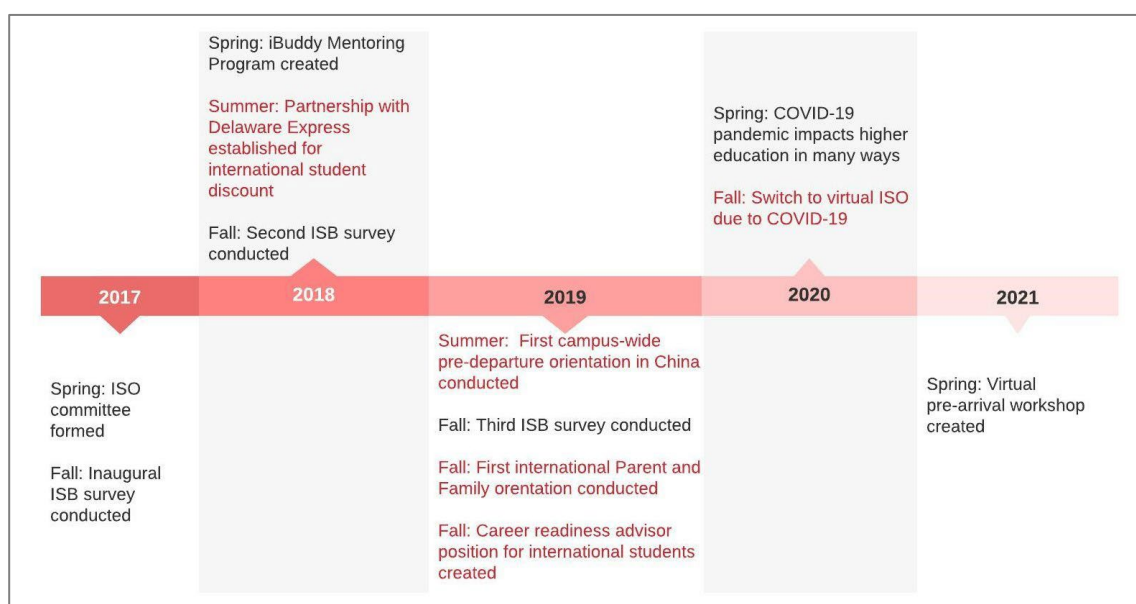


Figure I24 Timeline of Transition and Adjustment Programming at CGPS since 2017

relationship. New international students at UD may opt to be paired with a mentor, from whom they can ask questions, seek guidance and resources as they prepare to travel to the U.S. and as they adjust to UD and the local community.

In terms of facilitating students' transition to UD, the Center for Global Programs and Services provide two orientation programs: pre-arrival information sessions and international student orientation, which takes place when students arrive in the United States.

Pre-arrival Information Session

The first pre-arrival information session was delivered via Zoom in early January 2021 for new international students who were planning to travel to the U.S. for the spring 2021 semester. It was replicated in summer 2021 for students travelling to the U.S. for the fall 2021 semester. The duration of the information session was one hour: 30 minutes for a presentation and 30 minutes for a question-and-answer (Q&A) session. Students were encouraged to register and submit pre-submitted questions that would be incorporated into the presentation. It was designed to provide international students with the opportunity to hear from international student advisors on what to prepare before traveling to the U.S., including what immigration documents to bring and how to navigate the port of entry, what to pack, and what some community resources are, such as local grocery stores and off-campus housing.

One of the factors for starting this information session was the myriad of new and complex immigration regulations that were announced by the U.S. government in the wake of the COVID-19 pandemic. Although most of these regulations and policies were announced and listed on the CGPS website, highlighting the most relevant and pertinent regulations helped students feel less overwhelmed. The information session also allowed students to ask questions to international student advisors.

International Student Orientation

The Center for Global Programs and Services coordinates international student orientation, which is held the week before the beginning of each semester. Before the COVID-19 pandemic, this event was held in person and during the same week as other campus-wide student orientations. These orientations include:

1. New student orientation (for undergraduate and transfer students; coordinated by Orientation & Transition Programs);
2. Graduate student orientation (for graduate students; coordinated by the Graduate College);
3. Teaching assistant orientation (for graduate teaching assistants; coordinated by the Center for Teaching and Assessment of Learning); and
4. Individual departmental-level orientations, typically provided for all new graduate students within the department.

