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Технический комитет ТК 461
«Информационно-коммуникационные
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Под редакцией:
Позднеев Борис Михайлович, д.т.н., профессор, МГТУ «СТАНКИН»
Сутягин Максим Валерьевич, к.т.н., Газпром Корпоративный институт
Зуев Владимир Иванович, к.ф.-м.н., доцент, Институт социальных и гуманитарных знаний

Составители:
Ильин А.П., к.т.н., Вологодский государственный университет
Паннатье М.А.,к.п.н., University of Geneva (EUG)
Kultan Jaroslav, Ph.D., Dr.Ing, Ekonomická Univerzita v Bratislave
Зуев В.И., к.ф.-м.н., доцент, Институт социальных и гуманитарных знаний
Александрова М.Н., Университет Иннополис
Баранова Э.Е., Институт социальных и гуманитарных знаний
Мирзаянова Л.Ф., Институт социальных и гуманитарных знаний

Технический редактор:
Александрова М.Н., Университет Иннополис

Корректор:
Шамонова А.М., Институт социальных и гуманитарных знаний

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В настоящем издании представлены рабочие материалы, используемые для подготовки словаря-справочника электронного обучения. Все материалы взяты из открытых источников.

This publication presents draft materials for preparing an e-learning glossary. All materials are taken from open sources.

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СОДЕРЖАНИЕ

О ТЕРМИНОЛОГИИ ЭЛЕКТРОННОГО ОБУЧЕНИЯ

ВВЕДЕНИЕ

Изучение материалов российских конференций в области электронного обучения и участие в их работе позволяет сделать некоторые заключения и выводы.

Если рассмотреть достаточно большой интервал времени (20–30 лет), то можно обнаружить, что темы выступлений участников этих конференций повторяются с определенной периодичностью, а доступные в интернете многочисленные вебинары и онлайн-курсы открывают истины, однажды уже кем-то открытые.

Объяснение ситуации может быть только таким — примерно за десять лет вырастает новое поколение работников сферы образования и переподготовки, которое заново открывает для себя основы электронного обучения. Конечно, большую помощь в этом могут оказать (и оказывают) социальные сети, в которых новички могут обратиться за помощью к коллективному разуму профессионального сообщества. Однако, в силу разных обстоятельств это могут сделать далеко не все.

Из сказанного можно сделать вывод — необходим корпус соответствующей учебной и научной литературы. А в основе этого корпуса должны лежать периодически обновляемые глоссарии и справочники. При этом мы естественным образом сталкиваемся с проблемой адекватной терминологии.

Нечеткость терминов неизбежно открывает дорогу различным спекуляциям и злоупотреблениям. Это, как правило, относится ко всем инновациям, не только в области обучения.

Например, что такое «цифровая экономика»? Внедрение на производстве программ 1С? Использование технологий обработки больших данных для планирования и прогнозирования производства? Роботизация отдельных производственных процессов? Расчеловечивание (или дегуманизация) производства на основе технологий интернета вещей? Все это — совершенно разные задачи с самыми разными возможными последствиями, объединенные, однако, в массовом сознании под одним зонтичным термином.

Особую группу составляют термины, которые не переводятся на русский язык. Например, определение «смарт» (smart). Как перевести на русский язык Smart University — «умный» университет? Но тогда должен быть и «глупый» (Dumb). Наиболее близкий перевод прилагательного Smart — ладный, годный, но такие определения как-то не принято использовать в XXI веке. Или disruptive technologies — это «прорывные» или «разрушительные» технологии?

Рассмотрим некоторые вопросы, связанные с терминами, которые используются при описании электронного обучения.

МЕСТО ТЕРМИНА В СИСТЕМЕ ЗНАНИЯ

Наука может эффективно существовать лишь при наличии языка, который должен быть приспособлен к её нуждам. Основным элементом этого приспособительного механизма выступает специализированная терминология. При этом последняя является не столько вспомогательным, но и сущностным элементом науки. Терминологический словарь и его основа — терминологическая система — являются формой представления знания данной науки*.

При этом под термином понимается слово или словосочетание, которое выполняет строго номинативную функцию, функцию наименования специального понятия, названия специального предмета и явления [1, 2, 3].

По употребительности в различных сферах профессионального общения выделяют три группы терминов: общенаучные, межотраслевые и узкоспециальные.

Специальный научный текст является своеобразной средой профессионального общения, в которое оказываются вовлеченными как профессионалы, так и начинающие исследователи. В этой среде функционируют как

* Попов М.Х. Некоторые вопросы терминологической системы технетики. URL: http://www.kudrinbi.ru/public/401/index.htm

понятия давно известные и широко употребляемые среди профессионалов, так и понятия новые, не устоявшиеся и не имеющие строгого определения и понимания. Именно внутри этой когнитивно-коммуникативной среды профессионального общения (научного текста) и происходит осмысление и становление специальной терминосистемы [7].

Важнейшим условием успешного функционирования отдельно взятого научного текста является его принципиальная возможность освоения реципиентом, в связи с чем последний должен обладать достаточным объемом предварительного знания. Именно это предварительное знание обеспечивают терминологические словари.

При этом под терминологией, вслед за В.М. Лейчиком, мы будем понимать стихийно складывающуюся, неупорядоченную и несистематизированную совокупность терминов, в то время как под терминосистемой понимается сознательно формируемая и подвергающаяся упорядочению совокупность терминов [3].

Из сказанного следует, что составление словарей и глоссариев различных отраслевых терминосистем является необходимым и практически важным, поскольку исследования в любой области знания требуют досконального изучения терминологического аппарата.

В свою очередь термины являются результатом когнитивной деятельности человека и отражают уровень знаний в определенной области. Закрепив полученные человеком знания, термин сам становится инструментом этого знания (науки), поскольку дает возможность углублять эти знания, обогащать их и передавать другим [5].

При возникновении нового знания о фрагменте реальной действительности в определенной терминосистеме возникает терминологическая лакуна. Терминосистема, будучи структурированной совокупностью терминов и их связей для номинации нового знания, испытывает деформацию, образуя тем самым лакуну для нового термина.

Отправная точка на этом пути актуализуется в первой значительной научной публикации, посвященной обозначенной проблеме. Далее запускается механизм, в результате которого термин может быть принят рядом исследователей и использоваться в некоторых локальных контекстах. Также термин может претерпевать дальнейшие изменения, пока он не будет удовлетворять большую часть экспертов данной области знания. После принятия термина он признается частью дисциплинарного контекста и становится структурным элементом терминосистемы [7].

Особую важность в терминологической работе представляет упорядочение терминов. Эта работа может состоять из ряда этапов, к которым, кроме отбора терминов, относятся следующие*:

1) систематизация понятий данной области знания по категориям и построение классификационных схем понятий; уточнение на основании классификационных схем существующих дефиниций или создание новых;
2) анализ терминологии, который проводится с целью определения ее недостатков, позволяет выделить наиболее эффективные способы и модели образования терминов данной терминологии, выявить неудачные формы терминов и определить способы их улучшения или замены;
3) нормализация терминов, которая имеет две стороны — унификацию, направленную на упорядочение содержания терминов, и оптимизацию, имеющую целью выбор оптимальной формы терминов;
4) кодификация полученной терминосистемы, т.е. оформление ее в виде нормативного словаря. Ее результатом являются стандарты на термины и определения, которые в документации являются обязательными.

Следует отметить, что терминологический словарь, как тип справочной книги, обладает неограниченными возможностями для передачи разнообразной информации о термине в удобной и исчерпывающей для пользователя форме.

Следует заметить, что многие усилия по созданию терминологических словарей не приносят ожидаемых результатов. Поэтому для повышения эффективности этой деятельности логично использовать потенциал экспертного академического сообщества.

* Закирова Е. С. Лексикографическое описание технических терминов: современный подход // Известия МГТУ. 2012. Т.3. №2. С.316–324. URL: https://cyberleninka.ru/article/n/leksikograficheskoe-opisanie-tehnicheskih-terminov-sovremennyy-podhod (дата обращения: 08.06.2019).

ТЕРМИНОЛОГИЯ ЭЛЕКТРОННОГО ОБУЧЕНИЯ

Электронное обучение появилось в конце XX века и по настоящее время продолжает видоизменяться и эволюционировать, что находит свое отражение в терминологии. E-learning представляет собой новую образовательную парадигму, в которой информационные технологии играют системообразующую, интегрирующую роль, а открытие доступа к новым технологиям обучения и источникам информации становится определяющим.

Современное состояние терминологического фонда, описывающего электронное обучение, характеризуется трансформационным процессом, в результате которого на смену существующим терминам приходят новые. Достаточно подробно этот процесс был рассмотрен в диссертационной работе Е.В. Языковой [6].

За десять лет, прошедшие с момента написания работы [6], увеличилось как количество материалов, посвященных электронному обучению, так и соответствующих терминов (табл. 1).

Таблица 1

Термин	**Количество ссылок в поисковой системе Google**		
	Ноябрь 2005 г.	**Ноябрь 2009 г.**	**Май 2019 г.**
e-learning	56 500 000	104 000 000	3 440 000 000

Только за последние десять лет в терминологическом поле электронного обучения появились понятия, связанные с интернетом вещей, технологией блокчейн, социальными сетями, виртуальной и адаптивной реальностью. Тесно связаны с электронным обучением понятия Больших Данных, бизнес-разведки, онлайн-аналитики, социальной инженерии.

В табл. 2 приведены данные, полученные в результате анализа ключевых слов материалов, размещенных в сборниках ежегодной конференции «Электронная Казань». Несмотря на небольшой временной интервал, можно выделить некоторые тенденции, например, рост интереса к технологиям интернета вещей в системах обучения.

Таблица 2

Частота упоминания некоторых ключевых слов в материалах конференции «Электронная Казань» (нормированная на 100)

Ключевые слова	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
ИКТ в образовании	38	23	23	33	19	20
Интернет вещей, включая образование	1	1	4	5	17	19
Информационная безопасность	10	23	12	21	12	15

Ключевые слова	2013	2014	2015	2016	2017	2018
Методика электронного обучения	23	16	17	14	13	13
Обучение в сотрудничестве	6	6	11	3	2	5
Электронное обучение	39	26	28	25	19	26
Электронные образовательные ресурсы	27	18	14	17	8	14

Как уже упоминалось выше, терминологии отдельных областей науки и техники эволюционируют и превращаются в терминологические системы только в том случае, если они имеют четко определяемые границы и если им присуща своя система понятий. По мнению Е.В. Языковой [6], анализ терминологии электронного обучения уже десять лет назад позволял говорить о том, что термины, образующие данную терминологию, прошли определенную стадию упорядочивания, в результате чего терминология перешла на более высокий уровень терминосистемы.

