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Predictors of middle school students' perceptions of automated writing evaluation[☆]

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ABSTRACT

This study examined middle school students' perceptions of an automated writing evaluation (AWE) system, *MI Write*. We summarize students' perceptions of *MI Write*'s usability, usefulness, and desirability both quantitatively and qualitatively. We then estimate hierarchical entry regression models that account for district context, classroom climate, demographic factors (i.e., gender, special education status, limited English proficiency status, socioeconomic status, grade), students' writing-related beliefs and affect, and students' writing proficiency as predictors of students' perceptions. Controlling for districts, students reporting more optimal classroom climate also reported higher usability, usefulness, and desirability for *MI Write*. Also, model results revealed that eighth graders, students with limited English proficiency, and students of lower socioeconomic status perceived *MI Write* relatively more useable; students with lower socioeconomic status also perceived *MI Write* relatively more useful and desirable. Students who liked writing more and more strongly believed that writing is a recursive process viewed *MI Write* as more useable, useful, and desirable. Students with greater writing proficiency viewed *MI Write* as less useable and useful; writing proficiency was not related to desirability perceptions. We conclude with a discussion of implications and future directions.

1. Introduction

Writing is a goal-directed problem-solving process that involves planning, translating, transcribing, and reviewing/revising (Hayes, 1996). Thus, writing is not just the physical act of putting words on paper or typing on a keyboard but also involves the writer's ability to engage in self-directed cognitive, metacognitive, and affective processes. Learning to write involves the maturation of those processes via the influence of various social contexts, including formal education (Graham, 2018), as well as deliberate practice guided by

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