Like these campus-wide orientation programs, the duration of international student orientation at UD is typically between two and three hours. International student orientation also provides information that is helpful for new students to get acquainted with the university and the local community as well as provides an opportunity to meet new and current students on campus. What differentiates international student orientation from other campus-wide orientation programs is that the content of international student orientation is catered specifically to the needs of international students (at both the undergraduate and graduate levels). For example, two of the most prominent topics presented at international student are understanding how to maintain legal visa status in the U.S. and navigating the U.S. academic culture and classroom.

Moreover, international student orientation also introduces various support offices on campus and how those offices are available to support new international

students and their needs. These offices include Student Health Services, Student Wellness and Health Promotion, the UD Police Department, and Career Services. Partners from these offices are regularly invited to present at international student orientation and are asked to tailor their presentations with an international student lens. For example, in the presentation by the Police Department, the Chief of Police traditionally talks about some tips on how to engage with law enforcement in the U.S., as this interaction may differ from what international students are accustomed to in their home countries. It is expected that hearing from different support offices on campus and how their services can help students with their transition and adjustment to the university and their new community in Newark would assure new students that they are well-supported.

Organizational Role

Currently, I serve as Interim Assistant Director for Student Engagement, leading a sub-team of CGPS staff members in charge of planning student engagement programs, which includes planning international student orientation. One of the tasks involved in planning international student orientation is collaborating with other offices on campus and international student leaders to present during orientation. Additionally, I am also responsible for developing strategies to improve international student orientation based on students' feedback and overall CGPS services improvement goals.

Additionally, as Assistant Director for Special Programs, I serve international students enrolled at the English Language Institute, sponsored students (international students who receive external scholarships to study in the U.S.), inbound exchange students, and international students enrolled in short-term, non-degree programs. As

an international student advisor, most of my responsibilities center on immigration advising and providing support for students in these populations. I also serve as a liaison between sponsoring organizations and governments and UD in a variety of contexts, such as recruitment, admissions, financial issues, academic issues, and cultural adjustment of students. My other responsibilities include supporting the Global Partnerships team, serving on the management team (*middle line* of Mintzberg's model) for organizational policymaking, and chairing the committee for the International Student Emergency Fund¹³.

I anticipate that this ELP will expand my portfolio of skills and expertise in the field of international student and scholar services knowledge community. NAFSA: Association of International Educators categorizes three distinct networks within the ISSS knowledge community: international student advising, international scholar advising, and campus and community programming. Completing this ELP will allow me to enter the campus and community programming field by implementing programs directly related to the transition and adjustment of new international students at UD. Having expertise in a wide variety of areas within international education not only enriches my knowledge and skills, but also allows me to be versatile within the field. This versatility, in turn, could lead to future career paths that extend beyond international student advising.

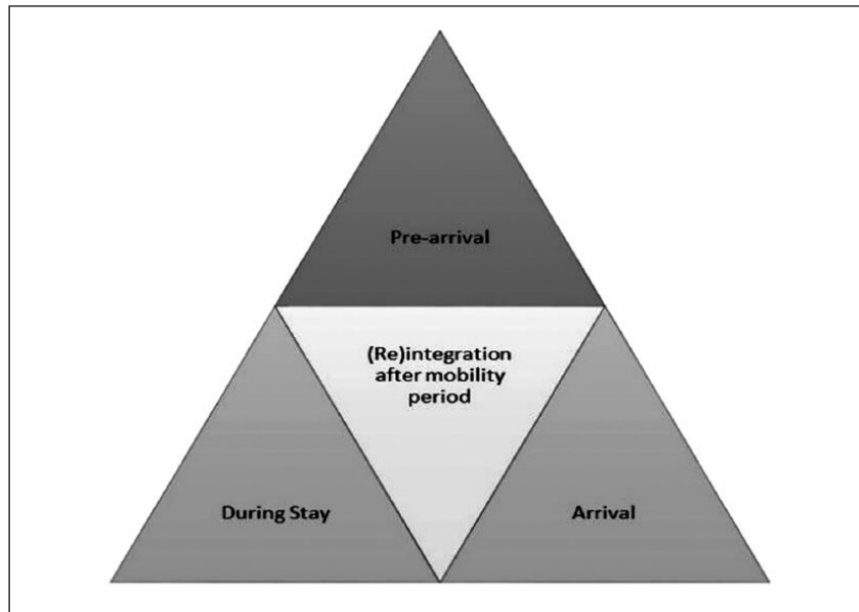
¹³ The International Student Emergency Fund is managed by CGPS to provide emergency assistance to international students who experience extreme unforeseen circumstances. This fund is different from the Student Crisis Fund, which is managed by the Dean of Students.

