Instructional Design

From OG Methods to Next-Gen Tech



SEEING IS BELIEVING & BEHAVIORISM GROWS

- AECT formed in 1932.
- The use of sound, pictures and film, was created to help learners obtain and retain information through the stimulation of sensory experiences.
- Theories: Behaviorism (Pavlov, Watson, Skinner)
- **Technology:** Radios, Pictures, Slides and Film with sound.



3,2,1 ... INSTRUCTIONAL DESIGN TAKES OFF

- WWII (1939-1950) led to a systematic approach to training, combining psychology and education to improve military instruction
- B.F. Skinner's Programmed Instruction (1954)
- Key ID Influences: WWII Military Training Models, Behavioral Objective Movement
- Theories: Blooms Taxonomy (1956), Cognitive Load (Sweller, 1956)
- **Technology:** Early Computers, Television, Teaching machines and Headphones



LEARNING REWIRED & SYSTEMS APPROACH

- The systematic approach to Instructional Design emerged, focusing on structured, systematic learning models.
- Key ID Influences: ISD (Instructional System Design), Kemp Model (1977) and Gerlach & Ely Model (1971)
- Theories: Constructivism (Piaget, Vygotsky, Bruner), Andragogy (Malcom Knowles, 1973) and Gagné's Nine events of Instruction (1965, applied in 1970's)
- Technology: Early PC's, Computers, Calculators, Scantrons and Apple 1



CLASSROOM TO CLICK & CONSTRUCTIVIM

- Learning had to replicate the actual complexity of a real-world environment, moving beyond theoretical models.
- The World Wide Web (1991) Transformed education by enabling self-directed
- Theories: Situated Learning (Lave & Wenger, 1991), Merrill's First Principles of Instruction
- Key ID Influences: SCORM (2000), Early LMS (Blackboard, WebCT, Moodle), Hypertext and Hypermedia
- **Technology:** WWW, Google Search and Multimedia Learning (CDs and Web-Based



THE RISE OF MOOC

- The rise of MOOC has influence ID in a way where it focused more on learnercentred, scalability and technology-driven education.
- **Theories:** Multimedia Learning Theory (Mayer, 2001), Self-determination Theory (Deci & Ryan, 2000) and Connectivism (Siemens & Downes, 2005)
- Key ID Influences: MOOCs (2008), Web 2.0 (Interactive, User-Generated Content) The rise of YouTube (2005)
- Technology: Smartphones, Mobile Learning (iPhone, 2007), Cloud-Based LMS and Learning Analytics (Moodle, Blackboard Expands)



THE RISE OF CONNECTIVISM

- Where formal and informal learning takes place anywhere, anytime with just a click of a button.
- Theories: Personalized Learning (Rose & Dalton, 2012), Microlearning (2010s)
- Key ID Infleunces: Gamification in Learning (Duolingo. Kahoot!, 2010s) Adaptive Learning (Al-Driven Learning Systems), MOOCs go Mainstream (Coursera. edX, Udacity,
- ID had to become more flexible, interactive and give a more personalized learning experience.
- **Technology:** iPads, Tablets, and Laptops, Al-Powered Learning Tools, VR/AR, Tablets, Interactive Whiteboards



SMARTER TECH, SMARTER LEARNING

- Emerging Learning Theories: Al-Powered Learning & Data-Driven Personalization, Blockchain Credentials & Decentralized, 5G & Edge Computing Enhancing Mobile Learning
- Key ID Influences: Al-Tutors and Chatbots for Personalized Assistance, Gamification and Immersive VR/AR Learning Environments and Blockchain-Based Digital Credentials for Skill Verification
- **Technology:** Al & NLP in ID and Quantum Computing's Potential
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