

**ARTISTICALLY CREATIVE DECISION-MAKING OF UNDERGRADUATE
COLLEGE STUDENTS IN A MEDIA ARTS COURSE**

by

Tanner McMullen

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Tanner McMullen

Approved: _____
Suzanne L. Burton, Ph.D.
Professor in charge of thesis on behalf of the Advisory Committee

Approved: _____
Mark Clodfelter, M.M.
Interim Director of the School of Music

Approved: _____
John A. Pelesko, Ph.D.
Dean of the College of Arts and Sciences

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

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ABSTRACT

Artistic creativity and creative thinking help students solve problems in and out of the classroom as well as develop skills to adapt to their changing world. Artistically creative decision-making has been largely unexplored at the collegiate levels. As a result, many undergraduate students are not able to develop their artistic creativity in an academic setting. Undergraduate students' participation in artistic creativity can provide a more individualized and meaningful musical experience allowing for deeper connections with the arts. Teachers can provide students with powerful, artistically creative experiences in the classroom that can translate to lifelong musical participation and connection. Conclusions from this study provide a more complete understanding of one undergraduate student's artistically creative decision-making. The student in this study made artistically creative decisions according to internal and external influences, access to media arts tools, and a product-oriented view of creativity. These conclusions will inform pedagogical practice and curriculum development of media arts in higher education and add to the limited research in pedagogical practices for facilitating artistic creativity and artistic decision-making in higher education as well as provide suggestions for future research.

Chapter 1

ARTISTICALLY CREATIVE DECISION-MAKING OF UNDERGRADUATE STUDENTS IN A MEDIA ARTS COURSE

Media arts, is defined as “. . . a unique medium of artistic expression that can also amplify and integrate the four traditional art forms by incorporating the technological advances of the contemporary world with an emerging skill set available to students and teachers” (Olsen et al., 2012, p. 5). Media arts is an essential art form through which PK-12 students express themselves and make meaning of the world around them (Bequette & Brennan, 2008; Greher & Burton, 2021). Media arts is ubiquitous in students’ daily lives, though there is little consideration for how media arts are employed in higher education. Offering artistically creative experiences for undergraduate students can facilitate creative connections between their personal lives and their collegiate education (Allsup, 2008; Green, 2005). To provide students with opportunities for artistic creativity through the medium of media arts, teachers must foster environments that support artistically creative opportunities.

Significance of the Study

Researchers (Nordin & Malik, 2015) have identified that undergraduate college students have the capacity to be creative. Media arts is one pathway for students to explore their artistic creativity. However, teachers are often unsure of how

to facilitate artistically creative experiences for their undergraduate students (Kettler et al., 2018; Nordin & Malik, 2015). There is a distinct need for research on best pedagogical practices to bring undergraduate students artistically creative challenges in the classroom. When educators have a foundation of pedagogical content knowledge to facilitate artistic creativity, undergraduate students will then be provided with opportunities to develop their artistically creative decision-making in an academic setting. Undergraduate students must therefore be given experiences in artistic creativity throughout their education to foster their creative capacities.

Definitions of Key Terms

I define key terms that I will use in this study. These key terms included are important to understand as they form the foundation of this study, and I use the terms listed as I describe the artistically creative decision-making of undergraduate college students.

Artistically Creative Decision-Making- Decisions made toward the completion or development of a creative product specific to the domain of the arts (Chemi, 2017; Lefford & Thompson 2018).

Creativity- Conceiving and developing new artistic ideas and work (National Core Arts Standards, 2014).

Digital Audio Workstation (DAW)- A computer software program that allows users to mix, edit and compose audio and video.

Media Arts- A medium of the arts that incorporates digital technology with the four traditional art forms of dance, music, theater, and visual art (Olsen et al., 2012, p. 4).

Stimulated Recall Procedure- Stimulated recall procedure is an interviewing technique to investigate cognitive processes by inviting participants to recall their concurrent thinking during an event when prompted by a video sequence or some other form of visual recall (Fox-Turnbull 2009).

Research on Creativity

Research in creativity dates back over a century and continues to shape our understanding of how individuals experience the creative process toward the completion of a creative product. For example, Wallas (1926), a psychologist and expert on creativity, suggested the development of a creative product comprises the following stages: (a) preparation, or information gathering, (b) incubation, the thought and development of ideas, (c) illumination, the “aha” moment, and (d) verification, or the refining of ideas. Wallas’ model continues to be used in research to describe and understand how creative processes and products are developed (Webster, 2002).

A pillar of research on creativity is the *4 Ps*, a framework used to describe the creative process and development of associated creative products (Rhodes, 1961; Tang & Werner, 2017). In the *4 Ps* model, creativity is viewed with emphasis on the (a) *person*, or the creative individual; (b) *press*, the circumstances and environment at the time of creation; (c) *process*, how the creative product was made; and (d) *product*, or what was made. Through the lens of the *4 Ps* researchers can gain deeper insight of not

only the creative person and product but the circumstances that led to the creation by using this framework as a way to analyze the creative process.

Scholars of creativity, like Guilford (1950), argued that divergent thinking, or generating multiple solutions to a problem, and convergent thinking, or selecting an idea, is essential to the creative process. Torrance (1974) developed the well-known Torrance Tests of Creative Thinking (TTCT), a reliable and valid test that evaluates a person's fluency, flexibility, originality, and elaboration of ideas. Other researchers such as Sternberg (1988), explored the creative person and the circumstances that can be conducive to creativity, arguing that defiant thinking and certain personality traits such as defiant thinking and willingness to challenge the norms of a domain, can lead to creative behaviors (Sternberg, 1988).

On the other hand, Csíkszentmihály (1998) analyzed creative individuals, or those who produce a novel idea to an existing domain, through the lenses of domain, field, and person. Much like the 4 Ps approach, Csíkszentmihály's view of creativity focused on how an individual functions in the particular domain in which they create, and the extent to which their work is accepted by the experts in the domain (Csíkszentmihály, 1998).

What these researchers highlighted is that no matter how the creative product is made, or who makes it, the circumstances surrounding the individual, tools at their disposal, and predispositions to thinking and the ways an individual views a task are essential to understanding a creative person. By understanding the creative person, one

can then step back and examine their creative process in the context of the press, process and finally the product.

In the Classroom

In today's 21st century world, where technology is rapidly evolving, "creativity and innovation are essential for the development of the necessary skills to flourish in the 21st century, as well as to promote essential skills for successful student and workplace achievement" (National Coalition for Core Arts Standards [NCCAS], 2016, p. 19). Instructors in higher education can use techniques such as questioning, comparing, contrasting, exploration, and discovery learning as found in the PK-12 classroom. When educators incorporate creative activities in the classroom, students synthesize the information received in their daily lives and in the instructional milieu (Eddles-Hirsch et al., 2020; Whitcomb, 2013).

Creativity, or changing an aspect in an already existing domain, requires individuals to make decisions in the process of creating a novel product (Csíkszentmihály, 1998). Teachers can prepare students for artistically creative endeavors by incorporating experiences that require artistic decision-making. Teachers' facilitation of opportunities to explore artistic creativity and artistic decision-making, can help students develop habits and skills they can use in their daily lives.

Artistic Creativity and Artistic Decision-Making

To differentiate artistic creativity from general creativity, one must identify the context through which one is creating and in which domain one is creating. Chemi (2017) defined artistic creativity as, “The production of a perceptible, novel and useful product that is specific to the domain of the arts” (pp. 139-157). For a creative product to be considered artistically creative, it must be created in the domain of the arts.

Lefford and Thompson (2018) investigated the artistic decision-making of music producers in the recording studio. In this context, artistic decision-making was described as “musical and artistic decisions that involve making actions and decisions [that] accumulate and impart attributes and defining characteristics upon the emergent artefact . . . every production and every recorded artefact is unique” (p. 2). Artistic decision-making consists of the steps one takes while completing an artistically creative product. Lefford and Thompson described artistic decision-making through the Beatles’ development of “Sgt. Pepper’s Lonely Hearts Club Band” (1967, p. 2):

The Beatles did not enter the studio to record Sgt. Pepper’s Lonely Hearts Club Band (The Beatles 1967) as we know it today. They entered the studio to record a collection of half-finished songs, and at junctures in the creative process, they took decisions about future actions. Production goals, the Beatles’ goals, any creators’ goals are the least defined and most vague at the start of the production process but, over time, actions and decisions accumulate and impart attributes and defining characteristics upon the emergent artefact.

Lefford and Thompson then described artistic decision-making from the perspective of an individual taking part in the development of a musical work. Researchers (Lefford & Thompson, 2018) concluded that when making artistic decisions to develop a creative product, the individual relies on personal aesthetic preferences, genre norms, listener expectations, and how the final product will be perceived or consumed by people.

Creative individuals implement artistic decision-making throughout their artistically creative processes as they complete a product. Artistically creative decision-making leads to a synthesis of their artistically creative experiences. Through artistic decision-making, one makes choices that lead to the development of an artistically creative product. An education that focuses on artistic creativity provides students with opportunities for artistic decision-making and development of artistically creative practices that are relevant to their daily lives (Lefford & Thompson, 2018).

Media Arts

Artistic creativity and artistic decision-making through media arts requires the coalescence of several artistic media to create a final product:

Media Arts education encompasses interconnectivity across all disciplines and domains, artistic and academic elements, aesthetics, and forms for the purpose of learning and creating in the arts. Media artworks are intrinsically interdisciplinary, integrative, and expressive, inclusive of imaging,

sound, moving images, virtual and interactive components. (Massachusetts Department of Elementary and Secondary Education, 2020, p. 1)

Due to its interdisciplinary nature, media arts are conducive to the exploration of one's artistic creativity and artistically creative decision-making. Students can use media arts as a way to express themselves in a medium that has become extremely relevant in their at-home experiences (Regelski, 2006). Be it through text messaging, social media, listening to music, watching television, or advertisements, media arts are a significant part of students' lives.