Problem Statement

This ELP is focused on the transition and adjustment of new international students during their first year at UD. One common definition of transition within the field of student development is “the process students to go through when entering and continuing through a particular institution of higher education and/or entering the same institution for a new purpose” (Association for Orientation, Transition, and Retention in Higher Education (NODA), 2021, para. 4). For the purposes of this ELP, I use the definition of international student adjustment as “the familiarization with the customs, places, social rules, and acceptable styles of interaction in the new environment (Bradley, 2000; Misra et al., 2003 as cited in Terrazas-Carrillo et al., 2014, p. 698). The customs, places, social rules, and acceptable styles of interaction can refer to the multiple domains of adjustment that is commonly cited in the literature: psychological, socio-cultural, and academic. Whereas the concept of transition refers to the process of movement from one phase into another (see Artifact 1), the above definition of adjustment reflects the outcome of the transition. Within the field of student development, the terms transition and adjustment are traditionally coupled together (e.g., Hadley, 2009; Hurtado et al., 2007), which are used throughout this ELP as such.

The present ELP focuses on the pre-arrival and upon-arrival phases of the international student lifecycle (see Figure I5 below). Specifically, it focuses on limitations of current pre-arrival and upon-arrival programs that do not meet the needs of new international students. Further, there are limitations in how these programs are implemented that also contribute to the shortcomings in meeting these information

needs. Therefore, *the problem that this ELP addresses is that there is too little orientation programming to meet the needs of new international students.*



Note. This model was adopted from “International students’ perceptions of their needs when going abroad: Services on demand,” by J. Perez-Encinas and J. Rodriguez-Pomeda, 2018, *Journal of Studies in International Education*, 22(1), p. 24.

Figure I25 International Student Lifecycle

Evidence of the Problem

Data for evidence of the problem are based on two sources. The first data source is the Needs Assessment Survey, which was distributed in fall 2021 semester. Of the 282 international students that were considered new international students for the fall 2021 semester and had arrived in the U.S., 95 responded to the survey, yielding a sample response rate of 33%. Approximately 19% ($n = 18$) of the

respondents were undergraduate students, while 81% ($n = 77$) were graduate students. There were thirty-four countries represented in the sample, whereby students from India represented the largest amount ($n = 23$). Students were asked whether they had specific needs or concerns after they arrived in the U.S. The questions focused on eight topics: immigration, COVID-19, academics, finances, housing, transportation, social and culture, and living in the U.S. The top three concerns of new international students were financial (86%), transportation (81%), and academics (69%). See Artifact 2 for more details on the analysis of this needs assessment.

The second data source that provides evidence of the limitations of the orientation programs is the International Student Orientation Satisfaction Surveys from fall 2021 and spring 2022 semesters. The surveys were distributed to attendees of the international student orientation program. For the fall 2021 semester, 40 out of 120 attendees (33.3%) responded to the survey. Of the respondents, 15 (38%) were undergraduate students and 25 (63%) were graduate students. For the spring 2022 semester, 50 out of 122 attendees (40.9%) responded to the survey. Of the respondents, 9 (18%) were undergraduate students and 41 (82%) were graduate students.

Limitations of Pre-Arrival Orientation

The current model for a pre-arrival orientation at UD is a one-hour virtual information session that is designed to provide preparatory information to new international students before they travel to the U.S. As mentioned previously, this pre-arrival information session mainly discusses the immigration-related aspects of preparing to travel to the U.S. It also briefly mentions some university and community resources, such as resources for finding off-campus housing, where to buy groceries,

and public transportation options. However, the information does not go into any detail on these topics. Some topics, such as healthcare providers and health insurance, require more explanation than what can be presented at a one-hour pre-arrival information session.

Findings from the Needs Assessment Survey and the International Student Orientation Satisfaction Survey suggest that there are certain information topics that were not met during international student orientation. However, due to the nature of the international student orientation format, it is not always appropriate nor feasible to cover all information topics at international student orientation.