Терминосистемам, как отмечал В.М. Лейчик, присущ признак относительной открытости [3], так они постоянно пополняются новыми терминами, отражающими новые появляющиеся понятия.

Анализ, проведенный в работе [6], свидетельствует о том, что в настоящее время в терминосистеме «e-learning» можно выделить восемь подсистем: «Stakeholders», «Educational Institutions», «Instructional and Learning Principles, Methods and Strategies», «Instructional and Learning Events», «Learning Administration and Management», «Learning Resources and Content», «Curricula, Courses, Programs», «Tools, Software, Programs».

Именно этот подход планируется использовать при работе над глоссарием электронного обучения.

ЗАКЛЮЧЕНИЕ

Работа над первым вариантом глоссария началась более пятнадцати лет назад. Сегодня первый вариант документа представляет больше исторический, чем практический интерес.

К сожалению, по причинам, указанным выше, актуальность этой работы за истекшее время не уменьшилась. Именно поэтому всех заинтересованных в издании глоссария мы приглашаем к сотрудничеству. Ждем ваших предложений по расширению/изменению списка терминов. Адрес нашей электронной почты: glossary@e-kazan.info.

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СЛОВАРЬ НЕКОТОРЫХ
НАИБОЛЕЕ ЧАСТО УПОТРЕБЛЯЕМЫХ ТЕРМИНОВ ЭЛЕКТРОННОГО ОБУЧЕНИЯ И ОБРАЗОВАНИЯ КАК СФЕРЫ ДЕЯТЕЛЬНОСТИ И ПРОИЗВОДСТВА В ЦЕЛОМ

GLOSSARY OF SOME
OF THE MOST FREQUENTLY USED ELEARNING, TRAINING & EDUCATION IN GENERAL TERMS

24/7 — Twenty-four hours a day, seven days a week. In e-learning, used to describe the hours of operation of a virtual classroom or how often technical support should be available for online students and instructors

70:20:10 Learning — A model for Learning and Development where 70% of learning is experiential (sometimes known as "on-the-job training"), 20% is through others (peer-to-peer or social learning) and 10% is from formal coursework and training. This is a broad, research-based framework for facilitating optimal learning, often attributed to McCall, Lombardo and Eichinger from their studies 1996

A

Adaptive Learning —

Adaptive Student-Centered Learning —

Adaptive University-Centered Learning —

Academic Term — An academic term or "session" is a portion of an academic year, the time during which an educational institution holds classes. A "semester" system (from the Latin meaning "six-monthly") divides the academic year into two terms, which are usually 14–20 weeks each. Some schools follow a trimester (three terms a year) or even a quadmester (four terms a year) schedule
See also *Semester*

Accelerated — Many institutions offer accelerated courses, which are traditional 16-week semester courses that have been condensed into half the time. Accelerated courses allow you to complete your degree or program sooner, but they cover the same amount of material in less time and can be demanding

Accessibility — When it comes to e-learning, accessibility for all learners is crucial. Accessibility means course content can be used by people with varying abilities and disabilities (visual, hearing, motor, or cognitive impairments). E-learning content developers and instructional designers should aim to make courses clear, easy to understand, and simple to complete. Learners who suffer from sensory, intellectual or technological difficulties will need assistive technology to successfully access and complete their training courses.
Accessible design also benefits people with older or slower software and hardware, while e-learning by its very nature enhances accessibility of learning content for remote learners or those who are unavailable during standard education / training schedules

Accessibility — A characteristic of Website design. Accessible sites can be navigated and understood by people with disabilities

ACL (Access Control List) — A list of permissions attached to an object. An ACL specifies which users or system processes are granted access to objects, as well as what operations are allowed on given objects

Action Learning — Learning process learners apply new knowledge or skills to a real or case study situation following guidelines and directions established during the training episode

Active Learning — A strategy focused on encouraging learners to actively participate in training. This approach prompts learners to read, discuss, and solve problems in order to synthesize course content. Examples of active learning activities include practical tasks and problem solving conducted in small groups

Activities Block — Provides easy and direct navigation to any activity in a user's course. As the instructor/trainer adds different types of activities, they will appear in this block. A user is able to navigate to the activities page for more information and links to the activity

Activity Profile API — Part of the wider xAPI specification, the Activity Profile API is used in any scenario where interaction between learners is required, such as collaboration, social or competition-type activities

Adaptive Learning — A method for delivering education via computer-based programs that adapts the instructional sequence based on an individual student's responses and scores

Adaptive Release — Allows instructors and course designers to release course content based on rules that they create. For example, an instructor can control what content is made available to which students and under what conditions they are allowed to see it

ADDIE (Analysis, Design, Development, Implementation, and Evaluation) — An acronym. It is a framework that instructional designers use, a guideline for building effective training and learning support tools. It involves five steps:

Analysis: Identify learner characteristics, learning goals, delivery options, timeline and pedagogical basis.

Design: Outline the project's design strategy, create storyboards, design the learning experience, develop a prototype and apply visual design.

Development: Compile content assets, integrate technology, troubleshoot problems, and review / revise the content.

Implementation: Establish a process for training the instructors and learners to ensure all necessary technology is functional.

Evaluation: Perform a formative and summative evaluation.

Recently, a new instructional design framework has been developed called SAM (Successive Approximation Model).

In today's fast-paced learning environments, the AGILE method is often seen as more efficient than ADDIE

ADL (Advanced Distributed Learning) — An initiative established by the US Department of Defense, aiming to make the delivery of online training consistent across content formats, technologies, and organizations. Notable contributions include SCORM and xAPI

Adobe Captivate — An authoring tool that is used for creating e-learning content in a quick and responsive fashion

Adobe Flash — A multimedia software platform used to produce animations, applications and games, and is often used to create content for e-learning

Affective Domain — A division of Bloom's taxonomy of educational objectives which references objectives and test items demonstrating interest, appreciation, attitudes, values, and/or psychological adjustment

Agent Profile API — Part of the wider xAPI specification, Agent Profile API deals with the definitions of agents (e.g. learners themselves) and can store documents across activities such as user settings, and personal documents such as a reflective learning journal, career plan or development goals

Aggregate Datatype — Generated datatype each of whose values is made up of values of the component datatypes, in the sense that operations on all component values are meaningful

Aggregation API — Allows you to compute aggregate statistics about existing table and column data

Agile — A content/software development practice that aims to minimize development time through short, incremental projects focusing on very specific areas of the product in question. This way, alterations can be made and issues rectified as and when they appear before moving on to the next part of the overall project

Agile Development — Based on iterative and incremental development, where requirements and solutions evolve more quickly through collaboration and between self-organizing, cross-functional teams. Key features include evolutionary development, adaptive planning, and delivery

Agile Learning — Often contrasted with the ADDIE process, the Agile design method emerged in the 1970s and became widely adopted in the 1990s. Unlike ADDIE, the agile method dives straight into a project, producing small pieces of content very quickly. Then the results are then refined over multiple quick iterations

AICC — A standard providing course content compliance with web-based learning requirements, facilitating a proper communication between the course content and the LMS.

The first official e-learning content standard, AICC was developed by the Aviation Industry CBT Committee in 1993 as a CD-ROM based standard. Online web support was added to the specification in 1998. A predecessor to SCORM, AICC was difficult to work with and many

steps were required to get content in the format running in a learning management system (LMS).
The AICC were responsible for work on a standard called CMI-5 based on the xAPI or Tin Can framework standard

Alice — An innovative 3D programming environment that makes it easy to create an animation for telling a story, playing an interactive game, or a video to share on the web. Alice is a freely available teaching tool designed to be a student's first exposure to object-oriented programming

Alphabetic Arrangement, Alphabetic Order — Macrostructure in which the terminological entries are ordered according to the letters of the alphabet which make up the entry terms

Analysis — First phase of ADDIE. Aims at identifying probable causes for the absence of performance and recommend a solution

Analytics — Analytics interprets captured usage and scores to identify patterns and trends that indicate how the content is being used, as well as its efficacy for an individual or a group of users

Andragogy — (1) An adult learning theory term widely used by an American educator named Malcolm Shepherd Knowles. Knowles used the term synonymously with adult education. This methodology moves away from a teacher-centric approach toward a more learner-centric or collaborative learning relationship between learner, teacher and peers, usually in an informal adult learning environment. Knowles' theory suggests that with maturity comes greater self-directedness and autonomy.
(2) An educational approach characterized by learner-centeredness (i.e., the student's needs and wants are central to the process of teaching), self-directed learning (i.e., students are responsible for and involved in their learning to a much greater degree than traditional education), and a humanist philosophy (i.e., personal development is the key focus of education). Related concepts include facilitated learning, self-directed learning, humanism, critical thinking, experiential learning, and transformational learning

AoD (Audio On Demand) — See *CoD*

Apache Hadoop — An open-source software framework for storage and large scale processing of data sets on clusters of commodity hardware

API (Application Programming Interface) — Provides an interface that allows developers to interact with programs and applications, including learning management systems. An API includes a set of credentials known as keys that are used by admins and developers. Similar to a username and password pair, the key allows developers to access the API and interact with data in an LMS. Integrating with a vendor's API can speed up the e-learning processes by automating time-consuming manual tasks like

updating, deleting, or exporting lists of users. In practical terms, an API allows you to push or pull data from one system to another

Application/App — Software a user activates to work on a computer; also called a program. There are many types of software that fit into the category of application. Application software is distinct from other forms of software, such as operating system and utility software.
The term "application" is often abbreviated to "app" when describing software programs that are designed for mobile phones

Application — First step in the Enrolment process, where an entity (or a trusted authority acting on behalf of the entity) applies for a credential bound to the entity's identity, based on the documents provided to support the application

Application Profile — A set of segments (category tags), metadata elements, element presence types (mandatory, optional, non-applicable), and vocabularies and/or refinements chosen by an organization to optimize the description of learning resources in a particular educational context

Applied Learning — Applied Learning, or Practice-Based Learning can be defined as experiential, hands-on, active learning that integrates deep academic and rigorous technical content in problems and projects that connect school to life and work-learning on the basis of one's own reflections on one's own actions. Applied Learning may be complemented by Theory-Based Learning

ARCS (Attention, Relevance, Confidence, Satisfaction) — Keller's ARCS model of motivation stands for Attention, Relevance, Confidence, and Satisfaction. It is a problem-solving approach to learning used by instructional designers with a focus on engaging content

Articulate Storyline — An authoring tool that allows for the creation of interactive, animated e-learning courses. Projects created with Storyline are presented using various media elements that are animated together, often using motion paths, to deliver a visually rich customized online course

Artificial Intelligence (AI) — Software that is capable of analyzing (both digital and real-world) stimuli to make informed, rational decisions to help perform its intended function.
In e-learning, Artificial Intelligence can be used to make data driven decisions to optimize course content for an individual user, using data that is constantly being gathered around the user's competencies, weaknesses, habits and behaviour. This predictive logic and analysis is exceptionally useful when helping maximize a user's understanding of new concepts and ideas

ASP (Active Server Pages) — A programming environment that combines elements of HTML and scripting. Webpages built with ASP can change dynamically based on user input

ASP (Application Service Provider) — Third-party organizations that supply software applicationsand/or software-related services over the Internet. ASPs allow companies to save money, time, and resources by outsourcing some or all of their information technology needs

Assessment — The process used to systematically evaluate a learner's skill or knowledge level.

