T-3

ASSESSING FOR LEARNING IN THE AGE OF AI: CAN MACHINES SERVE AS GUIDES-ON-THE-SIDE?

Brent Duckor, Carrie Holmberg

San Jose State University

Keywords: AI; Feedback; Assessment for Learning

Prior to the AI revolution, research on teachers and teaching has shown that formative assessment, also known as assessment for learning improves student learning more than most instructional interventions. Over the last two decades, empirical evidence from studies of studies (Hattie & Timperley, 2007; Hattie, 2012; Hattie & Clarke, 2019) demonstrates that well-implemented formative assessment practices that focus on use of non-graded feedback shift students' learning outcomes. Effective formative feedback is a critical element of instruction that benefits student learning (Andrade & Brookhart, 2016; Duckor & Holmberg, 2017; Fisher, 2012; Hattie & Timperley, 2007; Hattie & Zierer, 2018; Sadler, 1989). Researchers have also found that feedback must be differentiated and contextualized to inspire and improve student performance (Moon et al., 2020). Helping teachers to develop more effective tools, practices, and strategies, therefore, for offering and supporting differentiated formative feedback is an important component of equity-focused assessment reform aimed at State priorities for continuous improvement and equity-driven instruction (Ladson-Billings, 2008; Noguera et al., 2015). Ruiz-Primo and Li (2013) and Ruiz- Primo, Solano-Flores, & Li (2014) further argue that the field should first learn about what expert teachers do and how they frame their feedback practices for ELLs, in particular. In assessing the value of AI-supports that serves as guides-on-the-side in promoting effective formative feedback routines, there are at least three main lenses and corresponding focal points for making feedback practices "value added" in classroom settings (Duckor & Holmberg, 2023). Whether the AI supporting technology allows for deeper dives into Directionality, Configurations, or Modalities of feedback, each lens is interconnected with the other, and must be accounted for. This paper addresses the evolving affordances and constraints of AI technologies on K-12 classroom-based feedback on Modalities with a focus on spoken, written, and non-verbal routines. We will also explore the intersections of learning theories (behaviorist, constructivist, and information processing) which are implicitly embedded in AI-driven assessment for learning technologies.

SJSU Center for Innovation in Applied Education Policy