Therefore, the main limitation of the current pre-arrival orientation is that there are not enough programs that are offered prior to international students' arrival to the U.S. that meets their information needs. The benefit of the period before students arrive in the U.S. is that there is more time to explain certain topics that are lengthy and complicated. Additionally, because the duration of the upon-arrival orientation for new international students is also limited, there is also little time to cover these information needs. As a result, there are information needs that are not met that could aid in new international students' transition and adjustment.

Limitations of International Student Orientation

The results of International Student Orientation Satisfaction Surveys suggest that while satisfaction levels were high, there were a number of shortcomings that could be addressed to improve the international student orientation program. These shortcomings included gaps in the information topics that were lacking or insufficient and gaps in the execution of the orientation program. Some examples of information topics that are not covered at international student orientation include resources on

finding off-campus housing, information about taxes, and information about local transportation. Other topics were insufficiently explained during international student orientation, such as employment authorization procedures, obtaining a Social Security Number, and banking resources. Reported gaps in the execution of the orientation program included that there were few socialization opportunities, that the program was too long, and that an in-person program was preferable to a virtual one.

Root Cause of Problem

The root cause for the limitations in the current pre-arrival and upon-arrival orientation programming is the lack of data driven decision making in improving the program. A thorough assessment of new international students' needs upon arriving in the U.S. or an evaluation of the international student orientation model has not been conducted. Minor adjustments had been implemented, but the overall structure remained unchanged. Furthermore, although CGPS distributed satisfaction surveys after each international student orientation event, the results of these satisfaction surveys were rarely analyzed and used to improve the program. Evaluation was not embedded into the program.

Improvement Goal

Given the limitations of the current pre-arrival and upon-arrival orientation programming, the improvement goal is to increase the quantity and quality of orientation programming to better meet the needs of new international students at UD. To achieve this goal, this ELP focuses on three strategies:

1. Pre-arrival orientation: Adding pre-arrival orientation programming to better meet the needs that new international students have during the pre-arrival phases (Strategy 1).

2. Upon-arrival orientation: Modify the international student orientation to better meet the informational needs of new international students (Strategy 2).
3. Extending beyond orientation: Add programming that takes place after international student orientation (Strategy 3).

As a whole, the three strategies seek to reconceptualize orientation in that orientation is not only a singular event (i.e., international student orientation), but rather a series of programming that includes pre-arrival orientation, upon arrival orientation (international student orientation), and extended orientation during the first semester. Each of the individual orientation programming is designed to meet the specific transition and adjustment needs of each phase within the student lifecycle because the needs that students experience in each phase are different.

Improvement Strategies

Strategy 1 involves addressing the needs of new international students before they arrived in the U.S. and immediately after they arrive in the U.S. During these two phases, many of the needs are similar, as new students are preparing to encounter and transition to a new environment as well as experiencing their new environment. In this strategy, I propose to expand the pre-arrival orientation from one event to several virtual webinars that cover several different topics. Some examples include a webinar on understanding healthcare and health insurance in the U.S., preparing for financial management, the process of obtaining employment and applying for a Social Security Number, and obtaining housing. Furthermore, offering different topics that are relevant for new international students throughout the summer (as opposed to in a compressed period of time such as international student orientation) could reduce

information overload and feelings of overwhelm for students who just arrived in the U.S. and have other priorities with which to attend. Finally, this model also permits students to choose topics that are most relevant, necessary, and/or interesting to them. This strategy of digitally sharing information over an extended period of time is in line with the strategy adopted by many institutions recently (Chang, Gomes, & McKay, 2021).

Strategy 2 involves addressing the gaps of international student orientation by making changes to the content of information topics, the way in which information is conveyed, the duration of the program, and including socialization opportunities. It is expected that making these modifications to the orientation program will better meet new international students' needs in the upon-arrival phase.

One way to extend programming beyond international student orientation is through the First Year Seminar (FYS) class. It is common to offer special sections of FYS for specific populations (e.g., Honors students, education students, athletes, etc.), so that the seminar can be tailored to the needs of specific groups of students. Strategy 3 involves offering a section of FYS for only international students. Although this section only reach a fraction of undergraduate international students, it is an effective mechanism of conveying not only U.S. academic and classroom expectations, but also co-curricular resources. These include understanding rights as an international student, understanding U.S. career readiness, and communicating across cultures. Additionally, the Passport Activity that is embedded in the FYS syllabus allows for opportunities for students to explore the campus and the local community. Some examples include visiting various resource offices on campus, attending Coffee Hour, riding the UD shuttle, and visiting a UD museum with a classmate. These Passport Activities are

designed to facilitate the transition and adjustment to UD and the local community, as well as facilitate a sense of belonging to the university.

