

PRODUCTIVE USE OF ARTIFICIAL INTELLIGENCE IN TRAINING AND EDUCATION

Dr Sunil Abrol

President, ICPR

Trainers, irrespective of internal trainers or consultants and faculty in higher education institutions, need to take care of number of standard activities in order to achieve the objective of their participants to learn and meet learning objectives. They need to understand the expectations and needs of participants, develop content for the objectives to be achieved, design and develop activities that will help in effective learning and internalization of concepts, use multiple training methods to engage learners and make learning effective, use facilitation skills and variety of tools and methods of delivery to make learning interesting and participative. Trainer also plays the role of mentor and coach to provide personalized support to the learner. Role of trainer extends beyond delivery to ensure impact of learning and measurement thereof.

Artificial Intelligence (AI) refers to simulation of human intelligence processes by machine, especially computer systems. AI is therefore a technology or tool that is available to Trainers / Educators to use to make their role effective. Trainers and educators can use AI tools for many activities that they need carry out for delivery of training and courses.

- Automate Processes : AI tools can help trainers to automate many of the routine activities including activities, games, quizzes etc.
- Discover expectations and needs: AI tools can be helpful in understanding learner expectations and needs using data analytics.
- Respond to requirements: AI tools can be used to create automated and customized response to queries and doubts of learners.
- Personalize learning : AI tools have capability of customizing learning specific to the needs of individual learners thereby making learning learner oriented and relevant.
- Predict learner behavior: AI tools can be used to assess learning and predict learning and possibility of learning retention, applicability and benefits.
- Achieve diversity and reach: AI tools have the capability of catering to diverse learners and making trainer/ educator reach anywhere and everywhere thereby extending the reach of trainer / teacher beyond the classroom.

Training and Teaching - Purpose for which AI can be used

- Developing Intelligent tutoring systems
- Automated content creation
- Adaptive Assessment of Learning
- Provide 24/7 learner support
- Predictive analysis of Learning Behavior
- Instant feedback to Learner
- Developing Insights based on data analytics
- Identifying learning gaps and needs
- Mentoring and coaching of learning

Typical AI solutions used by Trainers and educators

- Virtual reality simulations
- Learner Support chatbots
- Automated grading tools
- Content recommendation system
- Data analytics for optimization
- Intelligent tutoring systems
- Assimilation of discussions
- Synthesizing books, manuals.

Applications of AI in Training and Education

- Create Role play scenarios
- Generate Quizzes with varying difficulty
- Create rapid videos
- Create unique images
- Practice communication skills
- Improve story telling
- Administration of LMS
- Matching Mentor- Mentee

AI Tools for Training and Education

Application	Tool
Idea Generation/ 24/7 support	Chat GPT, NewBing, Poe,
Content creation	JasperAI, Write Smith, Article Forge
Image Creation	Mid journey, Play form, Dalle
Understanding Learner needs	Education insights, Reading Progress
Speech to text	Amazon transcribe, Buzz, Whisper
Learning Assistance	Microsoft maths, Cogni, Blippar
Personalized learning	Carnegie learning, content technologies
Assessment	Grade scanner, Tunitin, iris
Tutoring and mentoring	AllHere, Guider, Capacity
Accessibility	Synthesia, Nuance, Audio transcriber

Artificial Intelligence(AI) is a support to the trainer and educator to make his / her job efficient . Productivity of trainers and educators will get enhanced manifold with use of AI tools. What is needed is investment by trainers and educators to familiarize themselves with various AI tools and start using them for activities that they feel comfortable with. Like any other software AI tools are user friendly and can be mastered easily.