AI & Gamification: Unlocking Creativity in Education

Course Ref:
ERASMUS+AIGAMIFICATION
Entry Level: B1

Language of tuition: French

Daily Teaching Sessions Morning:
4 x 45 minutes (3 hrs. 15)
Afternoon: 1 x 45 minutes

Total course contact hours:
1 week: 20 hours

Maximum class size: 14

Course provider:
NDI – KLF Bordeaux
2 parvis Gattebourse
33800 Bordeaux

Training manager

Xavier Casse

Xavier Casse is a French as a foreign language trainer with a passion for the subject, renowned for his expertise in educational engineering and teacher training. Curious and caring, he excels at creating innovative teaching resources tailored to the needs of learners.

Specialising in digital learning, gamification and artificial intelligence applied to the teaching of French as a foreign language, he has been designing engaging training courses for over 10 years. Xavier has given numerous conferences in France and abroad on AI and gamification, and knows how to captivate his audience and convey complex knowledge in a fun and interactive way.

Public :

Classroom Teachers – This course empowers classroom teachers with AI-driven knowledge and tools to enhance student creativity.

Curriculum Developers & Educational Leaders – Ideal for those shaping educational programs, this course offers valuable insights into integrating new tools effectively into curricula.

Educational Technologists & Instructional Designers – Professionals in educational technology and instructional design will gain expertise in the latest Innovative tools for fostering creativity in the classroom and understand gamification principles that will allow them to develop curricula that incorporate engaging game-based learning elements.

Objectives
● Develop understanding of AI tools for enhanced classroom creativity.
● Explore practical AI applications across subjects for creative student projects.
● Gain skills in designing engaging AI-powered activities that spark student innovation.
● Create an AI project demonstrating the effective use of AI to enhance creativity in a specific classroom setting.
● Enhance participants' understanding of the principles of gamification and its potential to increase student engagement, motivation, and learning outcomes in educational settings.
● Develop practical skills and techniques for integrating gamification and innovative tools like AI into various subject areas, fostering interdisciplinary connections and innovative teaching practices.

Preparation Pre-course Preparative Modalities:
● Needs Analysis
● Online resources for pre-course, arrival and cultural information
● Online language level assessment

Practical arrangements Intra-Course Modalities offered by the Course Provider
● Course tutor
● Pedagogic learning materials included
● Setting of learning objectives
● Ongoing assessment and evaluation including feedback on progress
● Guidance and advice on homework exercises
● Accommodation service upon request
● Transfer service from airport upon request

Design Engaging AI & Gamified Activities – Develop and implement AI-powered and gamified lessons that inspire student creativity, motivation, and participation.

Develop Project Management Skills
Learn the essential skills for managing and completing a project that showcases the creative potential of AI and games in a classroom setting.

Master AI for All Learners
Become adept at using AI tools to empower diverse learning styles, ensuring all students can benet from AI's creativity-boosting capabilities.

Analyze & Overcome Challenges
Critically assess the benefits and limitations of AI and gamification while developing solutions for common classroom challenges.

Enhance Technological Skills – Gain proficiency in digital tools and platforms that support gamified and AI-driven learning experiences.

Follow up provided Post-Course Modalities
● A Certificate of Attendance and Achievement
● Europass Mobility
● End of course test and programme evaluation

Course Content and Strategies
This course explores the dynamic intersection of AI-powered creativity and gamification in education. Participants will dive into practical AI tools that seamlessly integrate into lesson plans, enhancing creativity across various subjects. From imaginative writing exercises to interactive science simulations, AI will be used to transform classrooms into engaging learning spaces.

Through hands-on workshops and case studies, educators will learn to design AI-powered activities tailored to diverse learning styles, ensuring inclusivity and active student participation. Additionally, the course introduces gamification principles, covering strategies like points, badges, leaderboards, and rewards to boost student engagement. Participants will explore game design elements, real-world case studies, and advanced techniques, including virtual and augmented reality in education.

