AI in the Elementary Classroom: Foundations, Applications, and Ethics
Course Syllabus

Course Description

This professional development course equips elementary educators with the knowledge, skills, and confidence to effectively integrate artificial intelligence (AI) into their teaching practices. Through eight comprehensive modules, participants will explore the foundational concepts of AI, evaluate age-appropriate tools, and learn strategies to personalize learning, increase efficiency, and foster digital citizenship among students. The course emphasizes ethical considerations, student engagement, and teacher empowerment, helping educators navigate the evolving landscape of AI in education. By the end of the course, teachers will be prepared to make informed decisions about using AI to enhance instruction and support student success in a responsible, creative, and student-centered way.

This course enhances classroom teaching effectiveness and supports improved student outcomes by introducing new knowledge in the integration of artificial intelligence (AI) into elementary education.

Course Objectives
At the end of this course you should be able to:

1. Understand the basic concepts of artificial intelligence and explore its emerging role in education, especially in elementary settings.
2. Identify and evaluate AI-powered tools that support student learning and teacher productivity in elementary education.
3. Explore how AI can be used to personalize instruction and support differentiated learning in elementary settings.
4. Learn how to effectively introduce foundational AI concepts to elementary students concepts to elementary students through engaging, age-appropriate activities.
5. Understand the ethical implications of AI use in the classroom and help students become responsible digital citizens.
6. Learn how to use AI to streamline planning, grading, communication, and professional growth.
7. Develop strategies for embedding AI meaningfully into existing curriculum and instruction in elementary classrooms.
8. Reflect on the future of AI in education and plan for ongoing learning and adaptation.

Modules
- Module 1: Introduction to AI in Education, Quiz 1
- Module 2: Exploring AI Tools for Elementary Classrooms, Quiz 2

- Module 3: Personalizing Learning with AI, Quiz 3
- Module 4: Engaging Students with AI, Quiz 4
- Module 5: Promoting Digital Citizenship and AI Ethics, Quiz 5
- Module 6: AI for Teacher Productivity and Planning, Quiz 6
- Module 7: Integrating AI into Curriculum and Instruction, Quiz 7
- Module 8: The Future of AI in Elementary Education, Quiz 8

Grading
Each quiz must be passed at an 80% or higher (three attempts allowed).

Format
This is a self-paced, asynchronous (no required live meetings) course. Throughout the PD course, you will find it helpful to take notes along the way to assist with the quizzes. Within each module, you will find reflection assessments that are not graded but will help in your journey through the course. There is an interactive forum in the course to help you connect with peers and instructors, share ideas, and collaborate on best practices throughout your learning journey.