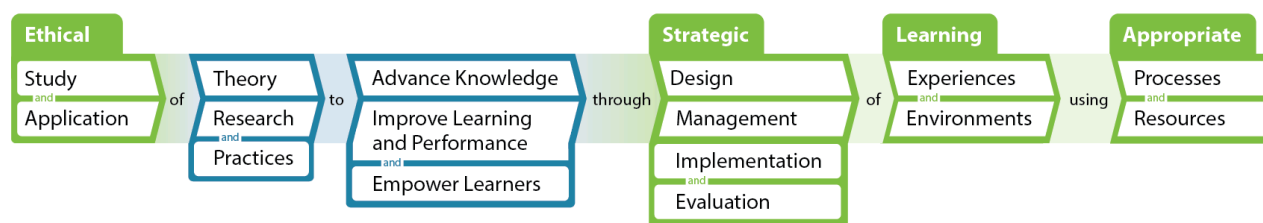


Educational Technology: Offering a Contemporary Definition

Heggart, K., Ritzhaupt, A., Prokes, C., & Kimmons, R.

Educational technology continues to evolve alongside rapid technological advances, yet its definition remains complex. This paper aims to offer a comprehensive, contemporary definition that reflects current educational practices. Led by seven AECT members, the 2023 Definitions and Terminology Committee gathered qualitative data through a survey of 140 AECT members, analyzed using NVivo to identify key themes. The result is a clear, research-based definition intended to support educators, policymakers, and researchers in navigating the digital educational landscape. This proposed definition was formally approved by AECT's board of directors in October 2023.

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Introduction

The field of educational technology continues to evolve rapidly with the COVID-19 pandemic accelerating technology's integration across diverse settings. As the field progresses, the language defining it does as well. The Association for Educational Communications and Technology (AECT) has long recognized this evolution, regularly updating its own definition. This paper presents current results of that process and explores the development journey, building on traditions established by past scholars towards a new definition (e.g., Seels, 1994; Reiser & Ely, 1997; Hlynka & Jacobsen, 2009).

Educational technology traditionally focused on tools and media for knowledge communication, primarily hardware and software. Recent definitions, however, emphasize theory and practice of applying technology to enhance learning. This shift acknowledges the field's inclusion of emerging tools like augmented/virtual reality and artificial intelligence, and also the developing pedagogical emphasis.

Below we discuss the need for a new definition and the process of developing it. By avoiding distinctions between tools and pedagogical purposes, the proposed definition reflects a holistic view.. It emphasizes using technology to serve learning and adapting to new platforms and modalities. Concluding with practical applications, the paper offers a refined framework for educational technology in today's digital age.

Literature review

The changing names and definitions adopted by AECT (formerly the Department of Visual Instruction) reflect this evolution of the field. As educational technology became more widespread, definitions provided by AECT adapted to this expanding scope. The 1963 definition focused on audiovisual communication and the design/use of messages to facilitate learning, reflecting a media-centric view (Ely, 1963). By the 1970s, the focus shifted to instructional technology as a systematic approach to designing and evaluating learning, emphasizing process over product. This shift was evident in the Presidential Commission on Instructional Technology's report (1970), which highlighted instructional technology as a method combining human and nonhuman resources to foster effective learning.

AECT's 1977 definition (AECT Task Force, 1977) further evolved and included management and the term "learning resources," broadening the concept to encompass people, ideas, and procedures. Subsequent definitions (Seels, 1994; Januszewski & Molenda, 2008) continued to refine this understanding, emphasizing both theory and practice, and eventually incorporating ethical considerations and the facilitation of learning. The 2008 definition marked a shift back to "educational technology," highlighting inclusivity and ethical use of technology.

The most recent definition, introduced in 2017 (AECT Definition and Terminology Committee, 2017), describes educational technology as the study and ethical application of theory, research, and best practices to advance knowledge and improve learning through the strategic design and management of educational resources. This definition underscores the importance of a holistic approach going beyond tools, aiming to enhance outcomes.

Today, educational technology faces new influences and challenges, including generative artificial intelligence (AI), which some view as a threat to traditional education. Additionally, shifts in learner diversity spurred a focus on personalized learning and learner-centered design, reflecting changes in educational needs. The demand for measurable educational outcomes also led to a rise in evidence-based practices, highlighting the need for educational technology to effectively demonstrate impact.

