SKIIIS 4116e

Promoting the Transition to Active Life through Gamification and Game-Based Learning





Training Module:

Technology and Innovation in Education

by Quarter Mediation

DAY 1:

- Introduction
- Activity 1: Understanding the Foundations of Educational Technology. Introduction to Educational
 Technology





Introduction to Educational Technology



- ☐ Introduction to the module and learning objectives (30 min)
- ☐ Key concepts in educational technology (30 min)
- ☐ Problem-based learning exercise: Analyzing case studies of successful technology integration in education (120 min)
- Reflection exercise: Identifying personal attitudes toward technology and its impact (15 min)
- Self-directed activity: Reading materials on the history and evolution of educational technology (60 min)





Introduction to the module and learning objectives

- Brief overview of the importance of educational technology in modern education
- Knowledge, skills and attitudes to be developed in this module



Introductory video on "Technology and Innovation in Education"







Key concepts in educational technology

- E-Learning
- Blended Learning
- Educational Technology







Key concept: E-Learning

Definition

• E-Learning refers to the use of electronic technologies, such as computers and the internet, to access and engage in learning experiences.

Characteristics

- Learning materials are delivered electronically.
- Learners can access content at their convenience.
- Interaction and communication may occur through online platforms.

Benefits

- Flexibility for learners.
- Access to a wide range of resources and courses.







Key concept: Blended Learning

Definition

 Blended Learning combines traditional in-person teaching with online learning activities, offering a balanced learning experience.

Characteristics

- In-person classes are complemented with online components.
- Learners may have control over the pace and place of their learning.

Benefits

- Enhanced flexibility.
- Personalized learning.







Key concept: Educational Technology

Definition

 Educational Technology encompasses all tools, platforms, and resources used to enhance teaching and learning processes.

Components

- Hardware (e.g. computers, tablets).
- Software (e.g. learning management systems, apps).
- Digital content (e.g. e-books, videos).

Benefits

- Improved engagement and interactivity.
- Accessibility to educational resources.







Case Study: "TechForChange: Transforming an Underserved Community School"

Background:

TechForChange is a case study that explores the journey of an underfunded, urban community school called "Maplewood Elementary" in a diverse and low-income neighborhood. The school faced numerous challenges, including low student engagement, struggling academic performance, and limited resources. However, through a strategic technology integration initiative, Maplewood Elementary achieved significant improvements over the course of two years.

Key points for analysis:

Strategic Technology Selection Professional Development Personalized Learning Community Involvement Data-Driven Decision-Making



Challenges and solutions:

Digital Divide: Many students lacked access to technology at home. The school addressed this by providing take-home tablets and organizing community technology access points.

Teacher Resistance: Some teachers initially hesitated to embrace technology. The school addressed this through ongoing professional development, mentorship, and peer support.

Funding: Funding was limited. The school sought grants and engaged local businesses to sponsor technology resources.

Results:

Over a two-year period, student engagement and academic performance notably improved. Parental involvement in the school increased. Discipline issues reduced, creating a positive learning environment. The school's success garnered media attention and community support.





Case Study: "TechForChange: Transforming an Underserved Community School"

Exploration questions:

- 1. What specific technology tools and strategies were employed at Maplewood Elementary?
- 2. How did these tools and strategies impact student engagement and academic outcomes?
- 3. What challenges did the school face during the technology integration process, and how were they overcome?
- 4. How can lessons from this case study be applied to your educational or social work setting to replicate or adapt the success seen at Maplewood Elementary?







Case Study: "TechForChange: Transforming an Underserved Community School"

Exercise description:

In this exercise, participants will work in groups to analyze a case study of a successful technology integration initiative in education, namely "TechForChange: Transforming an Underserved Community School".

The goal is to identify the key factors that contributed to the success of the program and consider how similar strategies can be applied in their own educational contexts.



Scenario:

You are a team of educators and social workers tasked with exploring the case study of a school that successfully integrated technology into their educational programs. The school, located in a diverse community, achieved remarkable results in terms of student engagement, academic performance, and personal development. Your task is to understand the factors that led to this success and brainstorm ways to replicate or adapt these strategies in your respective roles.





Case Study: "TechForChange: Transforming an Underserved Community School"

Instruction for participants:

- 1. Form groups of 3-4 participants. Each group will be responsible for analyzing a different aspect of the case study.
- 2. The case study document is distributed to each group.
- 3. Within each group, the participants are assigned different roles such as:
 - · Facilitator ensures the discussion stays on track,
 - researcher collects information from the case study
 - · recorder takes notes,
 - presenter summarizes the findings.
- 4.In your groups, thoroughly analyze the case study by considering the four exploration questions.
- 5. After analyzing the case study, brainstorm strategies that could be applied in your own educational or social work environments to replicate the success seen in the case study. Consider how you can adapt these strategies to your unique situations.
- 6. Each group will prepare a brief presentation summarizing their findings and proposed strategies.
- 7.Groups take turns presenting their findings and proposed strategies to the entire class. After each presentation, the class is invited to engage in discussion to share insights, ask questions, and offer feedback.