Assessments often take the form of a test included at the end of a course to evaluate learner performance. They should be aligned with the learning objectives of a course to accurately measure learner progress

Assessment Item — A question or exercise on a test, quiz, or other evaluation.

A question or measurable activity used to determine if the learner has mastered a learning objective

Assessment Software — Computer-based solutions used to systematically evaluate a learner's skill or knowledge level. With the growth of e-learning has come the need for remote invigilation of exams and systems to facilitate this process, which are sometimes known as Remote Proctoring software

Assimilation — Incorporating new ideas, concepts, or experiences into an existing mental schema is commonly known as assimilation. It also describes the association of new information with pre-existing knowledge. Many factors can influence the rate of assimilation, including distractions, a learner's traits, and motivation levels

Asynchronous Communication. Contact —

Asynchronous Learning — (1) A general term used to describe forms of education, instruction, and learning that do not occur in the same place or at the same time.

(2) Learning in which interaction between instructors and students occurs intermittently with a time delay. Examples are self-paced courses taken via the Internet or CD-ROM, Q&A mentoring, online discussion groups, and email.

Asynchronous learning allows learners to train individually, enabling them to complete courses at a time, place and pace that suits them.

(3) The ability for learners to access and consume an online course at different times. This is a core concept in e-learning and Web Based Training (WBT) and allows a course to be delivered at a pace that suits each individual learner.

Most online courses are asynchronous in nature, though instructors may include synchronous components, such as weekly meetings, and require attendance or participation.

(4) Opposite to synchronous learning: not time-bound, not taking place in real-time, e.g. discussion forums. Includes self-study at a time that suits but within a timetable. Asynchronous learning allows learners to go through a course at their own pace and on their own schedule

Attitudes — Personal choice and human modeling are manifestations of attitudes

Attribute — Characteristic of an object or entity in a metadata registry

Audio Bridge — A device used in audioconferencing that connects multiple telephone lines

Audio Conferencing — Refers to a connection between three or more locations that involves a voice-only connection. This can be done via telephone or via the computer. When the audio conference is done between computers over the Internet, it uses a technology known as VoIP (Voice over Internet Protocol).
Audio conferencing can be a way of facilitating group, tutor-led group conversations that supplement other forms of e-learning

Audiographics — Computer-based technology that permits simultaneous transmission of voice and data communication and graphic images across local telephone lines in a way that is interactive between the instructor and all participants

Audiovisual Work — Any work that consists of a series of fixed related images, with or without accompanying sound, susceptible of being made visible and, where accompanied by sound, susceptible of being made audible

Augmented Reality (AR) — The addition of superimposed, computer-generated interfaces, graphics or objects to a user's vision, often delivered via camera enabled mobile hardware such as smartphones or digitally enhanced glasses/goggles to create a digitally altered view of the real world

Authentic Learning — Refers to a wide variety of educational and instructional techniques focused on connecting what students are taught in school to real-world issues, problems, and applications

Authentication — Provision of assurance in the identity of an entity

Authentication Factor — Piece of information and/or process used to authenticate or verify the identity of an entity

Authentication Protocol — Defined sequence of messages between an entity and a verifier that enables the verifier to perform authentication of an entity

Authoring System — Computer program, which has pre-programmed elements for the development of interactive multimedia. Authoring systems can be defined as software, which allows its user to create multimedia applications for manipulating multimedia objects. E.g. Articulate, Storyline, Xerte

Authoring Tool — A software application or program used by trainers and instructional designers to create e-learning courseware. Types of authoring tools include instructionally focused authoring tools, Web authoring and programming tools, template-focused authoring tools, knowledge capture systems, and text and file creation tools.

Often paired with an LMS, this software is used to develop content for online learning and training programs. An e-learning content authoring tool is a software package, which content developers use to create and package e-learning course content, using SCORM or xAPI standards. There are many popular authoring tools to choose from, including Adobe Captivate, Articulate Storyline, Elucidat, and iSpring Pro

Authoritative Source — Repository, which is recognized as being an accurate and up-to-date source of information

Automated Learning —

Automated Learning System —

Automated System —

Avatar — A graphical image of a user, such as used in graphical real-time Chat applications, or, a graphical personification of a computer or a computer process, intended to make the computing or network environment a more friendly place.
In e-learning, avatars usually represent the learners

B

Backbone — A primary communication path connecting multiple users

Banner Web — "Banner Self-Service for Students" is a web-based application that gives students access to a wide array of Utica College academic and administrative information, including academic transcript and grades

Behaviour — Action that is an overt, observable, measurable performance

Bespoke Content — Developed to order — solely for the needs of the purchaser. Unlike off-the-shelf content, bespoke e-learning often takes into account not only the subject matter of the content, but the unique working practices, IT systems, and even branding of the organization

Biographical Footprint — The trail of information recorded in information systems as a result of normal social, living and employment activities during a person's lifetime. This trail of information can be used to evidence a person's link to a claimed identity

Blackboard — A globally used Learning Management System (LMS) widely implemented in schools and higher education institutions. Blackboard's services are used by 75% of U.S colleges and universities

Blended Learning — (1) The combination of traditional, face-to-face learning methods with technology-based online learning methods. It is also be described as a blending of live training and self-paced training. It offers a great way to augment the learner's experience.

(2) Blended learning is a mix of learning modalities: live classroom instruction, virtual classroom instruction, self-paced e-learning, on-going performance support, social learning, and more.
(3) A learning program that combines traditional classroom methods with online media to create a hybrid learning program. With blended learning, the instructor and learners are face to face in a brick-and-mortar environment but also utilize online content delivery and engagement. Blended learning is also known as Hybrid Learning and Mixed-Mode Instruction

Blockchain —

Blog — Short for "Web log," a specialized site that allows an individual or group of individuals to share a running log of events and personal insights with online audiences.
An online journal that may be available to the general public or entirely private, open to select friends and family. You can usually adjust your blog settings to restrict visitors from commenting on your blog entries. Blogging has caught on as a cheap form of knowledge sharing and expert communication

Bloom's Taxonomy — A classification of behavior and learning developed by Benjamin Bloom and others. Organized into three domains of learning: cognitive (or intellectual), affective (or emotional/attitudinal), and psychomotor (or physical, motor)

Branching — The concept of e-learning branching is where the consumed exercise content can vary based on decisions the user makes. This is fundamental to Games Based Learning and important for immersive training such as systems simulations

Branching Navigation — The adaptive learning technique that gives learners control over outcomes. Learners are prompted to choose from multiple solutions to given scenarios. Different outcomes are presented for each challenge encountered along the way

Bridge — A device linking two or more sections of a network

Brinkerhoff Success Measures — A method for evaluating the success of a learning initiative, developed by Robert Brinkerhoff. This method uses 5 steps, working toward identifying the critical causal difference between successful learning and learning that was not successful:
Plan Evaluation > Create an Impact Model > Conduct a Survey > Conduct Interviews > Collect and Analyze Data

Broadcasting — Transmission by wireless means for public reception of sounds or of images and sounds or of the representations.
In networking, to transmit information simultaneously to everyone on a network.
See also *Multicasting* and *Unicasting*

BYOD (Bring Your Own Device) — A policy whereby employees or members bring and use their own mobile, tablet or laptop device in a training or work setting. Most LMSs, like LearnUpon, are designed to be responsive and functional on any type of device, making it easy for learners and admins can access their training

C

CAI (Computer-Assisted Instruction) — The use of a computer as a medium of instruction, for tutorial, drill and practice, simulation, or games. CAI is used for both initial and remedial training, and typically does not require that a computer be connected to a network or provide links to learning resources outside of the course
See also *CBT*

Capstone — Also called a capstone experience, culminating project, or senior exhibition, among many other terms, a capstone project is a multifaceted assignment that completes, and is the high point of, a student's academic program or learning-pathway experience

Case-Based Storytelling — Bringing as examples cases that need to be resolved

CBL (Computer-Based Learning) — See *CBT*

CBT (Computer-Based Training) — The traditional name for what is now known as e-learning Computer-Based Training specifically describes the on-demand elements of e-learning, excluding instructor-led training.
This term also includes CMI (Computer Managed Instruction) and CAI (Computer Assisted Instruction).
The distinguishing point is that computer-based training does not involve an instructor or facilitator who is physically present. Now that most computer-based training occurs via the Internet, the term is used infrequently. More common terms are online learning, e-learning and Web-based Training (WBT).
An umbrella term for the use of computers in both instruction and management of the teaching and learning process. CAI (computer-assisted instruction) and CMI (computer-managed instruction) are included under the heading of CBT. Some people use the terms CBT and CAI interchangeably

CDN (Content Delivery Network) — CDN is a global network of proxy servers deployed in multiple data centers to enable the high availability and high performance of content being viewed by the learner

Certification — A certificate confirms that a learner has successfully completed a training program to a predefined standard. Many professional bodies require registered members to be recertified at regular intervals.