Ethical concerns, particularly around privacy and copyright gained prominence, prompting a reevaluation of responsible application of educational technology. The increased use of analytics for decision-making also shaped the field, offering new ways to enhance and measure outcomes. Furthermore, the rise of Learning Experience Design (LXD) reflects a shift towards creating engaging, impactful learning experiences, positioning educational technology as a field blending pedagogical principles with advanced design techniques.

The Definitions and Terminology Committee considered these changes and sought to update the field's definition to reflect the current technological landscape and evolving educational philosophies.

Methodology

In 2022, AECT leadership recognized the need for an updated, comprehensive definition. A commissioned group initiated the work, guided by Seels' (1994) recommendation that an ideal definition should be both stipulative and programmatic. Seels emphasized that definitions should identify the roles of practitioners, specialized knowledge areas, or professional standards and should establish parameters for what the field includes or excludes. These principles shaped the 2023 definition which aimed to reflect educational technology as both a process and a product, while also making it accessible for practitioners (Reiser & Ely, 1997).

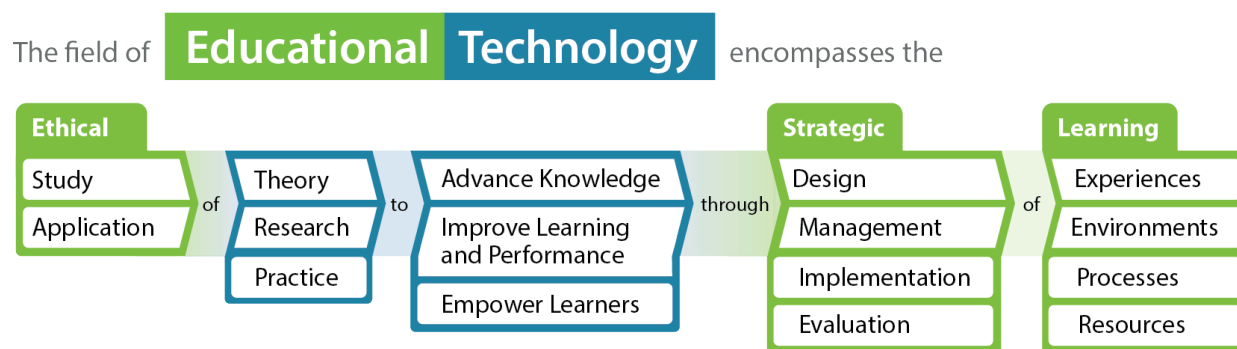
The committee reviewed past definitions dating to 1963 and examined contemporary research across educational technology and related fields. This iterative process, including feedback from past definitions and the literature, culminated in a proposed definition aiming to encapsulate the complexity and breadth of the field. The committee's proposed definition intentionally reflected the diversity of terminology and approaches used across the field, ensuring it could represent various viewpoints within educational technology. The proposed definition read:

The field of Educational Technology encompasses the ethical study and application of theory, research, and practices to advance knowledge, improve learning and performance, and empower learners through strategic design, management, implementation, and evaluation of learning experiences, environments, processes, and resources.

This definition was developed into a graphic (see Figure 1). It emphasizes educational technology is not solely about tools but integrates ethical considerations and research to enhance learning outcomes, creating a foundational framework for professionals navigating the evolving field.

Figure 1

Graphic displaying proposed definition



With approval, the committee proceeded to survey AECT members for validation. The survey, conducted over a month from September to October 2023, gathered member feedback on the new definition. Members anonymously reviewed the proposed definition and provided insights on relevance.

The project received Institutional Review Board (IRB) approval from the University of Technology Sydney. This highlights that the definition was designed for international relevance.

The survey included demographic and open-ended questions, developed in line with standard survey guidelines (Creswell, 2017), to capture members' backgrounds, views on the definition, and preferred modifications. Questions also addressed showing liked and disliked aspects of the definition, suggested additions or removals, and opinions on book access.

Data were analyzed using descriptive statistics for demographic responses, while open-ended responses underwent two-level coding with NVivo QDA software. First-cycle coding used an in vivo approach to capture initial impressions, while second-cycle coding used pattern codes to consolidate themes. To ensure validity, the committee conducted quasi-member checking by sharing findings and comparing analyses among committee members.

Findings

The survey of 140 AECT members revealed diverse perspectives shaped by respondents' professional sectors, experience levels, and AECT membership duration. Most participants were based in the United States and worked in higher education, followed by K-12 education. Respondents praised the definition's ethical focus, emphasis on empowerment, and inclusive nature. These elements were seen as particularly relevant in today's evolving educational landscape. However, critiques included its perceived length and the absence of explicit references to "technology" or "instructor," which some respondents viewed as critical for clarity and practicality.