The unique ability of media arts as a gateway to artistically creative decision-making is highlighted by the National Art Education Association (NAEA): "While media arts forms depend on technological tools, the tools are a vehicle for communication and creative processes . . . media arts education provides learners the essential skills of creativity, visual/media literacy, digital citizenship, and the ability to learn effectively via a variety of processes" (NAEA, 2019, p. 1). NCCAS (2016) specified that educators should implement "creative practices as the bridge for the application of the artistic processes across all learning" (p. 6). Introducing creative practices through media arts such as digital audio workstations (DAWs) and MIDI provide a pathway for students' convergent and divergent thinking (Kennedy, 2002), synthesis of ideas, and a way to generate ideas, revise, and collaborate (Tobias, 2010). In the PK-12 realm, media arts are uniquely suited for students to explore their artistic creativity and reflect upon their artistically creative decision-making. Yet, there is a

significant lack of research on how to facilitate these practices through media arts at the undergraduate collegiate level.

Implementation and Challenges

Today, media arts are gaining recognition as an important area of PK-12 arts education with many states beginning to include media arts standards in their PK-12 curricula but implementation of media arts for undergraduate college students is unclear. In higher education, standards addressing media arts or artistic creativity appear to be nonexistent. Arts standards at the PK-12 levels are well established through the common core and individual state standards. Yet, in higher education there appear to be no overarching standards or guidelines to establish and support educational goals for collegiate students to experience artistically creative decision-making through media arts. With a lack of standards and a clear framework, educators and administrators often struggle with how best to implement these practices in the post-secondary curriculum.

Watson (2018) discovered that, at the institutional level, it is possible for teachers to have a lack of support in teaching creative activities. Teachers reported they felt the administration was critical of “Creative tasks that seemed to focus on playing [e.g., games] rather than learning” (Watson, 2018, p. 19). This pressure may discourage teachers from implementing beneficial creative opportunities in their classrooms that students may connect with and enjoy.

Kettler et al. (2018) showed that some teachers perceived creative characteristics such as impulsiveness and nonconformity as poor behavior in the classroom and may punish the students for exhibiting these behaviors rather than directing them to a creative goal. These pressures experienced by students may inhibit their willingness to be creative in the classroom even when presented with the opportunity. However, Kettler et al. found that teachers can change their perceptions on creativity. Professional learning can dispel incorrect assumptions about creativity and introduce techniques to foster artistically creative decision-making in the classroom.

Media Arts in Practice

At the collegiate level, Tobias (2010) conducted a study on the experiences of undergraduate college students in a songwriting class. The students participated in artistic creativity through the means of songwriting and media arts. Participants were tasked with writing songs in conjunction with DAWs, MIDI, and recording equipment to finalize, edit, and shape their creative products.

Tobias found students' use of media arts in composition provided them a means to “edit and manipulate pitch and rhythmic content in ways that may have been difficult if forced to use standard notation” (p. 68). Students valued authentic artistically creative experiences in making, recording, and editing their own music in a similar way that professionals create the popular music that they listened to. Tobias also described skills students used throughout the creative process of “recording and

mixing” that “required critical, divergent, and convergent thinking through their music” (p. 537). Further, Tobias’ demonstrated the benefits of facilitating artistic creativity and artistically creative decision-making through media arts in the collegiate setting. Because of the everyday presence of media arts in students’ lives, incorporating media arts into the collegiate curriculum was a genuine pathway for students to be artistically creative.

While the research is scant in how to apply artistically creative decision-making at the collegiate level, researchers have highlighted how beneficial media arts can be in introducing artistic creativity and artistically creative decision making to students. Media arts allows for the unique opportunity for undergraduate students to synthesize several artistic media to create a final product.

Students and Media Arts

Undergraduate students regularly consume multiple forms of media by listening to music on music streaming platforms, watching videos, completing assignments for class online, or using the internet for recreation (Pepler, 2010; Regelski, 2006). Collegiate students have an interest in media arts, and many choose to teach themselves the tools to create at home (Draves, 2008; Greher & Burton, 2021). A media arts education can enable students to develop the skills to be active participants in the digital landscape around them (Regelski, 2006; Tobias, 2010). Due to the presence of media arts in students’ daily lives, a comprehensive media arts education is crucial.

Unfortunately, undergraduate collegiate students are not being given these artistically creative experiences (Nordin & Malik, 2015). In higher education, researchers have found that undergraduate college students are not offered curricular options to practice and develop their creativity. Students feel limited in their ability to be creative and express creativity in an academic setting (Alencar, 2016; Nordin & Malik, 2015). Nordin and Malik (2015), found that college students perceived barriers to creativity in the classroom such as the need for conformity and emphasis on task achievement (Nordin & Malik, 2015). Undergraduate students highly value creative activities in their college education, even if some did not realize its importance until much later (Watson, 2018). These barriers and challenges to artistic creativity may prevent undergraduate students from fully developing their creative potential (Nordin & Malik, 2015).

Purpose and Research Questions

Understanding undergraduate students' artistically creative processes will provide educators with a more complete view of how students experience artistic creativity through media arts. By comprehending how undergraduate students' express their artistic creativity through media arts, educators will gain tools to adapt their instruction to serve students' artistic creativity in an academic setting. Therefore, the purpose of this research was to explore how an undergraduate college student experiences artistically creative decision-making through a media arts project. The following research questions will be addressed:

1. In what ways do undergraduate college students employ artistically creative decision-making as they recall the development of their media arts project in a media arts-based course?
2. How do undergraduate college students describe their media arts project upon completion?

By focusing on undergraduate college students' artistically creative decision making in a media arts course, I hope to gain insight into how they experience artistic creativity through media arts, and how they reflect on their completed media arts project to inform pedagogical practices.

Chapter 2

RELATED LITERATURE

Creativity and artistic expression are an important part of a well-rounded curriculum (NCCAS, 2016). Education organizations such as the National Coalition for Core Arts Standards (NCCAS) have emphasized the need for PK-12 students to explore their artistic creativity in school. At the collegiate level, there are no core standards guiding educators on how to implement creativity and artistic decision-making into the curriculum. While there has been some success establishing artistic creativity and artistic decision-making practices at PK-12 levels, a survey of the literature has revealed a lack of research about implementing these activities at the undergraduate level. By examining research conducted in artistic creativity, songwriting, digital music making, and artistic decision-making I became interested in research exploring the artistic decision-making of undergraduate college students.

Creativity at the Undergraduate Level

Nordin and Malik (2015) investigated undergraduate college students' perceived barriers to creative thought and innovation in the classroom. They were interested in how undergraduate college students experience creativity in an academic setting, to explore this curiosity Nodin and Malik (2015) addressed the following:

- To Identify the levels of barriers to thought and innovative action among the undergraduate students of the faculty of Education UiTM, Shah Alam

- To examine the significant difference between barriers to creative thought and innovative action in gender
- To examine the significant difference between barriers to creative thought and innovative action in program
- To examine the significant difference between barriers to creative thought and innovative action in hometown. (p. 4)

Using a cross-sectional design, Nordin and Malik (2015) surveyed 213 undergraduate college students enrolled at UiTM, Shah Alam from a variety of majors. The researchers collected data using a 36-item, seven-point Likert-type scale that measured “. . . [The] degree of inhibitors affecting a person’s ability to create and innovate, issues related to self-esteem, elements that deal with self-confidence, and behavior associated with risk taking” (p. 5). Nordin and Malik found that a majority of students identified moderate to low levels of perceived barriers to creative thought. Of the 213 participants, 56.8% of students identified moderate perceived barriers, and 43.2% of students identified low barriers to creative thought. There were no significant differences with gender nor hometown being related to how students perceived barriers to creative thought and innovative action. Nordin and Malik suggested “educators play an important role in promoting, encouraging and nurturing creativity and innovation in classrooms” (p. 7). Educators are important to students’ perceived barriers to creativity, or lack thereof, as they set classroom expectations, assignment guidelines, and establish the class environment. To promote and nurture creativity in

the classroom, teachers should incorporate activities that include divergent thinking, problem solving, and providing new perspectives.

Nordin and Malik (2015) demonstrated that the undergraduate students in this study were experiencing barriers to creativity in the classroom. This study influenced the way in which I framed my thesis. Nordin and Malik investigated the experiences of undergraduate college students and their perceptions of creativity in the classroom. Similarly, my study investigated the ways in which undergraduate college students experience creativity in a college environment. While Nordin and Malik implemented a survey approach to data collection, I will be focusing my research on the creative decision-making of a single student in a media arts class. Using this study as foundational knowledge into the lack of creative activities in the classroom demonstrates a need for research into how undergraduate students perceive artistic creativity in an academic setting.

Creativity Through Media Arts Instruction

As Nordin and Malik (2015) highlighted in their research, undergraduate college students felt that they do not have options to be creative in an academic environment. This demonstrates a need for educators to adapt their instruction to better serve undergraduate students' creative needs. Airy and Parr (2001) studied how students experienced creativity in the classroom through technology, in this case, composing with MIDI. Through semi-structured interviews with students, Airy and

Parr (2001) “investigated student perceptions of the educational usefulness of writing music using MIDI sequencing software packages” (p. 1).