The awarding of a credential acknowledging that an individual has demonstrated proof of a minimum level of knowledge or competence, as defined by a professional standards organization.
Professional certification is a screening tool and a measurement of skills and knowledge. Certification credentials give employees and clients proof of an individual's level of specialization in his or her field of work

CEU (Continual Education Unit) — A CEU is a measurement used in continuing education programs. Usually, the completion of a certain number of units allows individuals to remain licensed in their profession

Characteristic — Abstraction of a property of an object or of a set of objects

Chat — A collaborative environment in which expressions are sent and received by participants synchronously or in real time; participants are engaged in communicative activity at the same time but can be in different locations.
Typically, an exchange of expressions in a chat environment takes over a period of minutes or hours.
Communication between members of an online service using text. The messages are sent between members in real-time as in a conversation by typing in short statements

Chatbot —

Chunk — A small unit of a larger piece of learning content is referred to as a chunk. It is designed to make assimilation more manageable for learners. Chunking content also helps to combat learner fatigue

Class — Description of a set of objects that share the same characteristics, attributes, operations, methods, relationships, and semantics

Classification Scheme — Descriptive information for an arrangement or division of objects into groups based on characteristics, which the objects have in common

Classification Scheme Item — Instance of a classification scheme

Classroom Learning — A style of learning delivery that typically adopts a traditional teacher/learner format. Although self-directed learning methods are not at play in a classroom setting (with learning being directed by the teacher), each learner is often given an individual workstation

Classroom Training — See *Instructor-Led Training*

Classroom-Based Training — Also known as face-to-face or live training, classroom-based training is a more traditional training method. An instructor guides learner through a course in a real-world environment such as a classroom or meeting room

C-Learning — See *Instructor-Led Training*

CLO (Chief Learning Officer) — The CLO is an executive-level employee in an organization who defines and leads the company's learning and development strategy. This role is usually found in large organizations and multinationals

Cloud — A set of remote servers where the data is stored and can be accessed from anywhere.
With respect to learning management, the cloud is an Internet-based repository of learning assets. With content in the cloud, the source version of content can be accessed by anyone and at any time

Cloud Delivery — The delivery of software via the internet (usually accessed via a web browser) with no localized installations necessary

Cloud Learning — Cloud learning is the storage of educational content in the cloud, so that the learning course is available on many devices and at any location

Cloud LMS — A cloud-based LMS is a web-based platform that helps companies to deliver, track, and report on e-learning. The main difference between a cloud LMS and other solutions is that learning content, tracking and reporting data is stored in the cloud. One benefit of a cloud LMS is that it is quicker and more cost-effective to install than self-hosted learning solutions. Cloud learning management systems also tend to require less in-house technical expertise to maintain and run

CMI (Computer Managed Instruction) — The use of a computer to manage the learning process, including testing and record keeping
See also *LMS* and *LCMS*

CMI5 (Computer Managed Instruction) — This is a "profile" for using the xAPI specification with learning management systems. It is essentially a set of rules for xAPI, which narrows the overly wide specification to increase adoption in the industry

CMS (Content Management System) — Software application that streamlines the process of designing, testing, approving, and posting content on Webpages.
A CMS is a system that supports the creation and management of digital content, usually for publishing. A CMS is more passive than an LMS. Users can view documents but the CMS cannot track and report on their progress as an LMS does

CoD (Content on Demand) — Delivery of an offering, packaged in a media format, anywhere, anytime via a network. Variants include audio on demand (AoD) and video on demand (VoD).
Providing content on demand enables users to decide when and where they access the available content. In terms of e-learning, it means that a learner can take their courses when it suits their schedule

Cognitive Domain — Division of Bloom's taxonomy of objectives that references objectives and test items requiring recall or recognition of knowledge and the development of intellectual abilities and skills

Cognitive Load — A theory developed by John Sweller that describes the strain working memory experiences when information is being processed. Cognitive load is defined in cognitive psychology as the extent of mental effort used in working memory. In e-learning, the term typically is introduced through the ideas of the Cognitive Load Theory, which argues that effective instructional design can be used to reduce cognitive load for learners

Cognitive Overload — A situation created when an instructor or trainer delivers too much information to learners all at once, making it difficult for learners to process the information. When this occurs, the learning activity's processing demands surpass the learner's processing capacity. The result is stress and anxiety, which causes a negative learning experience. To combat this problem, educators developed a methodology called microlearning

Cognitive Presence — When used in the context of an online environment such as an e-learning platform, cognitive presence refers to the construction of meaning through sustained communication between users. This ultimately contributes to a higher order of knowledge on the subject in question through the collaborative accumulation of recorded ideas and solutions

Cognitive Strategies — Learning that is domain-specific or executive, as in Meta cognitive, describes cognitive strategies

Cohort — The term cohort refers to a set of individuals who are treated as a group. In education, a cohort of students start a degree or certificate program at the same time and are in the program together throughout their degree. These students may be together for a year or more

Collaboration Space — Business activity space where an economic exchange of valued resources is viewed independently and not from the perspective of any business partner

Collaboration Technology — Software, platforms, or services that enable people at different locations to communicate and work with each other in a secure, self-contained environment. May include capabilities for document management, application sharing, presentation development and delivery, whiteboarding, chat, and more

Collaborative Activity — The pursuit of intended results through the efforts of several or all members of a collaborative group in a collaborative workplace

Collaborative Authoring — Collaborative authoring allows distributed and specific users the ability to work on different parts of the same project at the same time

Collaborative Effect — A particular intended result, supportive or constitutive of learning that can be achieved by the employment of a collaborative service or a collaborative tool

Collaborative Environment — The totality of affordances, functions and contents employed and generated by participants in fulfilling their roles. Typically, environments will support chat and discussion communications separately; thus, one can speak of distinct "chat" and/or "discussion" environments

Collaborative Function — An elementary functionality or capability provided for members of a collaborative workplace and enabling particular collaborative effects and collaborative activities that cannot be further decomposed without loss of this functionality

Collaborative Group — Two or more participants, in their capacity as members of the same collaborative workplace and through their involvement in the same collaborative environment

Collaborative Learning — When a common learning task is undertaken by multiple learners, enabling them to benefit from one another's skills, resources, experiences and evaluation.
Remote participation — i.e., where learners work on a problem solving activity together, during the process of which deeper learning takes place

Collaborative Service — One or several collaborative tools in their capacity of being provided in a collaborative environment and being administered as a single, compound set

Collaborative Support — Particular intended supportive effect that can be achieved by the employment of a collaborative service or a collaborative tool

Collaborative Tool — Hardware and related software and data in their capacity of providing a single or a combination of collaborative functions for several or all members of a collaborative workplace.
Allow learners to work with others via email, threaded discussions, or chats

Collaborative Workplace — The shared, networked space with the resources shared by a group, where a group of learners engages in collaborative learning activities.
The instantiation and isolation of the collaborative activities of a collaborative group which collaborates by means of a collaborative environment

Collaborative Workplace Log — A record of the events happened in the collaborative workplace

Commitment — Making or accepting of a right, obligation, liability or responsibility by a Person that is capable of enforcement in the jurisdictional domain in which the commitment is made

Commitment Exchange — Establishment of a commitment among two or more Persons to accomplish an explicitly shared and agreed to goal which is terminated upon one recognition of one of the agreed conclusions by all the involved Persons, although some recognition may be implicit

Common Carrier — A government-regulated private company that furnishes the public with telecommunications services (for example, phone companies)

Communication to the Public — Transmission to the public by any medium, otherwise than by broadcasting, of sounds of a performance or the sounds or the representations of sounds fixed in a phonogram

Community — See *Online Community*

Competency — Is the skill and intellect required for a person to perform a required function or position. For example, a nurse learning how to insert an IV needle.

Demonstrated (or, implied or presumed) ability of a person (or an entity) to accomplish the task-in-question (or a given task) at a certain satisfactory level.

Ability of an actor to perform (a) necessary action(s) in (a) given context(s) to achieve (a) specific outcome(s)

Competency Aggregation — Collection of competency expressions that is in any structure

Competency Definition — Specification of a disposition that, when attributed to an actor, can be used to predict the extent to which that actor will perform in such a way as to produce one or more desirable outcomes, when faced with a certain type of challenge and contextual environment

Competency Expression — Any form of digitalized information regarding competency representation

Competency Framework — Group of related competency definitions structured to represent the essential relationships between the individual competency definitions

Competency Management — A system used to identify skills, knowledge, and performance within an organization. Enables an organization to spot gaps and introduce training, compensation, and recruiting programs based on current or future needs

Competency Modeling — Act of determining the structure into which the competency expressions are organized.

Ways and methods to identify competency organization structure and/or each competency definition for targeted group(s) or populations

Competency Organization — Digitized expression or map of aggregation type(s) that defines a designated unit as a set of competencies

Competency Package — Standardized way to identify and exchange a set of data regarding competency between different systems or tools

Competency Representation — Image and idea of competency that occurs in a human mind

Competency-Based Learning/Training — An approach to learning designed to develop specific skills and competencies rather than abstract knowledge. Often used when a learner must master a concrete topic/skill and is conducive to independent study, where a learner can advance at their own pace

Complex Term — Term containing two or more roots

Compliance Training — Compliance training is employee training mandated by legislation, regulation or policy. It educates your employees on the laws or regulations applicable to their job function or industry. These training initiatives are usually mandatory, with regular completion of the training required in order to achieve and maintain compliance.
A form of training that employers are obligated to deliver to their employees to reduce the risk of health and safety or data security related incidents. Compliance training is often delivered using e-learning

Component Data Element — Simple data element that is used, or may be used, within a composite data element

Component Set — Attribute of a data element specification of a composite data element, which serves to specify the component data elements comprised in the composite data element

Composite Data Element — Identified, named and structured set of functionally related component data elements, as specified in a composite data element specification

Composite Data Element Specification — Description of a composite data element

Composite Identifier — Identifier (in a business transaction) functioning as a single unique identifier consisting of one or more other identifiers, and/or one or more other data elements, whose interworkings are rule-based

Composite Metadata Element — Metadata element that is a composite data element

Comprehensive Concept — Concept in a partitive relation viewed as the whole concept in a partitive relation viewed as the whole

Compressed File — A computer file that has been reduced in size by a compression software program. The user must decompress these files before they can be viewed or used

Compressed Video — Video signals downsized to allow travel along a smaller carrier