Measurement of progress

Progress in achieving the improvement goal will be measured by collecting the following data:

- 1) Evaluation on the effectiveness of the pre-arrival webinar series
- 2) Evaluation of the improved international student orientation model
- 3) Evaluation of student learning during the First Year Seminar

This assessment will focus on the following questions:

1. Which pre-arrival and upon arrival support have positively contributed to new international students' transition and adjustment during the first semester?
2. How did the First Year Seminar contribute to undergraduate international students' transition and adjustment during the first semester?

In the next section, I outline the types of artifacts I plan to collect in order to operationalize the improvement strategies outlined above, which aims to achieve the two goals of strengthening the existing pre-arrival programming and international student orientation and bridging the gap of transition and adjustment programming after international student orientation and into the first semester.

Artifact Narrative and Timeline

Artifact 1: Literature Review

The literature review is a survey of how the literature describes and examines international student transition and adjustment, existing and emerging types of

institutional support for international student transition and adjustment (which includes orientation programming), and the unique needs and sources of support of international students during the transition and adjustment periods. This artifact serves as a review of existing and emerging theories on these topics, which will help frame the problem and inform this ELP's improvement goals and strategies. A full draft of the literature review has been written.

Artifact 2: Analysis of Student Needs Assessment

The needs assessment is a survey that was sent to new international students at UD who arrived in the U.S. to begin their program in the fall 2021 semester. This artifact asked new international students about what types of needs or questions they had upon their arrival to the U.S., including those related to academics, immigration, COVID-19, finances, and transportation. Data from the survey informed the improvement goal and strategies.

Artifact 3: Analysis of International Student Orientation Satisfaction Surveys from Fall 2021 and Spring 2022 semesters

This artifact provided an analysis of the results of satisfaction surveys that were distributed to attendees of the international student orientation in fall 2021 and spring 2022 semesters. Findings from these surveys revealed the level of satisfaction of the attendees, topics that were useful to the attendees, as well as shortcomings of the orientation program. Analysis of these findings were used to inform the design of the improvement strategy on international student orientation. A draft of this artifact is complete.

Artifact 4: Design of Pre-arrival Webinars

This artifact contains a design of a pre-arrival webinar series that was piloted in summer 2022, targeted for new international students beginning their program in the fall 2022 semester. The design of the program, including the selection of topics, collaborators, and content of each webinar, was informed by the results of the Needs Assessment Survey (Artifact 2) and the International Student Orientation Satisfaction Surveys (Artifact 3). This artifact contains a description of the webinar series, purpose of each webinar, and how the design of the program was based on literature and data from Artifacts 2 and 3. A draft of this artifact is complete.

Artifact 5: Design of Improved International Student Orientation

This artifact contains a design and plan for an improved international student orientation that will be implemented before the start of the fall 2022 semester. It includes how the improved plan will address some of the challenges of the previous international student orientation format. The design document also includes the materials that will be used in the improved international student orientation. A draft of this artifact is complete.

Artifact 6: First Year Seminar Syllabus and Evaluation Plan

This artifact will contain the syllabus for the first year seminar (FYS) class that I will teach in fall 2022 semester. I will incorporate information from the Needs Assessment Survey (Artifact 2) and the results of the International Student Orientation Satisfaction Surveys (Artifact 3) to build the syllabus. I will identify transition and assessment needs of new undergraduate students that were not met during international student orientation and create activities within the course to meet these needs. Some of these needs include getting around campus and understanding U.S. culture. This artifact will also include an evaluation plan for the FYS class. This

artifact is currently being designed and is expected to be completed by the end of summer 2022.

Artifact 7: Assessment of Pre-arrival Webinars

This artifact will contain an evaluation to assess the effectiveness of the pre-arrival webinars (Artifact 4). Although individual surveys were created for each individual webinar (see Appendix 1 for an example of the survey), an overall evaluation of this webinar series is necessary to measure whether students found this webinar series to be useful in helping them prepare to travel and study in the U.S. This assessment plan is still being designed and will be implemented in the fall 2022 semester.