This study was conducted at a polytechnic tertiary school that offered courses in audio engineering and music production. As part of the curriculum, all students study MIDI for diploma requirements. Participants of this study consisted of both audio engineering and music production degree programs. The majority of students had not experienced music education. After 10 weeks of using the MIDI software, students engaged in a semi-structured interview that investigated their musical background, experience with computers, then their experiences in composing with MIDI. Researchers (Airy & Parr, 2001) found that through MIDI, participants without formal music knowledge felt more welcome to create as there was not as much of an emphasis on technical ability which may have scared these individuals away from more “traditional” means of music making such as instrument playing. Airy and Parr (2001) suggested that MIDI allows students to rapidly prototype ideas and attempt musical ideas that they may not have the skills to perform on a more traditional instrument. Airy and Parr (2001) stated “there is good reason for the educational application of MIDI technologies to be explored further. There is evidence to suggest that with these MIDI sequencers students write music faster and to a higher standard” (p. 48).

The study by Airy and Parr (2001) is influential to my own research. They emphasized the benefits of exploring creativity through a digital interface. They also suggested that due to the nature of MIDI, students were able to engage in rapid

prototyping, copying, and pasting of musical ideas, ease of editing, and experience low barriers of entry. I am curious if these factors will encourage creative processes, divergent thinking, and creative decision-making without the need for technical proficiency on traditional instruments. The participants of my study will be similar to the participants in the work of Airy and Parr, consisting of tertiary students, who are not music majors. Airy and Parr's procedure of interviewing 10 weeks after working with software will influence how I will frame my study. I was curious about students' retrospective view of their own creative process, and the study conducted by Airy and Parr served the development of my research questions.

Technology as a Tool

Tobias (2010) examined secondary students' musical engagement and learning through songwriting in a music technology class. Tobias addressed the following research questions.

In what ways are students engaging with music in the songwriting and technology class (STC), What are students learning through their engagement in the STC, how do students reflect on their work and participation both during class (in the moment) and outside of the immediate STC context (on the moment), In what ways do students' musical engagement in the STC intersect with their musical engagement outside of school. (p. 331)

To answer these questions, Tobias observed high school students enrolled in the STC over the course of six weeks. Data were collected in the forms of participant

observation, field notes, video recordings, students' video-based reflection, and two semi-structured interviews. Tobias concluded that throughout the course of the study, participants engaged in many creative processes and did so in different ways. Students engaged in these creative processes differently depending on the project, context, and peer group with some students sequentially working on their projects, while others took a more recursive approach.

Tobias observed students participating in a variety of creative processes such as generating ideas, planning, organizing, rehearsing, listening, editing, notating, and implementing convergent and divergent thinking. Tobias concluded that students drew upon various styles of popular music and concepts from their out of school experiences as inspiration and models for their own work. Tobias found that students were able to reflect on their work when prompted by a researcher or peer.

Tobias' in this study, sought to gain a deeper understanding of how students learn in a songwriting and technology class. I will also explore how students experience artistic decision-making through media arts. I will draw upon aspects of Tobias' data collection procedure such as the use of field notes, and semi-structured interviews, as Tobias demonstrated these means of data collection produce rich, descriptive content of the learning process when reflecting on the creative process. Tobias conducted the second set of semi-structured interviews in retrospect to gain an understanding of how students' look back on their creative experiences. The findings provided by Tobias are promising to my own data collection process, as participants'

reflection on a creative experience after it occurs can lead to quality data that can inform observation on student experiences in creativity and the creative process.

Continuing work from the 2010 study, Tobias (2012) through a single intrinsic case study explored how students in a high school songwriting and technology class (STC) engaged with music, creativity, recording, and production of original works using music technology. In this study, Tobias addressed the following research question, “In what ways are students engaging with music in the STC” (p. 331). Over the course of several weeks, Tobias observed, interviewed, and collected multimedia recordings of the students in the STC. The class in which the study was conducted is “. . . part of a high school program with the goals of teaching students how to ‘create, record, mix and produce original songs with a focus on technical components related to live sound, recording and production’” (p. 331). Tobias concluded that students used different processes in the creation and decision-making for each of their projects. While students completed their projects, Tobias observed students experienced multiple parts of the creative process simultaneously. For example, some students started with song lyrics, others started writing their music through their instruments or DAW then wrote. Other students produced and mixed their projects as they created them. One of the most substantial findings in this intrinsic case study was the idea of hyphenated musicianship. Tobias described his observations as follows:

Given the fact that the participants often embodied multiple roles at different points through the trajectory of their projects and/or simultaneously in various configurations, they enacted idiosyncratic forms of hyphenated musicianship.

This was afforded by opportunities for students to develop and apply skills and understanding indicative of each role they embodied. (p. 341)

Tobias observed students exploring their own skill sets and adapting their projects to what they were able to do. I will draw upon this study in both establishing a foundation of my research as well as a framework to guide my observations. Tobias' findings were intriguing to me as I explore the creative processes of students working with music and media arts. Using Tobias' findings as a guide for my own analysis will help me to gain a deeper understanding of students' creative decision-making throughout their project.

Artistic Decision-Making

In a qualitative case study, Lefford and Thompson (2018) investigated the use of naturalistic decision-making as a lens to view the creation of a musical product in a professional music studio setting. Lefford and Thompson addressed the following research questions: "Is it possible to observe musical creators directing their own decision-making processes at creative junctures? Is there evidence of metacognitive reflection?" (p. 545). To answer the research questions, Lefford and Thompson relied on data previously collected from a study on creative systems. Researchers (Lefford & Thompson, 2018) observed the practices of a record producer and audio engineer in a commercial studio in Liverpool as they worked on creating creative products. Data was collected over the course of three days while the participants worked to finish a recording project. Methods of data collection consisted of CCTV video footage and

audio recordings. Data were analyzed for metacognitive processes in the artistic decision making of the participants as they completed their creative work. Lefford and Thompson found that applying naturalistic decision-making to view the creative processes of individuals was difficult, and this model may not be the best means to observe these processes. Lefford and Thompson concluded that participants of the study implemented multiple creative solutions in completing their artistic products. These creative decisions were reliant on both external expectations such as genre norms, as well as personal musical preference. The creative decisions Lefford and Thompson observed were described as *artistic decision-making* “. . . actions and decisions accumulate and impart attributes and defining characteristics upon the emergent artefact” (p. 544).

The term “artistic decision-making” from Lefford and Thompson (2018) will be used throughout this study. Lefford and Thompson described artistic decision-making as “. . . actions and decisions accumulate and impart attributes and defining characteristics upon the emergent artefact” (p. 544). Using the term and definition provided by Lefford and Thompson will help to focus my data analysis. Drawing upon Lefford and Thompson’s analysis of a music producer’s artistic decision making will serve as a frame to better understand undergraduate students’ metacognition throughout their artistically creative decision-making processes and how they may use artistically creative-decision making to create a final product.

Summary

As prior researchers have emphasized (Nordin & Malik, 2015), undergraduate college students do not feel as though they are being provided with creative experiences in their education, and if they are, these students feel they cannot be truly creative. There is a significant lack of research in both understanding the creative processes of undergraduate college students and the implementation of creative experiences at the undergraduate level.

With these issues in mind, I designed my own study based on the findings of prior researchers to both gain insight into the creative processes and artistic decision-making of undergraduate college students, as well as to better understand how educators may facilitate these experiences in their own teaching. To do so, I relied on research at both the PK-12 level and preliminary work on the tertiary level (Airy & Parr, 2001; Tobias, 2010; 2012). This prior research not only helped to guide my research questions but helped to guide the design of my research.

By exploring undergraduate students' creative processes, one must also look at artistic decision-making, as the artistic decisions students make throughout the course of their project lead to its result. The aforementioned studies on the experiences of undergraduate college students and their use of digital media have informed the development of my research questions and the overall design and methodology of my study.

Chapter 3

METHODOLOGY

The purpose of this research was to explore how an undergraduate college student experiences artistically creative decision-making through a media arts project.

For this research, I explored the following research questions:

1. How do undergraduate college students employ artistically creative decision-making as they recall the development of their media arts project in a media arts-based course?
2. How do undergraduate college students describe their media arts project upon completion?

To answer these questions, I used a qualitative design in the form of an exploratory case study, which is used to gain a deeper understanding of a phenomenon when there is a lack of existing research (Mills et al., 2010).

Context

An undergraduate media arts course at a mid-sized East coast university in the United States was the context for this study. The course was a 75-minute class with 11 students held twice a week over 15 weeks for which I am the instructor of record. In this class, students developed skills in media arts using digital technologies such as digital audio workstations (DAWs), video editing software, MIDI, and online resources. Students engaged in weekly projects that they shared with their peers in class for reflection and feedback. As their final assignment, students were asked to

create a digital media arts project that incorporates skills they developed over the duration of the semester. Projects could include but were not limited to music videos, found sound compositions, foley artistry, video game music, soundtracks, commercials, or a project of their own choosing. Throughout the semester I became increasingly intrigued in students' artistically creative processes and decision-making as they participated in the peer feedback portion of class. After the semester was completed, I set out to recruit participants.

Participant

To select eligible participants, I implemented purposive and voluntary response sampling for this study. Purposive sampling was used as participants must have met a set of selection criteria (Merriam, 1998). In this case, the requirements consisted of undergraduate students who completed the media arts class and completed a final media arts project. According to Merriam (1998), the use of purposive sampling and reliance on criteria to find participants leads to "The identification of information rich cases" (p. 62). This method of voluntary sampling ensures that participants were both willing to participate and discuss their creative processes throughout designing their media arts project. I contacted all students in the course who were eligible to participate (see Appendix B). One student who was eligible responded, volunteered via email to agree to participate, and completed the participant consent forms (see Appendix C).