Computer Managed Learning — Learning where administrative processes (such as registration, scheduling, control, guiding, analyzing, reporting) are facilitated by information processing systems

Computer Program — Data representing instructions or statements that, when executed in a computer system, causes the computer to perform a function

Computer-Based Learning — Use of information processing systems as learning tools

Computer-Supported Collaborative Learning (CSCL) — ICT-supported collaborative learning activities involving resources, tasks or support systems (human or otherwise), facilitated by ICT, that contribute to the effect of collaborative learning

Concept — Unit of knowledge created by a unique combination of characteristics

Concept Diagram — Graphic representation of a concept system

Concept Harmonization — Activity for reducing or eliminating minor differences between two or more concepts that are already closely related to each other

Concept System of Concepts — Set of concepts structured according to the relations among them

Conceptual Domain (CD) — Set of valid value meanings

Conceptual Domain Relationship — A relationship among two or more Conceptual Domains

Conceptual Reference Model — Common structure and definitions for describing the implicit and explicit concepts and relationships within a system

Condition — Component of learning objective that describes the specific situation in which the performance occurs

Conditional — Value of the presence type attribute, used in a MLR application profile specification, segment specification, or composite data element specification, to specify that a segment group, segment, composite data element, stand-alone data element or component data element is used optionally or when the appropriate conditions occur

Conditional Data Element — Data element which shall be used to describe a learning resource when given conditions, specified by a rule or set of rules are satisfied

Conditional Metadata Element — A metadata element for which a value must be assigned when a given condition, given in a rule, is satisfied

Conformant Data Element — A data element is conformant if it conforms to the rules of its data element specification

Conforming (MLR Record) — A MLR record is conforming if all the MLR data elements belonging to the MLR record are conformant data element

Conformity — Fulfillment by a product, process, or service of specified requirements

Conformity Assessment — Any activity concerned with determining directly or indirectly that relevant requirements are fulfilled

Connect Time — The amount of time that a terminal or computer has been logged on to a computer or server for a particular session

Contact —

Content — The intellectual property and knowledge to be imparted. Different formats for e-learning content include text, audio, video, animation, and simulation content

Content Analysis — Procedure that when applied to an instructional goal, results in the identification of the relevant knowledge, skills and procedures required for a learner to achieve goal

Content Delivery Network (CDN) — A Content Delivery Network is a structure of servers that distribute webpages and other Web content to a user based on the geographical location of the user, the source of the webpage, and a content delivery server

Content Library — A central repository for resources and e-learning content. Content libraries can be used to store assets such as documents, presentations, video, audio, images, SCORM packages and more. A content library is a particularly useful feature in a learning management system (LMS) as it typically enables users to upload and manage e-learning assets in bulk, use the same asset across multiple courses and easily update existing assets.
In LearnUpon, a content library is a repository of reusable content, like videos, documents, question pools, SCORM and xAPI (Tin Can) files, from which a course can be created

Content Lifecycle Management — Content Lifecycle Management Content lifecycle management (CLM) is the management of content throughout the useful life of the content. It describes the content in each phase, from its conception through its development, use, revision, and retirement

Content Management — Content management (often abbreviated to CM) is a system of technologies and processes that maps out who can access the content, what can be done to it, and how it can be used — whether it be video, document or any type of file

Content Negotiation — Practice of providing multiple representations available via the same URI

Content Producer — Individual or organization producing e-learning content

Content Value — The content value of a MLR data element consists (1) of the actual single piece of information recorded as its content — for a simple MLR data element, or (2) of the set of related pieces of information recorded by its component MLR data elements — for a composite MLR data element

Context — (1) Text, which illustrates a concept or the use of a designation.
(2) Circumstance, purpose, and perspective under which an object is defined or used.
(3) Environment with defined boundary conditions in which entities exist and interact

Controlled Vocabulary — Vocabulary for which the entries, i.e., definition/term pairs, are controlled by a Source Authority rule base and process for addition/deletion of entries

Convergence — A result of the digital era in which various types of digital information, such as text, voice, & video, and their delivery mechanisms — television, telecommunications, and consumer electronics — are combined together in new, more closely-tied forms. WebTV is an example of convergence between televisions and computers

Cookie — Information stored on a user's computer after visiting a Website. Tracks data about that user, can be disabled in the browser

Coordinate Concept — Subordinate concept having the same nearest superordinate concept and same criterion of subdivision as some other concept in a given concept system

Corporate Open Online Course (COOC) — Similar to a MOOC, a COOC is simply delivered in a corporate context for businesses of any size

Corporate Training — Corporate training is the strategy of providing learners, internal and external to your organization, with the skills and knowledge they need to be successful. By furthering their success, you are, in turn, facilitating the success of your business

Cost–Benefit Analysis (CBA) — Technique designed to assist decision-makers in identifying a preferred choice among possible alternatives

Course — Term used to describe the collection of elements that make up training on a given subject. Usually a course is broken up into lessons, sections, or modules but course is sometimes used interchangeably with these terms

Course Builder — Functionality in a learning management system that is used to upload and create courses. Course builders allow you to combine elements such as text, image, video etc., to make your courses more engaging.
A platform or feature in a Learning Management System (LMS) used to create online courses. A course builder typically allows for combining

assets such as presentations, documents, video, audio and SCORM packages to produce course content. A course builder may also allow for authoring new e-learning content and adding quizzes, assignments and other assessment tools. Once the content is produced, the course builder is used to organize the content into learning activities and structure the activities into a cohesive online course

Course Catalog — A comprehensive collection of courses available to learners at any given time. Public course catalogs, such as those in marketplaces like Udemy and edX, are accessible to everyone. While private course catalogs, such as a company's new hire onboarding course, are pre-designated for a specific audience

Courseware — A term used to describe software with an educational purpose.
Any type of instructional or educational course delivered via a software program or over the Web.
Software or other materials designed for use in an education or training course.
Software designed specifically for use in a classroom or other educational setting, containing instructional material, educational software, or audiovisual materials.
A term used to describe software resources, which are used for Computer-Assisted Learning (CAL) to mediate or support a course or module

CPD (Continuing Professional Development) — CPD programs aim to help professionals stay up-to-date with developments in their field after tertiary or postgraduate training has ended. Also known as Continuing Professional Education (CPE), professionals use CPD to maintain knowledge and skills throughout their working lives. CPD obligations are common across professions and include formal, informal, structured and self-directed learning approaches

Credential — Set of data presented as evidence of a claimed or asserted identity and/or entitlements

Credential Evaluation — Most boards reviewing candidates holding international credentials require that they submit a credential evaluation to demonstrate their academic preparation and determine their eligibility for licensing or certification

Credential Service Provider — Trusted actor that issues and/or manages credentials

Credit Hour — The unit of measuring educational credit, usually based on the number of classroom hours per week throughout a term

Criterion-Referenced Test — Test that compares the performance of a leaner with the degree to which the objectives were achieved. It included pre-test and post-test

Criterion-Referenced Test Items — Test items whose responses are compared with some objective standard rather than with other responses as in norm-referenced items

CRM (Customer Relationship Management) — A digital operation that allows a company to profile, organize, value and communicate with their customers on a large scale.

A customer relationship management system manages all your company's relationships and interactions with your current and future customers. It helps you improve your profitability and retain customers. Integrating your CRM with your LMS will enable you to pursue an extended enterprise learning program.

Methodologies, software, and Internet capabilities that help a company manage and organize customer relationships. Helps identify and categorize customers

CSS (Cascading Style Sheets) — A style language used to describe the formatting and aesthetics of a Web page, such as the font, colors, and layout. CSS is used with HTML, XTML, and XML, which allows the same content to be formatted differently for different audiences and delivery platforms

Curation — The sourcing, organisation and presentation of content or media. In e-learning, the curation process is often a core part of creating online courses, in which a diverse range content is collated from internal and external sources. Curating learning content can drastically reduce the time taken to create an online course and enables course content to stay highly topical and relevant

Curatr — A Social Learning Platform that enables organisations to deliver online courses and MOOCs (Massive Open Online Courses). Rooted in social learning and built around gamification principles, Curatr allows users to learn from and with other people in a community environment

Custom Content — In e-learning, custom content refers to learning resources that are tailored to a specific audience and created with the company's goals and objectives in mind in order to achieve their desired results

Customer Service Training — Training that educates customer-facing employees on competencies required to deliver quality customer service. The target audience for customer service training includes customer service representatives, customer success managers, technical support agents and salespeople. The goal of the training is to ensure employees are prepared to field customer questions, inquiries and complaints in a manner that aligns with company standards and increases customer satisfaction

Customer Training — This is a branch of e-learning that involves training customers on how to use an organization's product and/or service. This form of training is particularly popular with software providers as it improves customer onboarding, increases retention and maximizes your support resources.

Not to be confused with Customer Service Training (see definition above), customer training focuses on teaching a company's customers how to gain maximum value from its products and services. Examples of customer training include new client onboarding, product "how to's," and target market best practices

Customer User Data — Describes the custom data fields added when an LMS is configured. Examples include "Location", "Job Role" or "Department". The use of custom fields allows you to deal with groups of learners as a unit and to assign all learners in that group to a specific course or learning path. Custom fields can also be used as filters to generate detailed reporting information

Customer-Focused E-Learning — Web-based learning programs targeted at current and prospective customers. By training customers online, companies attract new business and make people more comfortable with e-transactions

Cyberspace — The nebulous "place" where humans interact over computer networks. Term coined by William Gibson in *Neuromancer*

D

Data — Reinterpretable representation of information in a formalized manner suitable for communication, interpretation or processing

Data Base —

Data Base Management System —

Data Element (DE) — Unit of data for which the definition, identification, representation and permissible values are specified by means of a set of attributes

Data Element (in MLR) — Unit of data described in a data element specification

Data Element Concept (DEC) — Concept that can be represented in the form of a data element, described independently of any particular representation

Data Element Concept Relationship — The relationship among two or more Data Element Concepts

Data Element Definition — Definition of a data element as stated in a Part of the multipart ISO/IEC 19788 Standard

Data Element Name — Name of a data element assigned in a Part of the multipart ISO/IEC 19788 Standard

Data Element Specification — Specification of a composite data element (composite data element specification), or of a simple data element (simple data element specification)

Data Element Specification (in MLR) — Set of attributes (and attribute value rules) characterizing a set of data elements

