Open and Distance Learning

Key Terms & Definitions

Table of Contents

Open and Distance Learning: Key Terms and Definitions

Adaptive learning refers to the customisation and personalisation of learning through technologies including artificial intelligence to address the needs of the individual learner. (Cf. Personalised learning)

Andragogy broadly refers to educational methods and principles related to adult learning. (Cf. Pedagogy)

Artificial intelligence (AI) refers to the capacities of computing systems to perform tasks associated with human minds and intelligence, such as the ability to reason, discover meaning, generalize, or learn from past experience.

Artificial intelligence (AI) in education refers to the application of AI for supporting student learning outcomes or facilitation of educational goals, including educational administration. As such AI may cover a range of technologies and methods, such as machine learning, natural language processing, data mining, neural networks or an algorithm.

Assessment is a process of providing feedback on learning progress and achievement. In educational contexts, this involve gauging progress throughout the learning process towards determining formative assessment or at the end of a learning cycle in order to get a summary of what has been learned through so-called summative assessment. The term assessment also encompasses a number of tools and strategies. There has been a move away from merely assessment of learning to also consider assessment for learning and even assessment as learning.

Assistive Technology refers to tools and technologies that assist with full participation of an individual in various activities, including, but not limited to learning. Assistive technologies in the context of learning may include specialised computer software and hardware that increase mobility, hearing, vision, or communication capacities of people with disabilities.

Asynchronous Learning involves the use of technology to enable sharing of learning resources and the exchange of ideas within a network of learners and teachers who are separated by time and/or space. Examples of asynchronous learning are discussion forums and email interactions. In both cases there is a time lag between interactions.

Augmented Reality in education involves the addition of computer-generated information to a real-world environment with a view to creating a more interactive learning experience enhanced using multiple sensory modalities such as sound, touch, movement or smell.

Authentic assessment involves a range of assessment approaches and tools pertaining to tasks embedded in realistic contexts with a focus on application within the world of work and with the aim of effecting transformative change. Authentic assessments are more valid than conventional tests, especially when the learning outcomes cover higher-order thinking skills. They are more interesting, motivating and challenging to the learners, and provide better information about the achievement of the skills. (Cf. Assessment)

Blended Learning involves a combination of online and face-to-face learning experiences. Some examples of blended learning include the flipped classroom, online interaction followed by face-to-face teaching, online learning supplemented by a face-to-face practical. (Cf. Hybrid learning

and Multimodal learning)

Blockchain is a cumulative list of digital records that are linked together and where each successive entry links to the complete record of what has gone before as verified by transaction data and a time stamp. This makes data in a blockchain resistant to historical modification. In education, blockchain technologies can be used primarily for student records and credentials.

Cloud computing relates to the storing of data and computing done through the use of online-based computer resources that are shared between users.

Collaborative learning involves learners working together to achieve a common goal or to complete a task but where learners are responsible for their own learning. (Cf. Cooperative learning)

Community of inquiry (CoI) model explains how learning takes place in groups with specific focus on social, cognitive, teaching and learning presences.

Competency-based Education (CBE) is an approach to teaching, learning and assessment which focuses on learners demonstrating the knowledge, skills and attitudes in highly specific units regardless of time, place, or pace of learning, usually in authentic contexts.

Cooperative learning relates to learners collaborating in small groups and here learners are interdependent and rely on each other to complete the task or achieve the goal. Such activities are often involving carefully teacher-planned cooperative environments. (Cf. Collaborative learning)

Deep learning is considered a subfield of machine learning and it involves training of artificial neural networks to learn from large datasets, identify patterns, and make predictions or decisions and within distance education this can aid the personalisation of learning for individual students. (Cf. Machine learning)

Deeper learning relates the process of acquiring deeper knowledge and skills as opposed to merely attaining surface-level knowledge.

Distance education is a process of teaching and learning characterised by the separation of teacher and learner in time and/or place for most of the educational transaction, mediated by technology for delivery of learning content but with possibility of face-to-face interaction for learner-teacher and learner-learner interaction, and provision of two-way didactic communication. Distance is about the transactional distance and not the physical distance. It is a conceptual construct with two key dimensions: structure and dialogue. Programmes with more structure and less dialogue are considered to have more distance.

Distributed Learning is an approach which enables teachers, learners and content to be in different places and for engagement to happen independently of time or space.

Educational technology refers to the use of a range of technologies and methods to improve/optimise learning and performance in different educational contexts. This may also include using technologies for facilitating and supporting learning.

e-Learning is an umbrella term that refers to the use of any digital device or media (multimedia) for teaching and learning, especially for delivery or accessing of content. Thus e-learning can

take place without any reference to a network or connectivity. The digital device used by the learner to access materials need not be connected to a digital network, either a local area network or to the Internet (or even to a cell phone network if a tablet is used as a terminal or access device).