Dave

Dave (pseudonym) was an undergraduate college student between the ages of 18-21 and a junior attending the university in which this study was conducted. Dave was a student in the media arts course who volunteered to take part in this study. He had no formal training in music or composition prior to this class. Dave was familiar with DAWs and had experimented with music making in his free time before taking the media arts course.

Dave's inspiration for his final project was to create a video game soundtrack in conjunction with his girlfriend, Liz, who was taking a separate video game design class and tasked with creating a video game for her final project in said class. Dave approached me about the possibility of creating the soundtrack for Liz's video game as his final project. This was approved by me as incorporating digital music making with a video game project seemed like a unique opportunity for collaboration and artistically creative decision-making.

Conceptual Framework

Students' participation in artistically creative practices allows them to make personal and meaningful connections with the arts through artistic experiences (Adams, 2022; Draves, 2008). After two years of in-class observations and student feedback, I noticed a gap in curricular offerings that allowed for artistic creativity and artistically creative decision-making at the collegiate level. Undergraduate students had expressed a sincere desire for artistically creative course offerings, but these

options were not available to them in the collegiate setting. These student experiences are not unique, as other researchers have also documented a lack of creative experiences at the collegiate level (Nordin & Malik, 2015). My own curiosity about how undergraduate students employ creativity in the classroom as well as the desire for more knowledge of the facilitation of artistically creative experiences in an academic setting formed the basis of this study.

Creativity is an essential skill worthy of development and practice. When developing creative skills, students can learn to question, compare, contrast, explore, generate ideas, and synthesize their lived experiences. These creative skills are essential in a world where problem solving and creating what Csíkszentmihályi (1998) described as “novel products” is key to an innovative and progressive world. Students’ participation in artistically creative decision-making, or how one applies creativity in the process of creating an artistic product, allows them to put creativity in context. By employing creative thinking to make decisions, students are practicing and developing their own artistically creative voice and developing meaningful creative products that are a synthesis of their daily lives.

Creativity and artistically creative decision-making are skills I believe are essential to students’ education at the collegiate level. Through my observations, students wanted, but were not able, to develop their artistic creativity in an academic setting. By researching how undergraduate students employ artistically creative decision-making in the classroom, I looked to provide a basis of understanding for educators to help them support students' creativity at the undergraduate level. By

including artistic creativity and artistic decision-making in school, teachers give students circumstances to develop and explore their artistic creativity. As a result, students can apply these creative skills to artistically creative endeavors outside of the classroom and learn skills they may not have otherwise experienced.

Researcher Bias

As the instructor of the media arts course for a year and a half, I have completed and shared the same projects as the students. As part of my instruction, I create examples of projects both in and out of class to help students better understand what is expected. Completing the course content has helped me relate to the participant's creative process and helped me to understand how students may approach these projects. Over three semesters of instruction, participation and observation, I have developed some ideas of how I believe students use creative processes when designing projects. These observations have led to curiosities as to how students employ artistically creative decision-making while developing artistically creative products in an academic setting. I kept any assumptions I may have had in check, and to the best extent possible, worked to objectively collect and analyze data and derive interpretations and conclusions throughout the study. I based interpretations and conclusions from data collected, and its analysis pertaining to the conclusions of this study.

I believe all people are inherently creative and have the capacity to be creative. As the instructor of a media arts course and a K-8 music educator at a small private

school, I incorporate musical creativity, improvisation, and composition in my lessons. I believe that with the proper scaffolds and conditions, all students can thrive in a creative setting and make meaningful and powerful artistically creative products. Further, that all forms and genres of music making are important, as they are expressions of both the creator, the listeners, and the world in which the music was created.

Procedure

The following procedure outlines the steps I took to complete this research study. Here, I explain my data collection process, starting with the primary form of data collection: the Stimulated Recall procedure. I then explain the secondary sources of data, which will be used to supplement, and confirm or disconfirm findings in the primary source. After describing the data collection, I outline my data analysis process, in which I use multiple methods of data analysis to collect reliable and rich data. Last, I illustrate the process I used to ensure trustworthiness in my data and describe the scope and limitations of this study. By drawing upon multiple sources of data I triangulated the methods of data collection as well as triangulated findings, which helped me gain a detailed understanding of the artistically creative decision-making of undergraduate college students.

Data Collection

To address the research questions, I collected three forms of data: a video recorded 25-minute interview on the participant's reflection of the final project using the Stimulated Recall method, as well as course artifacts consisting of the pre-class questionnaire (see Appendix D), written reflection of the final project (see Appendix E), and researcher field notes.

Stimulated Recall Interview

The primary data source was a 25-minute semi-structured interview using the Stimulated Recall procedure. The Stimulated Recall procedure was designed using suggestions from Fox-Turnbull's (2009) study. Stimulated Recall is "an effective way to gain the perspectives of learners, their interpretation of events and their thinking at a particular point in time" (Fox-Turnbull, 2009).

For the Stimulated Recall interview with Dave, I provided a laptop computer with his final project loaded on the screen. The interview was video and audio recorded. The video recording captured the participant's completed media arts project as well as the timestamp as it played. This allowed me to pinpoint exactly where in the final project Dave was as he recalled aspects of his artistic decision-making and the creative process. The interview consisted of two full playthroughs of Dave's final project as well as a few follow-up questions after the project viewing was completed to give Dave the opportunity to share any other aspects of the project he felt were important. The participant's Stimulated Recall was video recorded as the video served

as a means for the researcher to connect the participant's responses with specific sections of their media arts project.

First Playthrough

As per the recommendation of Fox-Turnbull (2009), the stimulus needed to be as clear as possible. As this interview took place several weeks after the course had been completed, the first playthrough of the media arts project helped to serve as a reminder to the participant of their project and could jog their memory. Dave was instructed that during this first playthrough he was free to share any aspects of the creative process or artistic decision-making, but the video would not be stopped as this first playthrough served as a reminder of the process.

Second Playthrough

Before the second playthrough started, Dave was verbally given another set of instructions as a reminder of the procedure and what this second viewing of the project would entail. During this playthrough, Dave had the freedom to start, stop, rewind, and fast-forward the video as he pleased. When Dave remembered an artistic decision, he was instructed to stop the video, explain his decision, then resume play.

Final Questions

After both viewings of the project, I gave Dave the opportunity to share any other information he thought was relevant to his creative processes and artistic

decision-making. I also took this time to ask a few questions regarding the context of the project and why Dave decided to choose this project. After this final set of questions was asked, Dave left the interview, and the data were compiled into a folder.

Secondary Sources of Data

The secondary sources of data for this research study consisted of class artifacts such as a “Pre-Class Questionnaire,” (see Appendix D) written final project reflection (see Appendix D), and field notes. These three secondary sources of data served to supplement and confirm findings from the primary source of data collection, the Stimulated Recall interview.

As a routine procedure in the class where the study took place, I send out a “Pre-Class Questionnaire” (see Appendix D) through a Google Form. This questionnaire was sent to students before the first day of classes and provided me with enrolled students’ background information. I used this questionnaire to ask students their name, personal pronouns, major, year, if they have any prior experience working with a DAW, and if they had any concerns about the course. I used this information to adapt instruction and model the curriculum to best suit the students and their needs.

The last class artifact was a written final project reflection (see Appendix E). This final project reflection was completed immediately after students presented their final project to the class. This reflection helped to serve both as a course debrief, as well as a time for feedback from students to adapt instruction for the next semester. Immediately after presenting the project, students in the class were given a link to a

Google Forms document and were asked to respond to several short answer questions to the best of their ability. By asking students to complete this immediately after presenting, I hoped to get an accurate *in-the-moment* representation of their thoughts and experiences in the class and on the final media arts project. All responses were sent to the class TA by the students, and I did not have access to them until the final grades for the course were posted.

Field notes, the final source of data, were a course artifact that was a routine procedure in the course. Throughout the course, after students shared their projects, I asked them to describe their artistically-creative processes including what went well, struggles they may have had, or specific areas of the project that they may need feedback or suggestions. I used these notes to provide feedback to the class and shape the curriculum going forward.

In-the-Moment vs. On-the-Moment Reflections

Collecting data through a Stimulated Recall and course artifacts allowed for an *in-the-moment* (i.e., immediate) reflection and *in-the-moment* (i.e., retrospective) reflection. Tobias (2012) explained the importance of both reflecting *in-the-moment* and *on-the-moment*. When reflecting in the moment, participants share clear representations of their experience without having to rely on stimulated recall or their own personal recollection of the process. An *on-the-moment* reflection is a recollection of an experience after it has happened. *On-the-moment* reflections can give a more detailed reflection and a new perspective that may not otherwise have

been found if just relying on an *in-the-moment* reflection (2012). I used the Google Form as the participant's *in-the-moment* reflection of their creative process to supplement the Stimulated Recall responses and the *on-the-moment* reflection.

Data Analysis

I took the forms of data collected, the video recorded Stimulated Recall and written course artifacts, then transcribed them by hand. These transcriptions were placed into a folder for analysis.

To code the data, I employed in vivo coding. In vivo codes are codes that are found in the data and develop as data is collected (Marshall & Rossman, 2016). The use of in vivo coding was appropriate for this study as it is both an inductive and deductive means of data analysis. According to Creswell and Poth (2018), in vivo coding can be used to represent “expected information that researchers hope to find, surprising information that researchers did not expect to find, conceptually interesting or unusual information for the researcher” (p. 193). I applied in vivo codes as a means of inductive analysis as codes were used to answer the research questions. As Creswell and Poth suggested, I used the research questions to guide my deductive analysis. I implemented deductive analysis through in vivo coding as themes became emergent through the participant's responses in data collection. I analyzed data for emergent themes and patterns, or “surprising information that researchers did not expect to find” (Creswell & Poth, 2018, p.193). The use of inductive and deductive analysis through in vivo coding provided a thorough and detailed analysis of data as I was able to focus

my analysis on answering the research questions, but also had the flexibility to adapt and explore emergent themes throughout the research process. I examined all data for commonality, differences, and relationships to seek emergent patterns and themes relative to the research questions.