Data Element Specification Identifier — Unambiguous, unique and linguistically neutral value, resulting from the application of a rule-base identification process

Data Element Value — Specific instance of a simple data element, represented as specified in a simple data element specification

Data Model — Graphical and/or lexical representation of data, specifying their properties, structure and inter-relationships

Datatype — A set of distinct values, characterized by properties of those values and by operations on those values

Datatype Family — Collection of datatypes which have equivalent characterizing operations and relationships, but value spaces that differ in the number and identification of the individual values

Datatype Generator — Operation on datatypes, as objects distinct from their values, that generates new datatypes

Declared Semantic Equivalent (DSE) — Set of recorded information (SRI) declared suitable for use as a human interface equivalent (HIE) at the applicable semantic interoperability equivalency level (SIEL) in support of semantic interoperability requirements in accordance with externa constraints of the applicable jurisdictional domain and the nature and intended purpose of use of the SRI as provided by a Person to an individual

Default — A setting that the computer system uses automatically, unless it is changed by the user

Definition — Representation of a concept by a descriptive statement which serves to differentiate it from related concepts

Deliverables — Measurable, tangible, verifiable output that must be produced to complete the project or a training course

Delivery — Any method of transferring offerings to learners. Variants are instructor-led training, Web-based distance learning, online laboratory, CD-ROM, and books

Delivery System — Describe the means by which instruction is provided to learners, for example instructor-led, distance learning, computer-based, web-based, or self-instructional materials

Deprecated Term — Term rated according to the scale of the term acceptability rating as undesired

Derivative Works — Derivative works are produced by reusing content from existing sources

Design — The second phase of the ADDIE instructional systems design process; its purpose is to verify the learning tasks, performance objectives, and testing strategies

Design Brief — The document completed at the conclusion of the Design phase showing a detailed overview of the training. Components included are a sequenced list of learning tasks; a sequenced list of performance (learning) objectives; a list of testing strategies, a summary of benefits derived from the training

Designation Designator — Representation of a concept by a sign which denotes it

Designation Space — Set of designations

Desktop Videoconferencing — Videoconferencing on a personal computer

Dial Up — To open a connection between a user's computer and another computer via a modem

Didactical Design — Process relating activities, resources and ICT systems to achieve learning objectives. This can include learners, instructors, contents, methods, media, objectives, environment, etc. Didactical design is used as a synonym to instructional design in this standard as these terms are both used for the same meaning in some countries or communities

Differentiated Learning — A learning framework that aims to provide learners with different avenues to learning to best suit their individual needs. Various aspects of learning can be 'differentiated', including content, processes, assessment or the learning environment itself

Digital — An electrical signal that varies in discrete steps in voltage, frequency, amplitude, locations, and so forth. Digital signals can be transmitted faster and more accurately than analog signals

Digital Divide — The gap that exists between those who can afford technology and those who cannot

Digital Educational Resources —

Digital Footsteps —

Digital Learning Objects — A re-usable multimedia resource used to deliver a single learning outcome, often via a Learning Management System (LMS). Videos, quizzes, animation, text/articles/reports, images, or audio clips are examples of digital learning objects

Digital Shadow —

Digital Twins —

Directed Learning — An instructor-initiated learning exercise, undertaken in a controlled environment and adherent to a pre-determined agenda or syllabus

Discussion — A collaborative environment in which expressions are sent and received by participants asynchronously; participants can be engaged in communicative activity at different times and in different locations. Typically, an exchange of expressions in a discussion environment takes place over a period of days, weeks or months

Discussion Boards — On the Internet or an intranet, forums where users can post messages for other users to read

Discussion Thread — The term "thread" in computing refers to a series of related postings (sharing comments) in an online discussion. Your instructor may provide students with a private discussion forum to communicate with one another. You can organize this forum by creating new discussion threads specific to conversation topics

Distance Education — Educational situation in which the instructor and students are separated by time, location, or both. Education or training courses are delivered to remote locations via synchronous or asynchronous means of instruction, including written correspondence, text, graphics, audio- and videotape, CD-ROM, online learning, audio- and videoconferencing, interactive TV, and facsimile. Distance learning does not preclude the use of the traditional classroom. The definition of distance education is broader than and entails the definition of e-learning

Distance Learning — Learning that takes place without face-to-face contact with an instructor. Distance learning commonly takes place entirely online and gives learners the flexibility to learn on their own time and at their own pace. It is especially beneficial when learners are located in different geographic locations and time zones.

Also known as Distance Education. Distance learning occurs when student and teacher / instructor are in different locations. Distance learning has been around since long before the Internet and the presence of a computer in nearly every home and office, so it used be an asynchronous form of learning. With the Internet and mobile telephony, distance learning can now be both synchronous and asynchronous — or a combination of both.

The desired outcome of distance education. The two terms are often used interchangeably

Distributed Learning Technology System — Learning technology system that uses the Internet or wide area networks as the primary means of communication among its subsystems and with other systems

DNS (Domain Naming Service) — Global registration system of network designations

Domain Subject Field — Field of special knowledge

Domains of Learning — Three divisions used to classify types of learning: psychomotor (physical), cognitive (mental), and affective (emotional)

Download — The electronic transferring or copying of a file from one computer to another. Files may be downloaded from another connected individual computer, a computer network, a commercial online service, or the Internet

DVI (Digital Video Interactive) — A format for recording digital video onto compact disk allowing for compression and full-motion video

E

e-Business — Business transaction, involving the making of commitments, in a defined collaboration space, among Persons using their IT systems, according to standards

Echo Cancellation — The process of eliminating the acoustic echo in a videoconferencing room

Edge Computing —

Education — Processes aimed at facilitating learning through formally designed activities associated with specified curriculum often in courses, structured activities or units of instruction

Educational Technology —

EE (Extended Enterprise) — In e-learning, this relates to the training of your partners and customers to improve product adoption, increase customer retention, and maximize support resources. An example of this is reducing the number of support tickets you receive from your customers by providing them with product training via your LMS

e-Facilitator or efacilitator — The facilitator of an online learning course. They can be both the manager/organize of the course as well as the instructor in the course content.
See also Subject Matter Expert

Effectiveness — Extent to which planned activities are realized and planned results achieved

e-Learning (Electronic Learning) — (1) e-learning, or electronic learning, is the delivery of learning and training through digital resources. Although e-learning is based on formalized learning, it's provided through electronic devices such as computers, tablets and even cellular phones that are connected to the internet. This makes it easy for users to learn anytime, anywhere, with few, if any, restrictions.
(2) e-learning refers to the delivery and consumption of education content, as well as the analysis of learning performance as facilitated by information technology. e-learning has valuable application in both corporate and education environments through its ability to record

and analyze rich data about user activity, engagement and competence through the xAPI.
(3) Learning facilitated and supported through the use of information and communications technology (ICT). Covers a spectrum of activities from supported learning, to blended/hybrid learning to entirely online delivery.
(4) e-learning (short for electronic learning) is an umbrella term that refers to all types of training, education and instruction that occurs on a digital medium, like a computer or mobile phone.
(5) Short for 'electronic learning', e-learning is any kind of education or training that is accessed via a digital device. As so much e-learning now happens over the Internet nowadays, the term is largely synonymous with web-based training (WBT) and computer-based training (CBT).
(6) (also called distance learning, online learning, computer-based learning, web-based learning) — a type of learning that is delivered over the internet. The learning happens outside of a traditional classroom, by using an LMS to deliver learning materials and webinar services to replace a face-to-face communication. There are different e-learning techniques such as mLearning, blended learning, flipped learning, rapid learning, social learning, etc.
(7) Education that leverages technology for its delivery to end learners. Nowadays, e-learning is used synonymously with learning that occurs entirely on the web. It is typically used in reference to a course, training module, program or degree.
(8) Learning facilitated by information and communications technology (aka ICT-supported learning).
(9) All types of training, education and instruction that occurs on a digital medium, like a computer or mobile phone, making use of the range of digital media

e-Learning Content Chunking — A process of dividing information into small pieces and grouping them together so they can be stored and processed easily

e-Learning Personalization — A method of customizing the right type of learning for the right type of audience. A personalized learning is the opposite of a "one size fits all" model used in a traditional education. A learning curriculum and activities are adjusted to students' skills rather than to the age or grade

e-Learning Resources —

e-Learning Standards — These are principles which e-learning systems and content can adhere to for the greater good. SCORM is an example of a standard which guarantees (in theory) the interoperability of an LMS and the content you place into it. There are also standards such as IMS based around XML, designed with the goal of increasing transparency, enabling easier collaboration, and reducing vendor lock in

Electronic Data Interchange (EDI) — Automated exchange of any predefined and structured data for business purposes among information systems of two or more persons

Electronic Performance Support System (EPSS) — (1) An online system that provides learners/employees with a complete range of information, guidance, advice and assistance to enable maximum job performance with minimal intervention from others.
(2) Electronic performance support system: 1) A computer application that is linked directly to another application to train or guide workers through completing a task in the target application. 2) More generally, a computer or other device that gives workers information or resources to help them accomplish a task or achieve performance requirements.
(3) A computer application that is linked directly to another application so that when it is accessed, it trains or guides workers through steps they need to complete a task in the target application. Or, more generally, a computer or other device that enables workers to access information or resources to help them achieve a task or performance requirements

Element — Technical data that is indivisible within the context of registration

Embedded Tests — Testing strategies that provide opportunities for learners to demonstrate their skills in meeting objectives may be built into the training itself

Employee Training — Employee training, also known as workforce training, is the delivery of onboarding, role, soft skills, compliance, process, and product training to employees within your organization. This training feeds into the overall learning and development (L&D) strategy of the organization

Endorsing Organization — Organization that supports an application

End-to-End Solution — A marketing term used by large e-learning suppliers. Meant to imply that their products and services will handle all aspects of e-learning

Enrollment — The process from initial application for a credential through several identity proofing and identity verification checks that, if successful, result in entry into an identity Register for the purpose of issuing a bound credential

Enterprise-Wide E-Learning — e-learning that is intended for all or most employees within a company. Often part of a strategic change of direction with a very short timeline. Also used to support a core process such as sales

Entity — (1) Something that has separate and distinct existence and that can be identified in a context.
(2) Any concrete or abstract thing that exists, did exist, or might exist, including associations among these things

Entity Authentication Assurance — Degree of confidence reached in the authentication process that the entity is what it is, or is expected to be

