INSTRUCTIONAL TECHNOLOGY KEY TERMS AND CONCEPTS

Adult Learning Theories: Models of how adults acquire knowledge and skills. Examples include constructivist, experiential, social, self-directed, situational, transformative models. These theories emphasize the importance of practical experiences that build on prior knowledge and important differences in approach between adult and adolescent learning. In technology education, important examples include the Technological Pedagogical Content Knowledge model (TPACK) and the Technology Acceptance Model (TAM).

Collaborative Ownership: Shared responsibility for the creation and management of projects or tasks. In educational settings, collaborative ownership involves fostering a culture where students and educators work together and actively drive their own learning.

Data Analysis: Interpreting data to extract meaningful insights that can inform decision-making. In educational settings, data analysis provides important evidence to help inform instructional decisions.

Data Collection: The systematic gathering of data to facilitate analysis or support an argument. In educational settings, data collection involves gathering student performance data, feedback, and other relevant information to inform instructional practices.

Differentiated Instruction: An approach to teaching that tailors instruction to the varied needs of students. Differentiated instruction provides multiple means of representation, engagement, and expression to support the learning of each student in their individual contexts.

Digital Citizenship: The norms of responsible technology use. Standards for digital citizenship are constantly evolving and include measures like secure password selection and storage, as well as responsible social media use. In educational settings, teachers guide their students in participating in digital experiences in a manner that promotes the common good.

Digital Identities: The online personas that individuals create and manage through their activities in digital spaces. Managing digital identities involves understanding how to protect one’s personal information and present oneself responsibly online.

Educational Technology: Digital tools used to facilitate learning. Educational technology consists of hardware or software and pursues such goals as improving performance, providing unique learning experiences, leveraging data, and facilitating differentiated learning.

Instructional Technology: The specific application of technology in educational environments to enhance teaching and learning processes. Instructional technology involves the design, development, and implementation of technological tools and resources to support instructional goals and improve student outcomes.

Instructional Technology Specialist: A professional who supports the integration of technology in educational settings. An instructional technology specialist may assist teachers in designing and implementing technology-enhanced lessons, provide training on new technologies, and ensure technology resources are effectively enhancing student learning.

Intellectual Property Rights: The legal rights granted to the creators of original works. These rights ensure that creators can control the use and distribution of their creations and receive recognition and compensation for their work. In an educational setting, the use of media and other products of creative work are subject to the legal licenses under which they are made available.

Learning Objectives: The specific goals that define what students are expected to know and do. Learning objectives guide the planning and delivery of instruction and provide a clear framework for assessing student progress.

Personal Data Management: The responsible, secure handling of private information in digital environments. Personal data management involves awareness of privacy settings, securing personal data, and how personal information is collected, used, and shared online.

Professional Development: Training to acquire new job-related knowledge or develop new skills. In educational settings related to instructional technology, professional development involves training educators to effectively integrate technology into their teaching practices.

SMART Goals: Specific, Measurable, Achievable, Relevant, and Time-Bound objectives. In educational settings, SMART goals guide the pursuit of positive growth over time, often in the development of positive teaching practices.

Stakeholder Input: Involvement and feedback from individuals or groups with a vested interest in educational initiatives. Stakeholders may include students, parents, teachers, administrators, and community members.

Technology Evaluation Criteria: Standards used to assess the effectiveness and suitability of technological tools and resources. In educational settings, technology evaluation criteria help determine whether a technology meets student needs and supports instructional goals.

Technology Impact Evaluation: An assessment of the effects of technology integration on educational outcomes. Technology impact evaluation may involve measuring changes in student learning, engagement, and achievement.

Technology Implementation Plan: A detailed strategy for integrating technology into educational settings. A technology implementation plan outlines the steps, resources, and timelines for adopting technology intended to enhance teaching and learning.

Technology Integration: The incorporation of technology into educational environments to enhance instruction. Technology integration involves using technological tools and resources to facilitate learning, engage students, and improve educational outcomes.

Troubleshooting Strategies: Techniques to diagnose and resolve technical issues. In educational settings, appropriate and effective troubleshooting strategies differ for students, teachers, and technology specialists and may involve simple fixes like restarting devices or specific interactions specific to a piece of hardware or software.