Primary Data Source

The primary form of data was the Stimulated Recall interview. To analyze this source of data, I first downloaded the video and stored the video-recorded interview in a folder for ease of access. I watched the interview several times to gain a thorough understanding of the primary data source. Then, I transcribed the Stimulated Recall interview by hand in smooth verbatim. In this transcription, I included markers for when Dave rewound, paused, and resumed the playback of his final project.

After the transcription process was completed, I began the coding process. I used in vivo coding. I compiled the codes into themes, which were stored in a codebook.

Secondary Data Sources

To supplement the primary form of data collection, I relied on secondary sources of data. These secondary sources of data were my field notes, and course artifacts such as the pre-class questionnaire (see Appendix D), and final project reflection (see Appendix E).

To analyze the secondary data sources, I imported the pre-class questionnaire and the final project reflection into a word processing document along with the field notes and stored them in a folder. I read the responses to the course artifacts several times, then began the coding process. Similar to the primary source of data, I searched for emergent codes and codes relative to the research questions using in vivo coding. After finding codes, I compiled them into themes, which were stored in a codebook.

Trustworthiness

Qualitative research relies on the researcher's ability to base findings on observations, participant responses, and prior research (Merriam, 1998). Because of this, it is important to establish trustworthiness in findings to ensure that results are "believable and trustworthy" (Merriam, 1998, p. 218). To establish internal validity, I used triangulation of data, described as "the use of multiple methods to confirm the emerging findings" (Merriam, 1998, p. 204). Using these three methods of data collection ensured triangulation, which is crucial as "no single source of information can be trusted to provide a comprehensive perspective" (Merriam, 1998, p. 137). Using these three data sources I was also able to give a more holistic description of the participant's creative decision-making. As described by Merriam, "Understanding the case in its totality . . . mandates both breadth and depth of data collection" (p. 134). To ensure accurate representation of the data, I shared the Stimulated Recall transcription with the participant as a member check to assure that the transcription captures their

meaning and intent (Marshall & Rossman, 2016). Coded data and transcriptions were also sent to a peer reviewer to confirm or make suggestions to the findings.

Scope and Limitations

During this study, a considerable impact was the Covid-19 pandemic in the implementation of this study. The virus affected every facet of everyday life. This study explored the experience of one undergraduate student. The results of this study are not generalizable to a broader population as the use of artistically creative decision-making can be a unique process for each individual. The way that the undergraduate student who participated in this study experienced artistically creative decision-making while developing a media arts project may be different than another student's experiences.

Summary

Artistically creative decision-making and creative processes of undergraduate college students are largely unexplored at the undergraduate level. Looking to fill this gap in the research, I investigated the creative processes and artistic decision-making of an undergraduate college student taking a media arts course. By studying the artistically creative decision-making of Dave in the creation of a media arts project, I hoped to gain insight into the experiences of an undergraduate student in a creative environment to better inform my own, and other educators' facilitation of artistically creative activities at the undergraduate level.

Chapter 4

FINDINGS AND INTERPRETATIONS

The purpose of this research was to gain a deeper understanding of Dave's artistically creative decision-making to provide educators with a more complete view of students' creative processes in media arts. The research questions explored in this study were: "In what ways do undergraduate college students employ artistically creative decision-making as they recall the development of their media arts project in a media arts-based course?" and "How do undergraduate college students describe their media arts project upon completion?" Data were collected in the forms of (a) a Stimulated Recall interview, (b) class artifacts such as pre-class questionnaire (see Appendix D), a written final project reflection (see Appendix E), and (c) researcher field notes. After data were collected, I began preparing the data for analysis.

Confirmation of Themes

I compared my findings across the multiple data sources searching for agreement or disagreement in the codes and themes. By using multiple methods of data collection, I was able to use the secondary forms of data to confirm or disconfirm themes in the primary source. I triangulated the themes across three methods, an interview, written responses, and observations. Once themes were confirmed across multiple data sources, by a peer reviewer, I compiled the themes into findings.

Findings

Data analysis yielded emergent themes related to the use of a DAW as a creative tool, external and internal influences on decision-making, and product-oriented views of creativity. In this section I expand upon these emergent themes of (a) DAW facilitated decision-making, (b) internal influences, (c) external influences, and how they connect to Dave's employment of artistically creative decision-making while developing a media arts project. These findings pertain specifically to this study and the participant, Dave.

DAW Facilitated Decision-Making

Dave, in his recollection of his artistically creative-decision making, described the use of a DAW as being beneficial to his creative process. Every aspect of Dave's artistically creative decision-making process went through the DAW to achieve the finished project. Due to this reliance on the DAW, Dave used it as a "filter" to test ideas, incorporate new sounds, and finish the media arts project. I found Dave employed a DAW as an asset in the artistically creative decision-making process.

Dave used the DAW as a musical tool to access specific sounds in the development of his final media arts project. Dave described how the DAW was used to custom create specific sounds for his artistically creative decision-making process that he would not have had access to otherwise:

So, I had this idea of a theremin type sound like in my head and I was like
[makes the sound of a sigh] I don't know how do that in Ableton Live 10. So I

spent a, like a crazy long amount of time, figuring out how do I do that. And I think there is one instrument called like an operator where you can adjust the frequency. So, I kinda like messed around to find out what frequencies corresponded to the notes I wanted. Then automated it to go up and down gradually like that to get a theremin type thing, and I was pretty proud of it. (Stimulated Recall interview)

Dave used the DAW Ableton to create specific instruments to achieve a particular effect. For the section of the project Dave discussed, he wanted to incorporate a very particular sound. Without access to the physical instrument that he described, the use of the DAW was critical for him to simulate a similar sound and complete his artistic decision for this section of the project.

Dave recounted in both the interview and his final project reflection that a goal of his final project was to “emulate older video game sound fonts.” (see Appendix E) A sound font is a way to describe the particular timbre and texture of digital music. To achieve this specific sound font, Dave relied on the DAW:

After I put all the songs together, I put them all in one single project and tried to get the old video-gamey feel by removing as many instruments as possible because like old sound cards only had so much capacity. So, I used the bass in here is like the same instrument as the bass playing . . . [Rewinds project to earlier moment] here. (Stimulated Recall interview)

The use of the DAW made it possible for Dave to create the video game sound font he wanted for this project, as the digital nature of the video game music was only

replicable in a digital format. The DAW gave Dave ease of access to these specific sounds. Dave's ability to emulate the video game aesthetic in the music, and the artistic decision to do so was only possible with the DAW.

Dave's artistic decision-making in his final project was influenced by the use of a DAW, as this tool enabled specific sounds, textures, and effects not possible on physical instruments or other means he had access to. Dave's use of the DAW gave him the capabilities to explore sounds and artistically creative decisions drawn from both external and internal influences in his life.

Influences on Decision Making

Dave was involved in making multiple artistically creative decisions as he completed his final media arts project. Dave emphasized in his interview responses that his decisions were influenced by internal and external factors, and as a result, his decision-making changed as he worked on the project based on these factors.

Internal Influences

Internal influences on decision making, or decisions Dave made according to his own personal aesthetic impacted how he implemented artistically creative-decision making in the development of his media arts project. Dave employed many artistically creative decisions based on internal influences.

Dave was passionate about making music for as he described, "an art piece, or artwork" (Final Project Reflection). In the project reflection (see Appendix E), Dave

stated his original intent was to “Make something involving songs set to media” (Final project reflection). The use of a video game helped to serve this personal need, as he liked video games and music, and thus the project was something he became passionate about.

For example, while viewing the first playthrough of his project, Dave recalled and stated how he created the opening theme for the project, “I don’t know if I mentioned this, but like that’s a melody that I had. Like I was sitting on it for like two years. So, I was happy to finally be able to use it in something” (Stimulated Recall interview). Dave employed artistically creative decision-making for himself by including a personal musical theme he wrote and was able to use in his project. The decision to include this personal theme was due to Dave’s own personal preference and was not influenced by external factors. This sentiment was highlighted by Dave throughout all methods of data collection, mentioning this previously composed theme in his final project reflection, as well as when he introduced it during class.

On the second playthrough of the project Dave described his process in creating a song for a shaded forest environment:

I still think it fits, but definitely a lot of the instruments were kind of put there with sort of this vision of like a non-snowy sort of like heavily . . . shaded forest, so in kind of like a darker atmosphere than what is on the screen. It still works but it's kind of what I had in mind when I was doing that. (Stimulated Recall interview)

Dave's internal creative vision for the project influenced his decision making. Dave employed artistically creative decision making to emulate or recreate certain musical ideas he had envisioned, his artistically creative decisions were able to bring that artistic vision to life in the project. While Dave had some visual guidelines and expectations for the scene, he still made the instrumentation decision according to his personal aesthetic preference, or *what he had in mind* when he was creating.

Dave's application of artistically creative decision-making for himself continued as he described his process creating the soundtrack of the cave setting for the project.