By the end of the course, participants will have developed a comprehensive AI-enhanced, gamified learning unit. They will present their projects, demonstrate best practices, and create an action plan for classroom implementation—equipping them with the skills to foster innovation and engagement in their own educational settings.

Sample Programme
This is a sample of a schedule which can be adapted to suit the participants' needs.
One-Week Course
Total minimum number of course contact hours: 20 hours. *See appendix A below*

Outcomes
Harness AI for Creativity – Identify and evaluate AI tools to enhance creativity across subjects, integrating them effectively into lesson plans and curriculum structures.

Adapt to Diverse Learning Needs – Use AI and gamification strategies to support different learning styles, fostering an inclusive and dynamic classroom environment.

Master Gamification Techniques – Incorporate game elements and challenges to increase student engagement and improve learning outcomes.

Collaborate & Innovate – Exchange best practices with peers, applying AI and gamification strategies to create a more interactive and effective learning environment.

Appendix: Sample Programme

Week 1	Day 1	Day 2	Day 3	Day 4	Day 5
08:30 - 09:00	*Welcome, orientation and briefing before sessions*				
09:00 - 10:45	**Understanding AI in Education** Definition, history, and types of AI AI's Role in Education: Benefits, applications, and challenges in the classroom / Personalized learning / Adaptive learning platforms / Automating administrative tasks Discussion: How AI is already being used in education?	**AI Tools for Educators** AI-driven Educational Tools: Explore tools like adaptive learning platforms (e.g., DreamBox, Knewton, Squirrel AI), grading automation, and AI tutors (e.g., Squirrel, Watson Classroom) Hands-on Activity: Try out AI-driven apps that can personalize learning for students based on their pace and learning style	**Theories Behind Game-Based Learning** Cognitive Benefits of Game-Based Learning: How games can enhance memory retention, learning outcomes, and critical thinking The psychology of rewards and feedback Types of Game-Based Learning: Digital games, board games, and role-playing games (RPGs)	**Integrating AI and Gamification** How AI Enhances Gamified Learning: Adaptive game mechanics that respond to student progress AI-powered game-based tools that adjust difficulty levels in real-time Examples: AI-powered games, such as AI Dungeon (AI storytelling) or gamified platforms with AI integration Balancing Creativity with Technology: How to encourage student creativity while using AI and game elements	**Evaluating AI and Gamification Impact:** How to assess student engagement and performance in gamified and AI-enhanced lessons Using formative and summative assessments in a gamified environment
10:45 - 11:00	***Break***				
11:00 - 12:15	**Introduction to Gamification** What is Gamification?: Key principles and components of gamification Increased engagement and motivation Collaborative learning through game mechanics Examples of successful gamification in educational settings	**Implementing AI in Lesson Planning** Using AI to Analyze Student Data: How AI can help identify student learning patterns, strengths, and weaknesses Creating Personalized Lesson Plans: How to design AI-supported lesson plans that cater to individual needs Ethical Considerations: Privacy, bias, and the role of the teacher alongside AI	**Designing Gamified Classroom Activities** Creating a Gamified Learning Experience How to set learning objectives that align with game mechanics Digital Tools for Gamification: Platforms like Kahoot, Quizizz, Classcraft, and Seesaw	**Project Design with AI and Gamification:** How to structure long-term projects that incorporate both AI and gamification elements Student-Centered Learning: Encouraging creativity and ownership in learning through AI-powered games	**The Future of AI & Gamification in Education** Emerging Trends in EdTech: AI advancements, virtual/augmented reality, and future gamified education systems Building a Long-Term Strategy for AI and Gamification: How to stay updated with new tools, platforms, and educational trends
12:15 - 13:15	***Break***				
13h15 -14h45	Visit of the city	**Workshop :** design a sample lesson plan incorporating AI-based tools and personalize it for diverse learners	**Workshop :** Design a gamified classroom activity or mini-game for your subject using a digital platform	**Workshop :** Work in groups to create a project-based learning plan using AI and gamification strategies	Cultural activity