Artifact 8: Assessment Plan of Improved International Student Orientation

Model

This artifact will outline an evaluation to assess the effectiveness of the improved international student orientation (Artifact 5). This assessment plan will include a pre- and post-test survey that will be distributed to new international students who attend the fall 2021 orientation program. It is expected that this assessment model will be able to better measure the effectiveness of international student orientation, instead of just whether students were satisfied with the program. This assessment plan is still being designed and will be launched during international student orientation in fall 2022 semester.

Table I52 Artifact Table

Artifact	Purpose	Title	Type	Description	Action Steps	IRB needed?	Timeline	Status
1	Inform self and others	Literature review	Synthesis of Attached research	None	No		Draft completed and waiting for feedback	
2	Inform self and others	Needs assessment of new international students	Survey	Attached	None	Yes. Completed	Draft completed and waiting for feedback	
3	Inform self and others	International student orientation satisfaction surveys	Survey	Attached	None	No	Draft completed and waiting for feedback	
4	Address the problem	Design of pre-arrival webinars	Design document	Attached	None	No	Draft completed and waiting for feedback	
5	Address the problem	Design of improved international student orientation	Design document	Attached	None	No	Summer 2022	
6	Address the program	First year seminar syllabus	Syllabus	Attached	None	No	Summer 2022	In design phase
7	Assess progress	Assessment of pre-arrival webinar series	Survey	Attached	Protocol to be drafted and submitted to IRB	Yes	Fall 2022	Proposed
8	Assess progress	Assessment of improved international student orientation	Survey	Attached	Protocol to be drafted	Yes	Fall 2022	Proposed

REFERENCES

- Althen, G. (1990). *Orientation of foreign students*. NAFSA Field Service Working Paper #13.
- Althen, G. (1995). *The handbook of foreign student advising*. Yarmouth, Me., USA : Intercultural Press.
- Ammigan, R. (2019). Institutional satisfaction and recommendation: What really matters to international students? *Journal of International Students*, 9(1), 262–281.
<https://doi.org/10.32674/jis.v9i1.260>
- Ammigan, R., & Caro, C. E. (2020). The international visiting scholar experience: Insights from an importance- satisfaction study. *Higher Education Research and Development*, 1–18.
<https://doi.org/10.1080/07294360.2021.1962813>
- Ammigan, R., & Caro, C. E. (2021). The international visiting scholar experience: insights from an importance-satisfaction study. *Higher Education Research and Development*, 0(0), 1–17. <https://doi.org/10.1080/07294360.2021.1962813>
- Ammigan, R., & Jones, E. (2018). Improving the student experience: Learning from a comparative study of international student satisfaction. *Journal of Studies in International Education*, 22(4), 283–301. <https://doi.org/10.1177/1028315318773137>
- Association for Orientation, Transition, and Retention in Higher Education (NODA). (2021). Definitions & Terminology. <https://www.nodaweb.org/about-noda/definitions-terminology/>
- Bista, K. (2015). Roles of international student advisors: Literature and practice in American higher education. *International Education*, 44(2), 87–101. Retrieved from http://utexas.summon.serialssolutions.com/2.0.0/link/0/eLvHCXMw3V3JTsmwELWg4sAFsVM2-cQlCmo2x0XiwJKSikJQGuCEqiZxJKQsJNJKfD6eOIkdUH-Aa3brWW_G48l7CFnmeU__xQmkZznEzqw-zRLqWixlccITfZa5dMpzhNJUwXMHL-T2gd5Ll0V57D8AHwYjrZQkb6vdQurnPUYaj0PDcRCOoRQw4rwVisYHUJl6CqGl
- Briggs, P., & Ammigan, R. (2017). A collaborative programming and outreach model for international student support offices. *Journal of International Students*, 7(4), 1080–1095.
<https://doi.org/10.5281/zenodo.1035969>
- Center for Global Programs and Services. (2021). *The International Community at UD: Fall 2020 snapshot statistics*.
https://www.udel.edu/content/dam/udelImages/global/oiss/pdfs/2020_CGPS_Comprehensive_Report_web.pdf