And for this song because I wanted to make it a little creepier just because of the cave setting. Umm it's not really, I mean it does have like a tem- It does have a like a like a rhythm to it. Like it's not just all over the place but I did try to space out notes kind of uncomfortably to sort of make- kind of like how horror movie soundtracks do that stuff where they have like weird rhythms and weird instrumentation to sort of make it uncomfortable ... I sort of used that in the structure of this. (Stimulated Recall interview)

Dave described an artistic vision he had for a scene in the video game for which he was composing. To make this personal artistic vision happen in the project, he employed artistically creative decision-making in the form of orchestration, rhythm, and timing to achieve the goal of a horror movie setting.

Throughout the development of his media arts project, Dave drew upon his own person aesthetic preferences as he employed artistically creative decision-making.

These internal influences helped to give his project a unique and personal voice that Dave was passionate about and could relate to.

External Influences

External influences on decision-making were the decisions Dave made due to external factors or influences such as assignment guidelines, deadlines, or other expectations of the project from peers or collaborators as opposed to decisions made for personal aesthetic preference. Dave's inspiration for his final project was to create a video game soundtrack in conjunction with his girlfriend, Liz. Liz was impactful on his decision-making, as she provided suggestions, guidelines, and the artwork (the video game) that Dave's musical project was based on.

During the interview, Dave referenced how his final compositions were made to serve the finished project. This helped focus the final product. For example, when discussing how he collaborated with Liz, Dave stated:

I saw like vaguely what type of stuff she was trying to do. Like I saw her making the first part, but most of it was done . . . honestly like not last minute for the class but last minute for her class because her project was due a week before mine was. So I didn't have time to like go over to her house and have her show me it. So she just told me the environments that were going to be in there and how many songs she wanted. She said about five, so I made five and named them 'forest' and 'snow,' very functional names and it seemed to work out pretty well. (Stimulated Recall interview)

Dave's decision-making for the project was influenced by the prompts and guidelines given to him by Liz. While they did not work together all the time, the prompts Dave was given by Liz helped to guide and inspire his artistic decision-making.

Dave described the type of prompts he was given, and how he adapted his artistic decision-making to reflect what the needs of the final project and how it would be consumed by observers:

I was told it [a song] was supposed to be used in like a forest setting. And low and behold, it's pretty much the same setting the first one was in so I still think it fits, but definitely a lot of the instruments were kind of put there with sort of this vision of like a, like a non-snowy like sort of like heavily . . . shaded forest, so in kind of like a darker atmosphere than what is on the screen.

(Stimulated Recall interview)

Dave developed his project in accordance with the prompts Liz provided him. Her external influence on the project was evident with her providing the video game Dave created music for as well as giving Dave prompts and verbal descriptions of environments in the video game. These descriptions guided much of Dave's artistic decision-making as he worked to create music appropriate for the environments in Liz's game.

I was just gonna say specifically with that song like it was supposed to be a happier feel and at that point my girlfriend just told me the sort of concept was around like witches and stuff. So, I tried to make it a little like subtly like spooky and stuff. (Stimulated Recall interview)

Due to the prompt from Liz, Dave decided to create a specific sound and feeling with the music. Dave was sometimes given settings and descriptions of scenes by Liz to shape his musical work, other times Dave proactively employed artistically creative decision-making to fit the needs of the final project:

The bass when that comes in it wasn't originally there and then my girlfriend who was working on the gameplay portion of this told me that that was probably going to be the longest played one so I was like, 'Well I gotta have it progress a *little bit* so it's not the same thing that repeated over and over again.'

There's like a little variation so I just put something that sounded nice.

(Stimulated Recall interview)

When making artistically creative decisions for the project, Dave anticipated what the finished game would look like, and this shaped his musical decisions as seen by the looping track and using varied instrumentation.

The external influence from Liz was different from the internal influences as the artistically creative decisions Dave made in these instances were specifically to serve the needs of the project, to help fit Liz's descriptions, and the cohesion of the music with the video game rather than a personal choice based on an internal desire to create a specific sound. These artistically creative decisions consisted of looping tracks, changes in instrumentation, changes in texture, and sources of inspiration. These decisions were not made due to internal desires for a particular aesthetic or creative preference, they were made to serve the needs of the completed video game for which Dave was composing.

Product Orientation

The external influence of an audience's opinion on his finished project impacted how Dave made artistically creative decisions. While developing his media arts project, Dave worked with a product-oriented mindset. This means Dave employed artistically creative decision-making with the final product in mind, and how it would be perceived by others. Similar to Dave's use of a DAW acting as a creative filter when composing and incorporating new sounds and textures into the final project, the concept of the finished product acted as a filter to direct and guide Dave's artistically creative decision-making process. Dave made artistically creative decisions with an audience in mind, and consistently thought of how his finished project would be perceived. Dave employed artistically creative decision-making to create a product that he believed would be perceived positively by an audience.

In his final project reflection, Dave responded to this prompt: "Why did you choose this type of project to create for your final in this course?" Dave answered this question as follows:

I had wanted to make something involving songs set to media (an art piece or image). When my girlfriend approached me about making music for her project I realized it would be convenient to do a joint project. I envisioned a collection of songs presented as a soundtrack. It changed when my girlfriend decided to record a demo of the video game as her final project. (Final Project Reflection)

Dave described his media arts project in the context of the final product. The final goal and outcome shaped both his description of his project and influenced his choices throughout the creation of the final media arts project.

At the end of the interview, I gave Dave the opportunity to share anything else about his project and the process. Dave described his project as follows:

I really liked to make video game sounding things and sort of imagine them being in a video game. So that was it was kind of nice to go back to that way of thinking with the knowledge I have now to actually do it better and actually put it with a game. Like that was pretty satisfying to see it come together.

(Stimulated Recall interview)

This description by Dave aligns with a *product first* view, where he created with the final product in mind. The media arts project Dave completed was a final assignment for both his, and Liz's separate academic courses. As the finished project was required for both Dave and Liz, a product-oriented view is rational. The finalized project is what would be shown to both me and his peers. This product-based approach guided Dave's artistically creative decision-making and helped him work towards a clearer end goal.

Lived Experiences

Regelski (2006) stated that creativity, specifically in the realm of music making, is heavily influenced by the whole person and their lived experiences. When one creates, they do so by bringing in the totality of their lived experiences.

The concept of Dave's lived experiences internally influencing his creativity and how he used these experiences to describe his project was evident throughout our interview. Dave, over the course of the semester, mentioned his enjoyment of video games. Dave brought in many ideas inspired by his lived experience from playing games to his creative media arts projects. In relation to an underground scene, Dave stated:

This specific one [song], I remember like heavily basing it on the first *Super Mario Bros.* and the Bowser castle? It's heavily inspired by that. It is only a synth and nothing else. (Stimulated Recall interview)

Dave was drawing from a prior musical language he experienced through video games during his life. This influence on his media arts project went beyond recalling written melodies or video game soundtracks.

While recalling a winter game environment he wrote music for, Dave stated "The instrumentation in this one, I sort of tried to base it on the instrumentation of like Christmas songs and stuff like that" (Stimulated Recall interview). This specific quote was extremely interesting to me as the final project was completed in early to middle of December, a time when holiday music is often heard in grocery stores, on the radio,

and in TV commercials. It would make sense that Dave could have drawn inspiration from holiday music he was likely hearing in his life.

At the closing of the interview, Dave described how he viewed the overall writing experience and the project:

I really enjoyed this project a lot. A while ago when I started messing around in Garage band or whatever not really making anything too concrete, I really liked to make video game sounding things and sort of imagine them being in a video game or not and so that was it was kind of nice to go back to that way of thinking with the knowledge I have now, to actually do it better and actually, put it with a game. Like that was pretty satisfying to see it come together. (Stimulated Recall interview)

Dave demonstrated in this quote how he used his prior exposure to music through video games as an influence and model for this project. The internal synthesis of experiences from his day-to-day life shaped the artistically creative decisions Dave made and resulted in a project he enjoyed and identified with.

By relying on internal influences on creativity such as personal aesthetic preferences, use of unique sounds and instrumentation, and using his own artistic vision, Dave employed artistically creative decision-making in the development of his media arts project. These artistically creative decisions were entirely influenced by himself and were independent from the needs and expectations of others and the project requirements. Dave's artistic decision-making for himself was an opportunity

to incorporate personal aesthetic choices in the project giving the product a voice that was unique to Dave.

Summary

To address the questions: (a) How do undergraduate college students employ artistically creative decision-making as they recall the development of their media arts project in a media arts-based course? and (b) How do undergraduate college students describe their media arts project upon completion? I analyzed the data and found though themes that Dave had internal and external influences on his creative decision-making and used technology as a tool in his creative process, and had a product-oriented views of the creative process. Dave often used an eclectic approach of making decisions due to internal and external influences, the needs of the finished media arts project, and made decisions with the assistance of technology such as a DAW.

When asked to describe his final project, Dave's descriptions connected directly to the vision of the completed project. Dave related his final work as a whole or in sections to other completed works, such as video games or movie soundtracks, or he described his work as the completed product first as seen in his responses.

I believe his product-first approach to the final project is important to consider, as having a clear end goal and vision helped Dave shape his artistically creative decision-making to achieve his finished product. In the final chapter, I will discuss my conclusions, implications for music education, and suggestions for future research.

Chapter 5

CONCLUSIONS, IMPLICATIONS FOR MUSIC EDUCATION, AND SUGGESTIONS FOR FUTURE RESEARCH

Summary of Study

The purpose of this research was to explore how undergraduate college students' experience creativity through media arts. The research questions addressed in this study were: (a) In what ways do undergraduate college students employ artistically creative decision-making as they recall the development of their media arts project in a media arts-based course? and (b) How do undergraduate college students describe their media arts project upon completion? I explored these questions in a qualitative case study design.

