Course 2 - Learning in the Digital Age: Introduction to EdTech

Specialization Overview:

This course is part of the **Digital Pedagogy: Teaching & Training Online** specialization, which is designed to provide professionals with an overview of educational technology and its application in teaching and learning. The courses are devised to enable educators to integrate the advancements in the edtech field into their teaching pedagogy for enhanced effective learning. Led by experienced LUMS faculty, this specialisation will provide you with a comprehensive overview of best practices for structuring your course or training experience, engaging your learners, and measuring their progress. Whether you're interested in designing new courses/programs/trainings or revamping an existing one, you'll gain practical insights and techniques that you can immediately put into practice in your teaching.

This specialization is offered collaboratively through the LUMS Learning Institute and the LUMS Center for Continuing Education Studies. It covers the history of EdTech, its benefits and challenges, as well as the tools and resources available. Participants will gain practical skills and knowledge to integrate EdTech into their teaching and learning environments, enhancing the overall effectiveness of their educational practice. Upon successful completion of the specialization participants will have gained valuable skills and knowledge that can be applied in different domains within the capacity of teaching and Training.

Course Overview:

This course provides an introduction to the specialization, an overview of edtech, its emerging trends in the world and its applications in the educational settings. By the end of the course participants will have gained an understanding of the foundations of edtech and its educational implications. They will gain a profound understanding of various digital learning platforms, integrating edtech in lesson planning and delivery as well as gaining the opportunity to evaluate edtech applications in real life settings and situations. This knowledge will provide a strong basis for the participants to further construct upon as the course proceeds towards exploring edtech in various capacities within the educational setting.

Learning Outcomes:

1. Identify and describe the key trends in educational technology, including emerging technologies and their potential impact on teaching and learning.
2. Analyze and evaluate different digital learning tools and technologies for their effectiveness and appropriateness in various educational contexts.
3. Design and implement digital learning activities and assessments that align with learning objectives and incorporate effective pedagogical practices.
4. Identify and apply strategies for promoting digital citizenship and online safety in educational settings.

5. Utilize different digital resources and platforms to support collaboration and communication among students and between teachers and students.
6. Apply principles of universal design for learning (UDL) to create accessible digital learning materials that meet the needs of diverse learners.
7. Apply knowledge of copyright and fair use to create and share digital learning materials in compliance with legal and ethical guidelines.
8. Develop a plan for integrating EdTech into a classroom or school setting.
9. Analyze data from digital learning activities and assessments to inform instructional decision-making and improve student learning outcomes.
10. Use digital learning tools and technologies to facilitate personalized and self-directed learning experiences for students.
11. Design and deliver effective professional development programs for educators on the use of digital learning tools and technologies.

Course Outline:

By the end of the course, participants will have developed a strong foundation of educational technology (EdTech) and how it is transforming teaching and learning in the digital age. The students will have an opportunity to explore the evolution of EdTech, its potential and limitations, and how it is being used to enhance learning outcomes across diverse contexts. Topics covered in the course will include online learning, game-based learning, artificial intelligence, learning analytics, and emerging trends in EdTech. They will be given hands-on training regarding the application of digital learning tools to enhance student learning experience as well as utilization of resources to promote collaboration between teachers and students. Assessments for the course will be conducted in the form of quizzes, class participation and discussion, weekly reflections and a final project around applying the acquired into design thinking and innovation.

I. Introduction

- Overview of the course and its objectives
- Brief history of EdTech and its significance in modern education
- Understanding the impact of digital technology on learning

II. Theoretical foundations of EdTech

- Theories of learning and how they relate to EdTech
- Different models of technology integration in education
- Understanding the benefits and limitations of using technology in education

III. Educational technologies and their applications

- Learning management systems (LMS) and their features
- Online communication tools and their applications
- Multimedia resources and their impact on learning
- Mobile learning and its significance in education
- Virtual and augmented reality and their potential for education
- Game-based learning design principles

IV. Issues and challenges in EdTech

- Digital divide and accessibility issues
- Privacy and security concerns in online learning
- Social and cultural implications of using EdTech
- Ethical considerations in using technology in education

V. Evaluating the effectiveness of EdTech

- Approaches to evaluating the effectiveness of technology in education
- Understanding the role of data and analytics in assessing student performance
- Best practices for implementing and evaluating EdTech tools

VI. Future directions in EdTech

- Emerging trends in technology and their implications for education
- The role of artificial intelligence in education
- Ethical and social considerations for the future of EdTech

Assessment:

Assessment in this course will be based on a variety of methods, including:

- Quizzes to assess knowledge and understanding of EdTech concepts and tools.
- Class participation and discussion to encourage engagement and critical thinking.
- Hands-on activities to develop practical skills in using EdTech tools.
- Weekly reflection journals to help form questions of the new understanding with schema.
- Group projects to apply EdTech concepts to real-world scenarios and encourage peer to peer learning.