Flexible Learning is the provision of more choices to the learners in terms of when, where and how they learn. Flexible learning may include use of online learning, workplace-based learning, part-time learning, distance learning, and many forms of face-to-face teaching and learning with options to fast track and defer courses.

Flipped Classroom or flipped learning is a form of blended learning where learners read or watch online lecture materials at home, before participating in interaction in a classroom environment.

Formative assessment is the process of providing feedback to the learners throughout the learning process. It is often referred as continuous assessment, and done though assignments, self-check exercises, etc. in distance learning. It has the potential to improve teaching practices.

Gamification refers to infusing game design elements in the learning process by framing a specific learning process or processes as play. Such an approach can include the use of progress markers such as badges and other narrative and character elements associated with electronic games.

Heutagogy is considered a learning approach that emphasizes self-determined learning and learner autonomy. This approach believes in supporting the learner to create their own curriculum allowing learners to choose the courses of their interest. In heutagogy the focus is both on competencies and capabilities. (Cf. Andragogy and Pedagogy)

Hybrid learning is an umbrella terms for a learning approach in which different modalities of instruction, whether face-to-face or online, are combined in order to provide flexible and personalised learning experiences. (Cf. Blended learning and Multimodal learning)

HyFlex learning is a term used for a combination of hybrid and flexible learning. The key in HyFlex learning environment is the flexibility available to the learners to choose and participate in a range of delivery options, including online, blended and in-person activities within a course or a programme.

Information and Communication Technologies (ICTs) refer to a range of technologies and tools used to create, collate and communicate information and knowledge. ICTs are used in daily life to prepare documents, talk to others by phone, listen to radio and watch television programmes. Some ICTs involve one-way communication, while others facilitate two-way communication. Some can include only one medium (e.g., telephone), while others can handle more than one medium (e.g. computer and television).

Instructional design relates to the systematic process of designing, creating, deploying and evaluating learning.

Learner engagement pertains to a process of dynamic and active involvement/participation of students in the learning process.

Learner support entails different resources, services, as well as forms of assistance provided to learners in order to support them achieving their educational goals. Such support may involve formal initiatives at education institutions towards ensuring that students are successful in their studies and that they have access to the resources needed to overcome possible barriers or challenges.

Learning analytics entails the gathering, measuring, and analysis of student data in order to improve the effectiveness of learning and teaching.

Learning design also referred to as instructional design refers to the process of systematic planning, development, as well as implementation of learning activities and resources to achieve specific set learning outcomes and focuses more on a learner centric approach to design, development and delivery of courses. (Cf. Instructional design)

Learning Management System (LMS) often also called course management system or virtual learning environment, is a web-based software system that assists teachers to manage courses and deliver lessons online. It helps in administration, tracking and reporting of the learning process. An LMS usually has the following constituent components: content creation, organisation, delivery, learner support interactions, assessment and grading, and management of the learning process.

Learning outcomes are statements describing what students should be able to do after a specific course, lesson or other learning opportunity.

Learning pathways are routes chosen by learners within a learning environment. Learning pathway possibilities can be built into courses and programmes to support learner-centred activities.

Learning technologies are those that are used for enhancement of teaching, learning and assessment. In other words, it is the use of a range of ICTs for teaching, learning and assessment. Learning technologies can be deployed as tools for drill and practice, tutorials, information retrieval systems, simulations, communication, etc.

Lifelong learning is the ongoing, often voluntary, and self-motivated learning throughout the life of an individual for personal and/or professional reasons. Lifelong learning may include formal, non-formal and informal learning.

Machine learning involves the way in which machines such as computers learn through analysing data and then are able to improve their performance. (Cf. Artificial intelligence)

Massive Open Online Course (MOOC) is an online course available for large enrolment on the open web, where 'open' largely refers to open registration, and not necessarily courses that are openly licensed.

Metaverse (in education) refers to a hypothetical future iteration of the Internet which would allow a fully immersive and interactive virtual world where learners can engage with each other and educational digital content synchronously.

Micro-credential is a digital certification such as a "digital badge" that provides valid evidence of achievement of specific knowledge, skills or competences after going through a structured learning experience. Micro-credentials can be shared on social media and verified by others, including employers.

Microlearning refers to small units of learning that can be completed in a short time. These "bite- size" chunks of learning can be aggregated into larger lessons/ modules or programmes of learning. The term also refers to the process of using small chunks of multi-modal resources for just-in-time learning in the workplace or in professional development programmes.

mLearning or mobile learning is defined as the provision of education and training using mobile devices such as tablets, smartphones and mobile phones. While learning is not mobile, it is about teaching and learning through the use of mobile devices, anywhere, anytime.

Multimodal learning implies that learning is taking place through various modes; this could take place at an individual, interactional, instructional or institutional level.