Researchers (Nordin & Malik, 2015) concluded undergraduate college students face barriers to creative thought in their education. At the undergraduate level, there is a lack of research addressing how these students experience creativity in an academic setting, specifically through media arts. To address this gap in the current research, I implemented a qualitative design in the form of an exploratory case study in which I explored an undergraduate student's experiences in a media arts class and investigated his artistically creative decision-making while developing a media arts project.

Dave was a junior attending the university in which the study was conducted. To understand how Dave experienced creativity in media arts, I collected data in three forms. As a primary source of data collection, I conducted a semi-structured interview using the Stimulated Recall technique. To supplement this primary form of data

collection, I used course artifacts such as a pre-class questionnaire (see Appendix D) to provide background information of the participants and a final project reflection (see Appendix E) to give an in-the-moment recollection of the completed media arts project. Lastly, I used research field notes to further provide rich detail for the study.

After the data were collected, I transcribed the primary source of data, the semi-structured interview, by hand, and compiled the secondary sources of data, the course artifacts and researcher field notes into a single file for data collection. To analyze the data, I used in vivo coding to search for emergent themes and created a codebook. This codebook consisted of the codes, emergent themes, as well as my definitions of the themes. I sent this information to a peer reviewer. After confirmation of the validity of my analysis, the findings led to conclusions relative to the undergraduate student, Dave, and his experiences in developing a media arts project.

Conclusions

Relating to the purpose of this study, I have drawn the following conclusions from studying one undergraduate's artistically creative decision-making in a media arts course: (a) media arts is an impactful tool for artistically creative decision-making, (b) external and internal influences play a role in how a student employs artistically creative decision-making while developing a media arts project, and (c) an undergraduate college student made artistically creative decisions with having a product-oriented mindset while completing a media arts project could be a meaningful way to approach such a project.

Media Arts as a Tool for Artistically Creative Decision-Making

Media arts includes multiple art forms such as dance, music, theater, and visual art (Olsen et al., 2012). This expansive form of study can provide students with freedom to access many tools to aid their artistically creative decision-making. Media arts and media arts technology have the potential to support an undergraduate student's exploration and synthesis of multiple facets of media arts into artistically creative products.

The use of media arts tools such as DAWs can be impactful for artistically creative decision-making. A DAW was instrumental to Dave's artistically creative decision-making, by serving as a tool to help develop musical ideas, make artistically creative decisions to suit the needs of the finished project, and synthesize musical ideas into an artistically creative product.

Dave's use of a DAW in facilitating artistically creative decision-making aligns with findings found by Airy and Parr (2001), who examined the usefulness of writing music using MIDI software. They concluded that the use of digital technology aided students' creative decision making. Airy and Parr stated "MIDI sequencing allows students to compose and perform their music. It gives students a musical voice" (p. 43). Media arts technology may be beneficial to students' artistically creative decision-making processes, as it can enable new ways of interacting with sound, textures, arrangement, and instrumentation, thus providing new avenues for creative exploration.

While developing his project, Dave often employed artistically creative decision-making in diverse ways depending on the circumstances in which he created. No matter the situation, a DAW was always a part of the development of his media arts project. This observation aligns with the findings of Tobias (2010), who concluded that students employed many different creative processes throughout the development of a final product but will often engage with media arts technology such as a DAW to assist their creative process.

Media arts, due to its multifaceted approach to creativity, may allow students to express themselves and implement artistically creative decision-making in a variety of means. I found by incorporating media arts and technology such as DAWs in students' artistically creative experiences, this undergraduate student used these tools to synthesize his artistic creativity into a unique and meaningful creative work.

Influences on Artistically Creative Decision-Making

When employing artistically creative decision-making, the undergraduate student adapted his artistically creative decisions in response to internal and external influences. As described by Rhodes (1961) in the 4 Ps model, one can understand an individual's creative process by exploring internal influences such as the person, as well as external influences such as the "press," or the environment and circumstances in which something was created.

Internal Influences

Internal influences such as personal aesthetic preferences and lived experiences shaped Dave's artistically creative decision-making throughout the development of his media arts project. Findings from this study further support Tobias (2012), who found students' personal preferences were influential throughout the creation of their songwriting projects. For example, Tobias suggested students often made artistically creative decisions according to their own personal music preferences. Tobias described the musical preferences of participants as "lenses" in their creative process (Tobias, 2012, p. 391). These observations of students drawing upon personal musical preferences is an example of internal influences on the artistically creative decision-making process while developing a creative product.

Internal influences on creativity are unique to each student. Regelski (2006) described the importance of understanding students' lived experiences outside of the classroom in order to understand their music making. Regelski (2006) stated,

The ongoing reconstruction of self that is inherent to the pragmatic notion of experience—and, often, as a result of musical experience more than most kinds of experience. Like it or not, we are each of us a 'thing of histories,' telling, retelling and reconstructing our personal stories or versions of events as new slants or facts come available. Things don't just happen to us; we take them in, in various changeable versions. (p.13)

The current study's participant's artistically creative decision-making also drew from internal influences. Internal influences (i.e., personal aesthetic preferences,

lived experiences) shaped Dave's artistically creative decision-making throughout the development of his media arts project. Dave's familiarity and enjoyment of video game music guided the artistically creative decisions he made throughout the project. For example, Dave used specific sound fonts and instruments to emulate a nostalgic game from his childhood. Internal influences drawn from personal aesthetic preferences made this student's projects uniquely his own and gave this student a creative voice.

External Influences

External influences played a primary role in the artistically creative decision-making process of an undergraduate student while designing a media arts project. I concluded in this study, an undergraduate student adapted his artistically creative decision-making due to external influences such as genre norms, assignment expectations, peer influence, and audience reception of a creative work.

Liz's external influence guided many of the artistically creative decisions Dave made while creating a soundtrack for her video game. My conclusion is supported by Lefford and Thompson's (2018) description of a music producer's artistic decision-making process. Lefford and Thompson described a music producer's role as, "... providing aesthetic guidance, feedback and/or leadership; supplying or fostering innovation; and facilitating technical implementation of recording procedures—all on the way to delivering a recorded product" (p. 545). The music producer in Lefford and Thompson's study was tasked with developing and finishing a musical work in

collaboration with artists. The producer took external influences, then used their skillset to turn these influences into a final product. Findings from the current study suggest a student working in a media arts course may similarly adapt their artistically creative decision-making to fit their unique external influences—much like a music producer would adapt their artistically creative decision-making to accommodate input from collaborators and audience expectations.

Product Orientation

When an undergraduate student was provided with a final creative assignment, the end goal of a completed project shaped their artistically creative decision making. The participant directed his artistically creative decisions to create an end product that fulfilled the needs of the class requirements and supported his girlfriend's project.

Kratus (1991) suggested that an individual may approach creative musical activities with either a product orientation or a process orientation. Kratus defined these approaches as follows, "The question an observer must ask is: Is the creator's intent to produce a product (i.e., a composition or an improvisation), or is the creator interested in engaging in the process for its own sake?" (Kratus, 1991, p.4).

Most of the artistically creative decisions made by Dave throughout the development of his media arts project were made to serve the completed final product, supported Liz's project, and how it would be received by an audience.

Lefford and Thompson (2018) made similar observations when studying how a music producer made artistic decisions stating, "Producers sometimes seek solutions

that keep an artefact consistent with genre norms and at other times, novelty is valued” (p. 552). In both academic and informal settings, myself and researchers have identified a product-oriented view of creativity that is impactful to the artistically creative decision-making process of individuals as it helps guide artistically creative decision-making to meet the specific needs or expectations of an audience.

Summary

Artistically creative experiences in media arts provided a pathway for an undergraduate student to develop his artistically creative decision-making skills as he worked toward a final product. The participant used a *product-oriented approach* to artistically creative decision-making as this view helped to focus his decisions and resulted in a creative product, he was proud of. While designing this product, the undergraduate student drew upon *internal and external influences* as he employed artistically creative decision-making. These influences shaped the student’s understanding of not only the project he was working on, but also served to provide a unique voice to his artistically creative decision-making. By using media arts as a tool to aid in the artistically creative decision-making process, an undergraduate student may access multiple means of experimentation, expression, and ideas to support their artistically creative decisions.

Implications for Music Education

There is scant research in the implementation of facilitating artistically creative decision-making in media arts for instructors at higher education institutions, and researchers (Nordin & Malik, 2015), found many undergraduate students perceive barriers to creative thought. Teachers' facilitation of artistically creative decision-making activities in the classroom can provide students with options to create meaning from their personal and musical lives and make a product that is uniquely their own. Participating in activities that foster artistic creativity can help students explore complex social and political issues as well as address their own feelings and emotions (Hess, 2018). Through the findings and conclusions in this study, I can add to the pedagogical knowledge to support music teachers' implementation of artistically creative decision-making through media arts by better understanding the experiences of an undergraduate student.

I concluded an undergraduate student's artistically creative decision-making throughout the creation of a media arts project was product oriented. Due to the expectations and constraints of an academic environment such as assignment deadlines, project requirements, as well as grades to consider, it is understandable a student may prioritize a product-oriented view of creativity over a process orientation. In the academic setting, students are often primarily graded on their completed products. This emphasis on a final product may affect students' artistically creative decision-making, as students could work to make a product for the grade rather than the creative experience itself, while others may use the final project to guide their

decisions. In accordance with the conclusions from my study, I suggest that by providing an undergraduate student a clear end product and the opportunity to share this product can focus their artificially creative decisions to a goal.

