CRITICAL THINKING ASSIGNMENT MODULE ONE

Analysis of a Current EdTech Trend

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Technology has infiltrated education over the past couple of decades, as it has infiltrated all aspects of human life globally. The variety of applications are still developing, as Artificial Intelligence (AI), adaptive learning technologies, and new learning theories drive the use of personalized learning beyond an initial constructivist viewpoint. As educators learn to use more adaptive tools, and students communicate their desire for them, it is becoming clearer how technology can be used to incorporate students' individual skill sets, experiences, and knowledge retention to further challenge them and aid in deeper learner and critical thinking. While studies are occurring throughout the world, empirical evidence has yet to show a direct link between the use of technology in personalized learning and increased cognitive application (Schmid, Pauli, Stebler, et al., 2022). There is evidence, however, of an increased educator ability to provide the personalized learning experiences that students desire, increased student motivation to do the work, and an increase in available data to support the students (Schmid, Pauli, & Petko, 2022). Regardless of a student's direct knowledge acquisition, technology use still supports valuable learning experiences.

One agreed upon definition of personalized learning has yet to be established, but it is generally viewed as incorporating the needs of individual students in their learning environments. Personalized learning plans address students where they are in their learning pace, learning styles, physical and online learning spaces, and their learning choices, aligning with the need for students to "build networks and customize their learning environments in ways that support the learning process." (ISTE Student Standard 2.5c) (*Students*, 2023). Educational institutions throughout the world have been moving more towards personalized learning over standardized learning and incorporating the use of digital learning platforms as well as

technology-based lesson design and curriculum platforms, interactive learning management systems, and individualized online lessons and supplementation. This occurs at many levels including school-wide adaptation of these technologies, teacher-based inclusion, student-choice use, and outside use with additional learning environments such as tutoring (Schmid, Pauli, & Petko, 2022). One common acknowledgement among researchers is the need for students to both feel like they have a choice in their learning and for educators to have strong classroom management around the use and material of the technology students use (Brod, et al., 2023).

While students highly benefit from a constructivist viewpoint towards technology use which supports student learning derivation from their environment, educator oversight cannot be undervalued (Brod et al., 2023). Students need instruction on how to use the technology effectively in order to take advantage of the increased motivation and engagement that they benefit from while having agency over their academic growth (Schmid, Pauli, Stebler, et al., 2022). This is where an educator's responsibility to "create innovative digital learning environments" becomes critical (ISTE Educator standard 2.5c) (*Educators*, 2023). Students, with the support of teachers, then have the opportunity to experience true personalized learning: "What is desirable is an EdTech design that adapts agency levels to different learners and changes the level of agency assigned to a particular learner over time." (Brod et al., 2023). One beneficial result of student use, along with students' increased involvement in the what, how, and where of their studies, is a plethora of useful data for teachers that can enable more advanced and useful lesson design.

Educational design throughout the world focuses on widely different approaches, from career-focused education to student "learning for learning's sake". While North America has broadly incorporated personalized learning for a significant amount of time, European, Asian, and African countries are exploring its application in a variety of different depths. Internationally, the use of EdTech not only provides data for educators, but for researchers to identify the real-world impacts and implications of technology-assisted personalized learning (Digital Promise Global, 2021). The tools are here to provide the desired supported learning environment for each student to excel, and they are continuing to develop at an exponential rate. As they do, not only will students learn more, but educators will learn more about how the personalized learning environment truly benefits their students.

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