Online Learning is e-Learning with a mandatory involvement of a digital network which a learner needs in order to access at least part of the learning materials and services. Online learning refers to network-enabled teaching and learning that allows the learner to have increased interaction with content, teachers and other learners.

Open and Distance Learning (ODL) is the provision of distance education opportunities in ways that seek to mitigate or remove barriers to access, such as finances, prior learning, age, social, work or family commitments, disability, incarceration or other such barriers. "Open" refers to a commitment that removes any unnecessary barriers to access to learning. Distance education refers to teaching and learning that temporarily separates teacher and learner in time and/or place; uses multiple media for delivery of instruction; involves two-way communication and possibly occasional face-to-face meeting for tutorials and learner-learner interaction. Open learning is not the same as distance learning, but both are complementary and hence the two terms are often used together as open and distance learning.

Open Educational Practice(s) (OEP) can be defined as the deliberate use of OER in teaching and learning (referring to the best ways of reusing, re-mixing, redistributing, retaining and revising OER) or a broad commitment to and practice of cooperation, collaboration and sharing of resources and expertise for social interaction, knowledge creation and peer learning.

Open Educational Resources (OER) is defined by the UNESCO OER Recommendation 2019 as any "learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others."

Open Learning refers to policies and practices of openness in entry requirements (with minimal or no restriction on qualifications), choice of courses, place of study and time, etc. It is an educational philosophy where learning can happen anywhere, anytime from any resource, and therefore, can also inform practice in face-to-face institutions.

Open Schooling is the provision of schooling (teaching and learning) opportunities making use of open, distance and innovative e-Learning methods which do not necessarily require teachers and learners to be in the same place at the same time. It refers to the physical separation of the school-level learner from the teacher, and the use of unconventional teaching methodologies and information and communications technologies (ICTs) to bridge the separation and provide education and training.

Open Textbooks are textbooks that are published with an open license as an OER and that are available for free and may be adapted for different purposes.

Open University is a type of single-mode distance teaching institution that also offers flexibility in terms of choice of courses, entry requirements, learning media and approaches, choice of courses, time and place of study. Courses and programmes of an open university may offer different degrees of openness in their provision based on the nature of the studies and the legal contexts of operation.

Pedagogy is broadly understood as the science or study of teaching and learning. In some cases, this is more narrowly interpreted in terms of teaching and learning of children as opposed to adult teaching. (Cf. Andragogy)

Personalised learning relates to the differentiating and customisation of learning towards the needs of the individual. (Cf. Adaptive learning)

Problem-based learning (PBL) involves an instructional approach where learning takes place through solving a meaningful and often ill-structured authentic problem by means of investigating and negotiating collaboratively.

Quality (in distance education) relates to the level of effectiveness, efficiency, as well as equity within educational programme, policies, and practices ensured by the teaching and learning provider. The measures of quality in distance education includes quality of learning materials, the efficiency and effectiveness of both pedagogical practices and learner support, and student satisfaction. Such a system requires a dynamic system to ensure students in distance education receive the highest quality of learning experience. .

Recognition of Prior Learning (RPL) or Prior Learning Assessment and Recognition (PLAR) involves a process of acknowledging learners' existing knowledge and skills within a higher education context.

Robotics (in education) refers to the design, construction, programming, and operation of robots which in turn are programmable machines that can carry out a range of tasks autonomously or under the control of a human operator. Within educational contexts robotics is used to support the facilitation of learning problem-solving and programming skills.

Self-directed learning (SDL) involves a learner characteristic or process through which students would take charge of their own learning and setting their own goals, selecting physical or social resources and evaluating their progress.

Self-regulated learning refers to learner-driven metacognitive, motivational, as well as behavioral processes initiated by learners for their own learning.

Summative Learning is the process and practice of providing feedback at the end of a course to measure/evaluate student achievement.

Synchronous Learning is the opposite of asynchronous learning, where a learner interacts with teachers and/or learners online at the same time from a different place.

Technology-enabled learning refers to the application of some form of digital technology to teaching and/or learning in an educational context to support and facilitate student learning.

Transformative learning is an approach to learning which deliberately explores dilemmas that force the learner to question his or her own assumptions through critical thinking and questioning.

Tutoring involves academic support provided by individuals in terms of a specific skill or subject content. In many distance education contexts this may involve tutors who support learning in addition to formal lectures presented. In some institutions, this is also called academic counselling.

Unbundling refers to the process of separating parts of the traditional model of higher education, which involved the bundling together various services, such as teaching, research, student services, and credentialing. Creating short stackable courses to meet the needs of the leaners is an approach adopted by higher education for unbundling.

Virtual learning environments (VLEs) are online platforms used for learning purposes. This can involve a number of online resources or a combined platform or learning management systems.

Virtual reality in education involves the creation of a simulated experience that can be similar to the real world.

Virtual universities or cyber universities are higher education institutions or networks of higher education institutions responsible for the design, development and offering of courses and programmes in flexible and online environments.