Recurring themes indicated a preference for the detailed and learner-centered nature of the definition among higher education and K-12 educators, while industry professionals valued its broader applicability. Criticisms often stemmed from concerns about redundancy, with some respondents suggesting that condensing terms like "processes and resources" might improve readability.

Generational differences also emerged in the analysis. Respondents with over 25 years in the field often emphasized traditional terminologies and the inclusion of "systems," indicative of a historical perspective. Meanwhile, newer members valued the aspirational focus on ethics and empowerment. These contrasting perspectives highlight the complexities of uniting diverse professional priorities within a single definition. Additionally, preferences for open-access dissemination underscored members' interest in ensuring the definition's global accessibility and influence. Overall, the findings revealed the

challenge of balancing traditional and contemporary perspectives in a field experiencing rapid technological and pedagogical advancements.

Discussion

The survey responses highlight ongoing debates within the field. The inclusion of ethical study represents a significant shift for AECT, positioning ethics as an aspirational standard not only for practice but also for research. While most respondents supported this focus, some questioned whether ethical research could always be achieved in practice. The committee maintained that setting high expectations promotes professional integrity and aligns with the organization's mission.

Learner empowerment emerged as another key theme, reflecting the field's transition from technology- and instructor-centered design to more learner-focused approaches. This shift aligns with broader trends in education, emphasizing personalization and active engagement. While newer members largely embraced this inclusion, some experienced professionals argued for retaining a stronger focus on tools and instructional design. The committee's decision to retain empowerment as a goal acknowledges its relevance in fostering equitable and inclusive educational experiences.

Another recurring critique was the definition's length. At 40 words, the definition matches its 2017 predecessor but exceeds earlier iterations. The committee defended its comprehensiveness, arguing that capturing the breadth of educational technology's current scope required this level of detail. To address concerns about complexity, a graphical tool was developed to visually clarify the definition's structure, particularly the interplay between ethics, learner empowerment, and the application of technology.

A smaller but notable debate involved the perceived lack of explicit references to "technology" and "instructor." While some respondents viewed these omissions as weaknesses, the committee argued that a broader conceptualization of "technology" allows the definition to remain relevant across evolving tools and platforms. Similarly, avoiding references to specific roles, such as "instructor," ensures the definition applies to diverse educational contexts, including informal and self-directed learning.

The discussion ultimately underscores the tensions inherent in defining a dynamic and multidisciplinary field. Balancing clarity with inclusivity, the committee aimed to craft a definition that resonates across sectors, generations, and professional priorities, while remaining adaptable to future advancements.

Conclusion

Based on survey feedback, minor clarifying adjustments were made to the proposed definition to finally read:

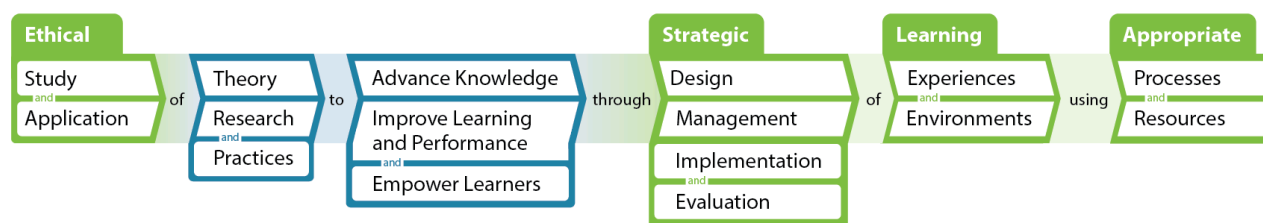
Educational technology is the ethical study and application of theory, research, and practices to advance knowledge, improve learning and performance, and empower learners through strategic design, management, implementation, and evaluation of learning experiences and environments using appropriate processes and resources.

The definition was approved by the AECT Board of Directors in 2023 as presented in Figure 2.

Figure 2

Graphic displaying accepted definition

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The finalized definition of educational technology emphasizes ethics, learner empowerment, and inclusivity, offering a versatile framework for diverse educational contexts. For educators, it supports designing inclusive, student-centered environments and integrating emerging technologies ethically. Policymakers can use the definition to guide equitable access initiatives and professional development, while researchers gain a foundation for exploring impacts on learning outcomes. The emphasis on transparency and open access fosters global collaboration, extending the field's reach and impact. As educational technology evolves, this definition provides a shared understanding of its purpose, ensuring adaptability to future advancements.

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