Entry Behaviors — Specific competencies or skills a learner must have mastered before entering a given instructional activity

Enumerated Conceptual Domain — Conceptual domain that is specified by an extensional definition

Enumerated Value Domain — Value domain that is specified by a list of all its permissible values

ePortfolio — The accumulation of evidence demonstrating an individual's work and accomplishments, hosted and displayed on a web-based or digital platform

ePub — A standard format for eBooks

Ergonomics — Design principles relating to the comfort, efficiency, and safety of users

ERP (Enterprise Resource Planning) — A set of activities supported by application software that helps a company manage such core parts of its business as product planning, parts purchasing, inventory management, order tracking, and customer service. Can also include modules for finance and HR activities. The deployment of an ERP system can involve considerable business process analysis, employee retraining, and new work procedures

Essential Characteristic — Characteristic which is indispensable to understanding a concept

e-Test — Examination to measure learner (student, trainee, customer or client) for learning outcome or competency, conducted on an IT device, such as computer, laptop, etc., including mobile devices

Ethernet — A type of local area network, originally developed at Xerox, in which computers communicate through radio frequency signals sent over coaxial cable

e-Training — See *TBT*

Evaluation — (1) Any systematic method for gathering information about the impact and effectiveness of a learning offering. Results of the measurements can be used to improve the offering, determine whether the learning objectives have been achieved, and assess the value of the offering to the organization.
(2) The fifth phase of the ADDIE instructional systems design process; its purpose is to assess the quality of the training materials prior to and after implementation and the ISD procedures used to generate the instructional products

Evaluation Report — The deliverable for the Evaluation phase of ADDIE; consists of two parts, the plan for collecting evaluation data and the summary of the evaluation data results

Events of Instruction — The nine steps outlined by Robert Gagne that correlate to and address the conditions for effective adult learning. In brief, each lesson should (1) capture attention, (2) inform the learner of the objective, (3) stimulate recall of prior learning, (4) present material, (5) provide guidance, (6) elicit performance, (7) provide feedback, (8) assess performance, (9) enhance retention and transfer

Evidence Based — A collection of existing and developing new resources that provide practical and innovative information on incorporating research into everyday practice. Resources will include information on a variety of methods, models, and real-life examples with application to various settings and patient populations

e-Workshop or eWorkshop — Asynchronous facilitated learning event, typically run over a period of 5 to 8 weeks. Learners spend on average 4–5 hours per week on collaborative and individual tasks, at a time that suits them best

Experience Application Programming Interface (xAPI) — xAPI develops on existing API functions by recording data in a consistent format using a universally applicable vocabulary. Learning in both online and offline environments can be recognized and recorded using xAPI, which also allows vastly different systems to communicate this learning data securely and efficiently.

The xAPI vocabulary format consists of an 'Actor > Verb > Object' structure. In simple terms, this may look like: John Smith > Completed > Learning Activity

Expert System —

Expression — (1) The content or message communicated between participants in a collaborative environment.

(2) That which is generated, composed and communicated between participants in a collaborative environment, including both composed contents (expression body) and metadata that is typically both composed and generated (expression data model instance).

(3) An instantiation of the Data Model for text-based expressions including the expression body and possible expression attachments

Expression Attachment — Additional data associated with a given expression

Expression Body — (1) Composed contents of the expression communicated between participants in a collaborative environment, referenced from the expression data model instance.

(2) Principle message or communicative substance of the expression shared among participants in a collaborative environment, related through reference to the expression Data Model instance

Expression Data Model Instance — An instantiation of the data model (metadata) describing the expression as a whole. It references the expression body (and any attachments), and also provides expression metadata (e.g. date, time, title, etc.)

Extension — Totality of objects to which a concept corresponds

Extension of a Rule Set — Let RS be a rule set, the extension of the rule set RS, noted [[RS]] is the set of all strings S, where S satisfies all the lexical rules in the rule set RS.

Extensional Definition — Description of a concept by enumerating all of its subordinate concepts under one criterion of subdivision

External Constraint — Constraint which takes precedence over internal constraints in a business transaction, i.e., is external to those agreed upon by the parties to a business transaction

Extranet — A local-area network (LAN) or wide-area network (WAN) using TCP/IP, HTML, SMTP, and other open Internet-based standards to transport information. An extranet is only available to people inside and certain people outside an organization, as determined by the organization

F

F2F (Face-to-Face Training) — (1) Face-to-face training refers to the in-person elements of instructor-led training.
(2) Face-to-face learning refers to an environment in which both teacher and learner are physically present and able to converse naturally with no need for digital intervention. This is a traditional method and retains merit through ease of discussion, adaptability and engagement. However, face-to-face learning requires physical resources and can only be delivered on a small scale.
(3) A traditional learning that requires a teacher and students to be located in the same physical classroom

Facilitative Tools — Electronic applications used in online courses as part of course delivery. Examples are mailing lists, chat programs, streaming audio, streaming video, and Webpages

Facilitator — The online course instructor who aids learning in the online, student-centered environment

Facilitator Guide — The print resource that is used by the facilitator to lead the instruction. Incorporates all aspects of analysis and design into its development, making it the primary vehicle to house all facets of the instruction: instructional strategies, testing strategies, learning objectives, content, pacing, timing, introductions, closure, transitions, and reviews

Facilitator Plan — The portion of the Implementation Plan that describes how the facilitators will be selected and prepared to lead the training event; includes the following components: identification, schedule, preparation (train-the-trainer)

FAQ (Frequently Asked Questions) — (1) A list of most often asked questions from learners provided to address common issues. FAQs allow learners to get the information they need without having to contact the vendor directly.
(2) A file established for public discussion groups containing questions and answers new users often ask

Feedback — (1) Feedback can be provided while a learner completes a course, an exam, or assignment in an LMS. Types of feedback include showing the learner if the answer they submitted is correct or incorrect or displaying correct answers after submission.
(2) Information received that is either confirming or corrective of some action.
(3) Communication between the instructor or system and the learner resulting from an action or process

Field Trial — The third stage in formative evaluation, referring to the evaluation of the program or product in the setting in which it is intended to be used. Also, the second phase of summative evaluation

File Server — Computer with a large storage device on a network, used for storing files and software that can be shared by users on the network

Filtering — Filtering provides a means to include or exclude portions of content for specific audiences

Firewall — Method to give users access to the Internet while retaining internal network security

Five Levels of Evaluation — Jack J. Phillips' descriptive model for evaluating the effectiveness of training. Includes: Level 1: Reaction and Planned Action, Level 2: Learning, Level 3: Job Application, Level 4: Business Results, Level 5: Return on Investment

Flash — Adobe Flash technology has supported the delivery of multimedia content for nearly twenty years. Three popular e-learning formats rely on Flash technology: SCORM, xAPI (Tin Can), and video. That is one reason why the decline of Flash technology, which Adobe will cease to support in 2020, is a concern for anyone working in the e-learning industry. Although this movement away from Flash will generate cost and complexity for e-learning professionals, LearnUpon offers their customers a number of alternatives including support for HTML5 content delivery

Flipped Learning — (1) Also known commonly as the Flipped Classroom in the field of education, flipped learning switches the lecture / instructional element of learning away from the face to face environment

to the learner's own time, allowing them to take in information at their own pace. Face-to-face education and training environments can then focus on discussion and interaction, facilitating lively debate.
(2) A model of teaching in which students study learning material at home by watching videos and come to the class to get a deeper understanding of a topic, discuss unclear moments and interact with the classmates

Flowcharting — Procedure for identifying and graphically representing the sequential and alternative relationships among processes and decision points relevant to completing a project

Fog Computing —

Footprint — The region on the earth to which a communications satellite can transmit. Also, the floor or desk surface space occupied by a piece of computer equipment

Formal — Expressed in a restricted syntax language with defined semantics based on well-established mathematical concepts or standardized formats

Formal Description Technique (FDT) — Specification method based on a description language using rigorous and unambiguous rules both with respect to developing expressions in the language (formal syntax) and interpreting the meaning of these expressions (formal semantics)

Formal Learning — A type of learning that is planned, structured and guided by an instructor/teacher

Formative Evaluation — (1) The process of collecting data that can be used to revise the instruction before implementation, thus making the instruction more effective. A pilot test is an example of Formative Evaluation.
(2) An assessment of a learning program's value that occurs while the program activities are in development or during early implementation. It can be performed during any stage in the ADDIE process to determine how to best revise and improve the learning program. In contrast to summative evaluation, formative evaluation focuses on the process

For-Profit University — Both non-profit and for-profit schools confer degrees, but their focus and composition are quite different. For-profit colleges operate more like traditional businesses. These schools have investors who expect to make money (hence for-profit)

Forum —

Framework — Structure composed of related parts that are designed to support something

Frequency — The space between waves in a signal. The amount of time between waves passing a stationary point

FTP (File Transfer Protocol) — A protocol that allows a user to move files from a distant computer to a local computer using a network like the Internet

Full-Motion Video — Signal that allows transmission of complete action taking place at the origination site

Fully Interactive Video (Two-Way Interactive Video) — Two sites interact with audio and video as if they were collocated

Fully Online Learning — Fully online means just you and the screen-you complete all the work online. You could, for instance, enroll in a course at a school that is physically located far from you

Functional Service View (FSV) — Perspective of business transactions limited to those information technology interoperability aspects of IT systems needed to support the execution of Open-edi transactions

G

Gagne's Nine Events of Instruction — A method for organizing instructional strategies within the lesson designed by Professor of Instructional Design, R.M. Gagne. The Nine Events of Instruction include: Gain Attention, Inform Learners of the Objectives, Stimulate Recall of Prior Learning, Present the Stimulus (Content), Provide Learner Guidance, Elicit Performance, Provide Feedback, Assess Performance, Enhance Retention and Transfer (Closure)

Games Based Learning — (1) Education or training content organized into a gaming structure from the outset. This will include an end goal or series of goals, usually with milestones that offer rewards and positive feedback for achievement along the way.
(2) The use of games in learning and training. The main idea is to help a student to apply the skills gained in games to a real-world environment

