Chapter 7
Trailblazing With Technology

Nyree D. Clark
Colton Joint Unified School District, USA

ABSTRACT

This chapter explores the evolution of technology use in the K-12 educational setting, and how it has made a significant change over time. Frameworks guide educators in seeing the big picture of what and how they are instructing students. The 4S culturally responsive technology framework combines culturally responsive pedagogical practices with the 3T framework for technology innovation. This allows the technology to amplify and enhance what is being learned while celebrating the culture and language of the learner. Supplemental frameworks (Bloom's taxonomy, social justice standards, or CASEL) can be added to a lesson to personalize the learning experience for each community to ensure equitable practices are being met for all students. Technology in the hands of innovative educators and students can lead to transformational learning that extends the funds of knowledge for every learner.

"Technology will not replace great teachers, but technology in the hands of great teachers can be transformational." -George Couros

What does it mean to be an educator in the United States? Does it mean a person who fosters intellectual curiosity and multiple perspectives (Ayers, 2020)? A person who uses whatever privileges they possess to make sure all students win (Love, 2020)? A person who seeks to shift students from being dependent learners to independent learners (Hammond, 2015)? These questions have opened the pathways to deep conversations that have led to many shifts in educational practices and pedagogy in the last few years. These changes have been made through instructional practices, varied styles of leadership, collections of ideas, collaborations, and modifications

that lead to the freedom to be innovative while learning (Miller, 2015). Innovative Leader/Teacher, George Couros, defines *innovation* as "a way of thinking that creates something *new* and *better*" (Couros, 2015, p. 19). In short, innovation is the process of actively acquiring and synthesizing new knowledge to create tools or adjustments to our way of life that are a benefit to the collective community. This way of thinking centers learning on questioning, creating, and refining ideas and ways of thinking to keep pushing our student outcomes into areas of transformation (Courus, 2015). Successful educators and leaders in our country understand the need for innovation and how it is constantly evolving and transforming our learning communities.

Educational Technology (EdTech) is a term used to describe the use of software, electronic devices, and digital tools to enhance and increase student learning. This form of technology uses tools that can amplify student voices, synthesize student learning, and provide equitable access to the content being taught. The innovation that can be witnessed when technology is integrated into a learning experience is the students are no longer consumers of content but become content creators of their own learning. These new "millennium learners" see the use of technology as a fundamental way of life and not a nuanced special treat offered from time to time (Housand, B. & Housand, A., 2012). In keeping up with the philosophy of this new evolution of students, many administrative leaders, instructional coaches, and educators actively seek conceptual frameworks to ground their best practices in technology integration and provide actionable steps in obtainment (Magnana, 2017).

"A meaningful technology integration framework can guide how educators think about, enact, and communicate educational innovation with technology to more reliably impact student learning." -Sonny Magnana

FRAMEWORKS

The importance of using a framework is to help educators contextualize or make meaning in what we are doing. Frameworks are also able to help us recognize the "big picture" so we can be intentional in our instructional practices. Though frameworks can offer the stability of the structure, innovation can still be fostered through the process of cultivating a community of change agents.

There are three existing frameworks that have been heavily utilized in the Edtech field of study. They are the Substitute, Augmentation, Modification, and Redefinition (SAMR) Model, the Technological Pedagogical Content Knowledge (TPACK), and the T3 Framework. Each of these models helps to frame the way that technology is used. Each model offers a different perspective on how technology is integrated and how it can enhance student learning. Is there a right or a wrong model to use?

24 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/trailblazing-with-technology/334270

Related Content

Expectations, Challenges and Suggestions for Faculty Teaching Online Courses in Higher Education
Alec Sithole, Davison M. Mupinga, Joachim S. Kibirige, Fidelis Manyangaand Brian K. Bucklein (2019). *International Journal of Online Pedagogy and Course Design (pp. 62-77).*
www.irma-international.org/article/expectations-challenges-and-suggestions-for-faculty-teaching-online-courses-in-higher-education/216932

Case Study of a New Zealand School's Use and Development of a Parent Portal
Julie Lynchand Kerry Lee (2012). *Encyclopedia of E-Leadership, Counseling and Training (pp. 199-211).*
www.irma-international.org/chapter/case-study-new-zealand-school/58437

Applied Ethics for Digital Imagery
Shalin Hai-Jew (2010). *Digital Imagery and Informational Graphics in E-Learning: Maximizing Visual Technologies (pp. 288-311).*
www.irma-international.org/chapter/applied-ethics-digital-imagery/39632

Interface Design, Emotions, and Multimedia Learning
Chaoyan Dong (2008). *Handbook of Research on Instructional Systems and Technology (pp. 79-91).*
www.irma-international.org/chapter/interface-design-emotions-multimedia-learning/20781

Game-Based Language Learning in Technological Contexts: An Integrated Systematic Review and Bibliometric Analysis
Gwo-Jen Hwang, Pei-Ying Chen, Shih-Ting Chu, Wen-Hua Chuang, Chin-Ya Juanand Hui-Yun Chen (2023). *International Journal of Online Pedagogy and Course Design (pp. 1-25).*
www.irma-international.org/article/game-based-language-learning-in-technological-contexts-an-integrated-systematic-review-and-bibliometric-analysis/316184