- Chang, S., Gomes, C., & McKay, D. (2021). The digital information ecology of international students: Understanding the complexity of communication. In S. Chang & C. Gomes (Eds.), *Digital experiences of international students: Challenging assumptions and rethinking engagement*. Routledge.
- Daddona, M. F., & Cooper, D. L. (2002). Comparison of freshmen perceived needs prior to and after participation in an orientation program. *NASPA Journal*, 39(4), 300–319.
- Glass, C. R., Gesing, P., Hales, A., & Cong, C. (2017). Faculty as bridges to co-curricular engagement and community for first-generation international students. *Studies in Higher Education*, 42(5), 895–910. <https://doi.org/10.1080/03075079.2017.1293877>
- Hadley, W. M. (2009). The transition and adjustment of first-year students with specific learning disabilities: A longitudinal study. *Journal of College Orientation, Transition, and Retention*, 17(1), 31–44. <https://doi.org/https://doi.org/10.24926/jcotr.v17i1.2711>
- Hurtado, S., Han, J. C., Sáenz, V. B., Espinosa, L. L., Cabrera, N. L., & Cerna, O. S. (2007). Predicting transition and adjustment to college: Biomedical and behavioral science aspirants' and minority students' first year of college. *Research in Higher Education*, 48(7), 841–887. <https://doi.org/10.1007/s11162-007-9051-x>
- Ishler, J. L. C., & Upcraft, M. L. (2005). The keys to first-year student persistence. In M. L. Upcraft, J. N. Gardner, & B. O. Barefoot (Eds.), *Challenging & supporting the first-year student: A handbook for improving the first year of college*. San Francisco, CA: Jossey-Bass.
- Institute of International Education (2021). “International Students by Academic Level, 1999/00 – 2020/21.” Open Doors Report on International Education Exchange. Retrieved July 14, 2022 from <http://www.opendoorsdata.org>
- Kimoto, L. (2009). The English language instructor: A bridge to support services on campus. In M. S. Andrade & N. W. Evans (Eds.), *International students: Strengthening a critical resource*. Rowman & Littlefield Education.
- Koo, K., Baker, I., & Yoon, J. (2021). The first year acculturation: A longitudinal study on acculturative stress and adjustment among the first year international college students. *Journal of International Students*, 11(2), 278–298. <https://doi.org/10.32674/jis.v11i2.1726>
- Matheson, R., & Sutcliffe, M. (2018). Belonging and transition: An exploration of International Business Students' postgraduate experience. *Innovations in Education and Teaching International*, 55(5), 576–584. <https://doi.org/10.1080/14703297.2017.1279558>
- Moogan, Y. J. (2020). An investigation into international postgraduate students' decision-making process. *Journal of Further and Higher Education*, 44(1), 83–99. <https://doi.org/10.1080/0309877X.2018.1513127>

- Nassim, S. Z. (2011). *The world is knocking on our doors: Examination of the experience of first-year undergraduate international students and support services programs available to them at the University of Delaware.*
- Perez-Encinas, A., & Rodriguez-Pomeda, J. (2018). International students' perceptions of their needs when going abroad: Services on demand. *Journal of Studies in International Education*, 22(1), 20–36. <https://doi.org/10.1177/1028315317724556>
- Smith, R. A., & Khawaja, N. G. (2011). A review of the acculturation experiences of international students. *International Journal of Intercultural Relations*, 35(6), 699–713. <https://doi.org/10.1016/j.ijintrel.2011.08.004>
- Strayhorn, T. L. (2019). College students' sense of belonging: A key to educational success for all students. In *College students' sense of belonging: A key to educational success for all students* (2nd ed). Routledge.
- Terrazas-Carrillo, E. C., Hong, J. Y., & Pace, T. M. (2014). Adjusting to new places: International student adjustment and place attachment. *Journal of College Student Development*, 55(7), 693–706. <https://doi.org/10.1353/csd.2014.0070>
- Upcraft, M. L., Gardner, J. N., & Barefoot, B. O. (Eds.). (2005). *Challenging & supporting the first year student: A handbook for improving the first year of college.* Jossey-Bass.
- Vasilopoulos, G. (2016). A critical review of international students' adjustment research from a Deleuzian perspective. *Journal of International Students*, 6(1), 283–307.
- Young, N. E., & Althen, G. (2013). *The handbook of international student advising* (3rd ed.). Intercultural Interaction LLC.
- Yu, X., Isensee, E., & Kappler, B. (2016). Using data wisely to improve international student satisfaction: Insights gained from International Student Barometer. In K. Bista & C. Foster (Eds.), *Exploring the social and academic experiences of international students in higher education insitutions* (pp. 212–232). <https://doi.org/http://doi:10.4018/978-1-4666-9749-2.ch012>