Reflection exercise: Identifying personal attitudes toward technology and its impact

Individually, take a moment to reflect on the case-study exercise "TechForChange: Transforming an Underserved Community School" aimed to analyze successful technology integration in education, and consider:

- 1. How the insights gained can be applied in your own educational or social work practice?
- 2. What actionable steps can you take based on the lessons learned from the case study and group discussions?







Self-Directed Activity: Exploring the History and Evolution of Educational Technology

Description:

Through this self-directed activity, you are invited to dive into the rich history and evolution of educational technology. By exploring selected readings, articles, and online resources, you will gain insights into the development of educational technology over the years, from its inception to modern innovations. This activity is designed to provide a comprehensive understanding of the field's growth and how it has shaped education today.

Participants are encouraged to also search by themselves the topic, by exploring websites of educational organizations, government agencies, and academic journals that may have relevant articles and publications on the topic. Moreover, Google Scholar, ResearchGate, or the own institution's library resources can also be used as resources for adding more topics to the reading list. In this way interesting related-readings in the national language can also be found.

Reading list:

- A short history of educational technology web article
- <u>Digital learning and ICT in education</u> web article
- Innovative Educational Technologies: European Experience and its Implementation in the Training of Specialists in the Context of War and Global Challenges of the 21st Century
- The history of technology in education YouTube Video
- <u>Technology in Education: A Future Classroom</u> YouTube Video
- <u>5 Educational Technology Trends in 2023</u> YouTube Video
- <u>Digital Transformation in Education, why does it take so long?</u>
 YouTube TEDx Video
- What is E-Learning YouTube Video
- Aligning teacher competence frameworks to 21st century challenges: The case for the European Digital Competence Framework for Educators – online scientific article
- <u>Data Analytics: The Future of Innovative Teaching and Learning</u> online scientific article





Self-Directed Activity: *Exploring the History and Evolution of Educational Technology*



Instruction for participants:

- 1.Access the Reading List provided by your facilitator. It includes free access articles and online resources related to the history and evolution of educational technology.
- 2. Choose Your Starting Point by beginning with an article, or resource that piques your interest.
- 3. Dive into the chosen reading material. Take your time to read and reflect on the content. Consider the following as you read:
 - 1. What were the initial goals and objectives of educational technology?
 - 2. How have technological advancements influenced educational practices?
 - 3. What key milestones or innovations were instrumental in the field's evolution?
- 4. While reading, you can take notes of important historical events, and any questions or insights that arise.
- 5.If a particular aspect of the history of educational technology intrigues you, explore it further. You can seek additional resources or delve deeper into the subject matter.
- 6.After your reading and research, take time to reflect on how the historical context of educational technology has influenced the present. Consider how it impacts your role as an educator, community educator, or social worker.
- 7. Consider sharing your insights, questions, or additional resources related to the history and evolution of educational technology in the next lesson. Engage in conversations with your peers to enrich the learning experience.





Self-Directed Activity: *Exploring the History and Evolution of Educational Technology*

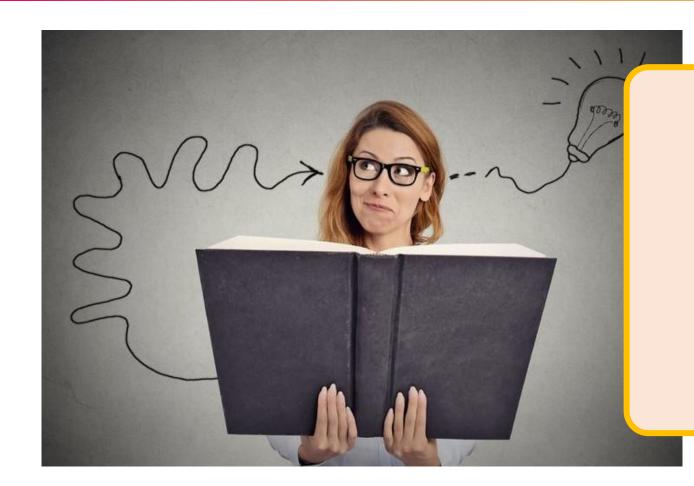
Learning outcomes:

- Deeper understanding of the historical context and evolution of educational technology.
- Insights into the factors that have driven innovation in the field.
- Appreciation for how historical developments have shaped modern educational practices.
- Ability to apply historical knowledge to the role of an educator, community educator, or social worker.

This self-directed activity encourages participants to become independent learners by exploring educational technology's historical journey. It enables them to connect the past with the present and gain valuable insights into the field's evolution.







Conclusion

