Accessibility to media arts tools and the medium in which an undergraduate student worked was influential to Dave's successes in artistically creative decision-making. Media arts is a medium uniquely suited for accessibility and differentiation of instruction. Consisting of "dance, music, theater, and visual arts," (Olsen et al., 2012, p. 4) Media arts can allow for multiple means for accessing artistically creative decision-making in the classroom. Teachers' facilitation of media arts experiences in their instruction may provide undergraduate students with appropriate tools and experiences that allow them to make meaningful artistically creative products.

In my own instruction, I allow for students to choose their own final projects, by doing so I am not only allowing them to choose their final creative product, but to also choose by which means they employ artistically creative decision-making. Accessibility to media arts technology can be a useful tool for students' exploration of their artistic creativity. I concluded the use of a DAW was central to how an undergraduate student experienced artistic creativity through media arts

Teachers' incorporation of choice in the classroom may give students freedom to explore artistically creative decision-making in whichever means they feel most comfortable, creating a space where students can support their freedom in the creative process with the skills and tools available.

Suggestions for Future Research

There is a lack of research at the undergraduate level pertaining to artistic decision-making through media arts, as well as how undergraduate students experience creativity in the classroom. Therefore, I suggest the following for future research on undergraduates' experiences in artistic decision-making and creativity:

1. Replicate this study with a larger sample size to get a more complete view of multiple students' experiences in artistically creative decision-making.
 - a. Using a larger sample size in this study would allow for a deeper understanding of undergraduates' use of artistically creative decision-making. Multiple students may employ their decision-making in different ways depending on their project, the context in which they are working, as well as their own lived experiences.
2. Conduct the study in conjunction with a complete course, rather than in retrospect.
 - a. By conducting this study in conjunction with a course and compiling data as students complete a creative work, a researcher could gain more insight into students' "in the moment" reflections of their artistically creative decision-making process. As my study was completed in retrospect, the majority of my data represents an "on the moment" reflection, which is relying on a student's recollection of their creative process weeks after.

3. Research the impact of including a final goal for a creative endeavor. This could provide insight into how individual students may similarly or uniquely employ artistically creative decision-making to reach the same goal.
4. Research what the impact of another creative tool, other than a DAW, has on the artistically creative decision-making process of undergraduate students in a media arts course.
 - a. While in this study, the participant created music for a video project, he primarily worked in a DAW and described his artistically creative decision-making in the context of working with the DAW. As described in my implications for music education, the tools available to students can allow for access to a unique set of options to employ artistically creative decision-making while working towards a completed artistically creative product.

Closing

Media arts is ubiquitous in students' daily lives, and researchers found artistically creative experiences for PK-12 students can connect students' personal lives with their education (Allsup, 2008; Green, 2005). Creativity is an essential skill for all students as it helps them solve problems both in and outside of the classroom and adapt to our changing world (Kettler et al., 2018). Even with this evidence of the benefits of media arts and creativity, there is a lack of exploration of creativity, specifically creativity through media arts at the undergraduate college level, leaving

both students and teachers with unclear direction on how to facilitate these artistically creative experiences in the classroom. By gaining a deeper understanding of one undergraduate college student's experience in developing a media arts project, I found that accessibility to media arts technology, awareness of product orientation and students' influences can have an impact on artistically creative decision-making. Through my findings in this study educators can gain perspective into how an undergraduate student employs artistically creative decision-making through media arts. This new perspective as well as my implications for education may help educators facilitate more artistically creative experiences at the undergraduate level.

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Appendix A
IRB APPROVAL LETTER



Institutional Review Board
210H Hulihan Hall
Newark, DE 19716
Phone: 302-831-2137
Fax: 302-831-2828

DATE: January 26, 2022

TO: Tanner McMullen, B.M.
FROM: University of Delaware IRB

STUDY TITLE: [1820320-1] Artistic Decision-Making of Undergraduate Students in a Media Arts Class
SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF EXEMPT STATUS
EFFECTIVE DATE: January 26, 2022

REVIEW CATEGORY: Exemption category # (2)

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 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 B

PARTICIPANT RECRUITMENT FORM

Hello [participant]

For my master's in music Teaching I am currently conducting a research study on the creative processes of undergraduate college students after completing a media arts project. I am reaching out to possible participants who have met the following criteria: undergraduate college students enrolled in creative sound design for Fall 2021 semester and have completed a media arts project at the end of the course. Please read the following and respond to this email, Tannermc@udel.edu to confirm interest in participating.

Purpose:

The purpose of this study is to explore undergraduate college students' artistically creative decision-making while developing a final project for a media arts course (Fall 2021--MUSC334, Creative Sound Design).

In this study I will be examining the following questions:

1. How do undergraduate college students describe their completed media arts project?
2. What do undergraduate college students recall about their artistically creative decision making as they developed a media arts project?

Data Collection:

If you choose to participate, you will be asked to:

- Participate in a 25-minute video recorded *stimulated recall* wherein you will describe your artistically creative decision-making by starting, stopping, rewinding, and fast forwarding the video recording of your final project.
- Share course materials such as: your final project, pre-class questionnaire, and final project reflection with the researcher.

Involvement:

Participation in this study involves a 25-minute in person stimulated recall of your final media arts project for MUSC334. Your participation in this study is voluntary and at any point you can stop participating.

Privacy:

As a participant in this study, your identity will be kept confidential throughout the process.

Only the researchers will have direct access to the video data, although portions of video data may be shown to audiences at professional research conferences. The video data recorded will be collected by the primary investigator in such a manner that the identity of the human subjects cannot be readily ascertained, directly or through identifiers linked to the subjects.

Consent:

Before participating in this study, you will be asked to read and fill out a consent form that has been approved by the University of Delaware Institutional Research Board

Please contact Tanner McMullen at “Tannermc@udel.edu” if you would like to learn more about this study or participate. Participation is entirely voluntary, and the decision to participate will not have a positive or negative impact on your grade for Creative Sound Design.

Thank you,
Tanner McMullen

Appendix C

PARTICIPANT CONSENT FORM

CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Title of Study: Artistic Decision-Making of Undergraduate Students in a Media Arts Class

Principal Investigator(s): Tanner McMullen

Important aspects of the study you should know about:

- **Purpose:** The purpose of the study is to:
 - Explore undergraduate college students' artistically creative decision-making while developing a final project for a media arts course (Fall 2021--MUSC334, Creative Sound Design).
- **Procedures:** If you choose to participate, you will be asked to:
 - Participate in a 25-minute in person or virtual meeting where you will describe your creative decision-making as you watch the video recording of your media arts project.
 - Share course materials such as: your final project, pre-class questionnaire, and final project reflection with the researcher.
- **Duration:** Your participation in this study will consist of:
 - One 25-minute in person or virtual meeting.
- **Risks:** The main risk or discomfort from this research is:
 - There is no risk to you through your participation in this study.
- **Benefits:** The main benefits to you from this research are:
 - You will gain more awareness and understanding of your artistically creative practices in relationship to your completed media arts project
 - You will contribute to the scant research on the facilitation of artistically creative decision-making through media arts in higher education, thus influencing best pedagogical practices.
- **Costs and Compensation:**
 - If you decide to participate there will be no cost to you and you will not be compensated for participation in this study.
- **Participation:**
 - To maintain your confidentiality, no identifiers will be used. Only the researcher will have direct access to the video recorded data. Every effort will be made to keep all research records confidential. In the event of any publication or presentation resulting from the research, no personally identifiable information will be shared.

- Taking part in this research study is your decision. You can decide to participate and then change your mind at any point.

Contact Information: If you have any questions about the purpose, procedures, or any other issues related to this research study you may contact the Principal Investigator, Tanner McMullen, tannermc@udel.edu or Dr. Suzanne Burton, slburton@udel.edu.

CONSENT TO PARTICIPATE IN THE RESEARCH STUDY:

I have read and understood the information in this form, and I agree to participate in the study. I am 18 years of age or older. I have been given the opportunity to ask any questions I had, and those questions have been answered to my satisfaction. I understand that I will be given a copy of this form for my records.

| | | |
|--|--|---------------|
| _____ Printed Name of Participant (PRINTED NAME) | _____ Signature of Participant (SIGNATURE) | _____ Date |
| _____ Person Obtaining Consent (PRINTED NAME) | _____ Person Obtaining Consent (SIGNATURE) | _____ Date |

Yes

No

5.

If yes, what do you use? *

6.

Describe your prior musical experience. (Please note: this will not determine your success in this class. You can have zero musical experience and still excel throughout the semester.) *

7.

What interested you in Creative Sound Design and what are you most looking forward to learning this semester? *

8. Do you have any worries and/or concerns about this semester? *

9. Are there any other questions or concerns you would like me to know before class?

10. Final Question! Who are your top three artists/bands right now? *

Appendix E

FINAL PROJECT REFLECTION

Sound Design Final Project Reflection

Please reflect upon the ways in which you developed your final project. * Required

1. Name *
2. Why did you choose this type of project to create for your final in this course? *
3. What did you envision as your finished project before starting this assignment? *

4. What decisions did you make as you developed the final project? *

5. Was the finished project what you expected? In what ways? *

6. What would you change if you had time to revise your project? *

Appendix F

HUMAN SUBJECT TRAINING



Completion Date 09-Oct-2020
Expiration Date 09-Oct-2023
Record ID 38850980

This is to certify that:

Tanner McMullen

Has completed the following CITI Program course:

Not valid for renewal of certification through CME.

Course In The Protection Human Subjects

(Curriculum Group)

Human Subjects Protections - Social-Behavioral-Educational Focus - All UD Researchers/Faculty/Staff

(Course Learner Group)

1 - Basic Course

(Stage)

Under requirements set by:

University of Delaware



Verify at www.citiprogram.org/verify/?w9cc8d624-bed5-469b-8e6f-f1d24dc70d9f-38850980