Gamification — (1) The insertion of game mechanics into a process that is not itself a game. In e-learning, it takes the form of points, badges, and leaderboards used to engage and motivate learners.
(2) The integration of participation incentives that are largely based upon gaming principals to encourage engagement with a software platform. In e-learning, this includes the use of point scoring, trophies and badges, various 'levels' and leaderboards to increase engagement with and retention of education content.
(3) In the context of e-learning, Gamification takes a set of learning content and activities that do not naturally comprise a gaming element, and adds a layer of game design theory and mechanics in order to boost learner motivation and achievement.
(4) A type of learning implying the usage of game elements such as badges, levels, achievements, points etc. to increase students' engagement in the learning process.
(5) The application of game-related components (keeping score, competing with others, applying rules) to other types of activities,

such as learning. In e-learning, gamification is believed to increase engagement and knowledge retention in learners by capturing and keeping their attention in an entertaining and challenging fashion. Examples of gamification include awarding badges to learners for course completion and making leaderboards visible to everyone in a course or program. A great example of gamification is how Duolingo uses it to teach learners new languages

General Concept — Concept which corresponds to two or more objects which form a group by reason of common properties

Generated Datatype — Datatype defined by the application of a datatype generator to one or more previously-defined datatypes

Generic Relation — Relation between two concepts where the intension of one of the concepts includes that of the other concept and at least one additional delimiting characteristic

Globalization — (1) The tailoring of an offering to include clear, grammatically correct text that eliminates slang, gender references, and cultural or generational idioms.
(2) The process of deploying a single system worldwide that meets a variety of needs.
(3) Integrating several working systems into one

Globally Unique Identifier (GUID) — A set of numbers and letters in a standard format that can uniquely identify something in an application/system. A GUID usually looks like this: d2d2c1f9-5248-40ef-8add-65c1b81b5414

Graduate Entrance Exam — A standardized test, not related to any specific field of study, that measures an applicant's potential to withstand the rigors and succeed in graduate school is called at graduate entrance exam. Examples include Graduate Record Examination (GRE) and Graduate Management Admission Test (GMAT). Test scores are used by admissions departments to supplement undergraduate records and other qualifications for graduate study. Schools usually accept test scores taken within the previous 5 years

Granularity Indicator Code (GIC) — Code to indicate whether or not the MLR-Record for a specified MLR core element contains either (1) general information as per MLR 2 and MLR 3; or (2) more detailed information in compliance with the data element specifications as provided in the MLR Part 4+ referenced

Graphical User Interface (GUI) — A type of user interface that is built around graphical icons and visual indicators, such as windows, tabs, tiles & folders, as opposed to a purely text based interface. For example, Macintosh, Windows, and graphical simulations

Grok — To reach total understanding of a subject. From Robert Heinlein's Stranger in a Strange Land

Group-Based Instruction — The use of learning activities and materials designed to be used in a collective fashion with a group of learners in interactive, group-paced instruction

Guerrilla Learning — An unstructured, unconventional and informal approach to learning built around the individual requirements of a learner. Learning content is sourced or curated on an ad hoc basis from the immediate learner's environment. An example of this is solving a problem by searching for an instructional video on YouTube

H

Hard Skills — Technical skills
See also *Soft Skills*

Harmonized Quality Model — A state-of-the-art quality approach taking into account current quality approaches (e.g., for quality management and assurance), requirements, and a balanced view of different stakeholder interests. It provides guidelines and recommendations to develop quality for learning, education, and training. It combines both process and product orientation

HDTV (High-Definition TV) — Television that has over five times the resolution of standard television. Requires extraordinary bandwidth

Heutagogy — The development of self-directed learning skills. The goal is to develop learner capacity and create autonomous workers who are well-equipped to meet the demands of the workforce. With its roots in andragogy, heutagogy puts mature learners in the driver's seat, as the final stop in the learning continuum

Hierarchical Analysis — A technique used with goals in the intellectual skills domain to identify the critical subordinate skills needed to achieve the goal, and their interrelationships. For each subordinate skill in the analysis, this involves asking "What must the student know how to do in order to learn the specific subskills being considered?"

Hierarchical Relation — Relation between two concepts which may be either a generic relation or a partitive relation

Homepage — A document with an address (URL) on the World Wide Web. Maintained by a person or an organization, it contains pointers to other pieces of information

Homonymy — Relation between designations and concepts in a given language in which one designation represents two or more unrelated concepts

Host — A network computer that can receive information from other computers

Hosting — Outsourcing of the technology and commerce parts of a company's Internet-based learning system to an outside organization

HRD (Human Resource Development) — (1) A term coined by Leonard Nadler to describe the organized learning experiences, such as training, education, and development, offered by employers within a specific timeframe to improve employee performance or personal growth.
(2) Another name for the field and profession sometimes called training or training and development

HRIS (Human Resource Information System) — A system, which supports both human resources and information technology. It allows HR activities, records and processes to be held in this system. Integrating your HR system with your LMS facilitates user creation, maintenance, and learner record storage

HTML (Hypertext Markup Language) — The code used to create a homepage and to access documents over the Web

HTML5 — HTML5 technology provides many tools to fill the gap left by the decline of Flash. HTML5 enables video and audio content to render directly in a browser. It is also more efficient than Flash as it requires less processing power

HTML5 Package (H5P) — A free and open source content collaboration framework based on JavaScript that aims for the creation and sharing of interactive HTML5 content. The framework consists of a web-based content editor that enables users to add and replace multimedia files and text content

HTTP (Hypertext Transfer Protocol) — The foundation of communicating data over the internet. Hypertext is a structured text that uses logical links (hyperlinks) between nodes containing text

Hub — A network device that connects communication lines together

Human Interface Equivalent (HIE) — Representation of the unambiguous and IT-enabled semantics of an IT interface equivalent (in a business transaction), often the ID code of a coded domain (or a composite identifier), in a formalized manner suitable for communication to and understanding by humans

Human Resources — Human resources include facilitators, coaches/manager support, manager contact, and subject matter experts. Human resources impact both the development and implementation of the training

Hybrid Learning — A similar concept to blended learning (which focuses on a blend of online and offline content), hybrid learning focuses on curating the right mix of all possible learning content regardless of whether it sits online or offline

Hyperlink — A hyperlink is a word, phrase, or image that you can click on to jump to a new document or a new section within the current document. Hyperlinks are found in nearly all Web pages, allowing users to click their way from page to page

Hypermedia — A program that contains dynamic links to other media, such as audio, video, or graphics files

Hypertext — A system for retrieving information from servers on the Internet using World Wide Web client software. Hypertext consists of key words or phrases in a WWW page that are linked electronically to other Websites or pages on the Internet

I

iCal — iCalendar is a globally adopted format for sharing meeting requests. An LMS like LearnUpon can send ILT invitations with an attached iCal invite so that your learners can save the session to their calendar

ID (Instructional Design) — Involves applying a methodology based on cognitive psychology and instructional theory to create learning content. An instructional designer typically uses an authoring tool to develop effective course content that achieves specific learning objectives

ID Model — A graphic representation of a systematic approach. Designed to facilitate efficient and effective development of instruction.

Identification — Rule-based process, explicitly stated, involving the use of one or more attributes, i.e., data elements, whose value (or combination of values) are used to identify uniquely the occurrence or existence of a specified entity

Identifier — Designation that is intended to be dereferenced

Identity Provider (IdP) — In a Single Sign On environment, the IdP is the service that holds the directory of users and is where authentication usually takes place; using a password or a set of other pre-determined credentials

IEEE — The Institute of Electrical and Electronics Engineers. Their Learning Technology Standards Committee is working to develop technical standards, recommended practices, and guides for computer implementations of education and training systems

ILS (Integrated Learning System) — A complete software, hardware, and network system used for instruction. In addition to providing curriculum and lessons organized by level, an ILS usually includes a number of tools such as assessments, record keeping, report writing, and user information files that help to identify learning needs, monitor progress, and maintain student records

ILT (Instructor-Led Training) — (1) Training delivered by an instructor either in an in-person or webinar conference setting.
(2) Training that follows the traditional a 'teacher/learner' structure.
(3) Training mediated by a live instructor, such as classroom training or live classes delivered over an web-based conference system.

(4) ILT typically refers to providing instruction in a classroom environment where the instructor and learners are together at the same time and in the same physical location.
(5) Traditional classroom learning environment with an instructor. Virtual instructor–led training (VILT) is delivered over the internet via a live, online virtual classroom environment.
(6) Also known as ILT, instructor led training happens in a classroom environment — with instructor and learner together at the same time, in the same place.
(7) ILT is an acronym for Instructor-Led Training and refers to an individual leading a group of learners in training sessions. These sessions typically take place at a specific place and time or in a live webinar session.
(8) Usually refers to traditional classroom training, in which an instructor teaches a class to a room of students. The term is used synonymously with on-site training and classroom training (c-learning)

Immersive Learning — This sort of e-learning places individuals in a virtual interactive learning environment, so as to replicate possible scenarios or/and to teach particular skills or techniques. Simulations, Roleplay, virtual learning environments and virtual reality (VR) can be considered immersive

Implementation — The fourth phase of the ADDIE instructional systems design process; its purpose is to conduct the training

Implementation Plan — The deliverable for the Implementation Phase consisting of the Learner Plan which is used to identify, and prepare the learners to participate in the instruction and the Facilitator Plan which is used to identify and prepare the facilitators to facilitate the instruction

IMS (Instructional Management System) Global Learning Consortium — Coalition of government organizations dedicated to defining and distributing open architecture interoperability specifications for e-learning products.
See the *IMS Website*

Individualized Instruction — The use, by students, of systematically designed learning activities and materials specifically chosen to suit their individual interests, abilities, and experience. Such instruction is usually self-paced

Informal — Expressed in natural language

Informal Learning — (1) Learning that occurs outside of structured, planned learning initiatives. This learning often occurs naturally as an individual spends time in the appropriate environment, such as a new job.
(2) Informal learning occurs when people have a need to know something. They set their own learning objectives and acquire knowledge, skills and information in their own ways. This could be through asking questions, observing experts, practicing and conversing. It is the kind of natural learning humans do outside of a structured environment..

(3) Informal learning is the learning that takes place during everyday activities, such as work, socializing, and extracurricular activities.
(4) This is education / training that happens outside of a structured instructional environment. Much learning happens through the natural absorption of knowledge from one's surrounding and proponents of the 70:20:10 principle suggest that this accounts for 90% of learning, with only 10% being from formal training
(5) An ongoing process of gaining new skills and knowledge through peers and colleagues observation, reading blogs and news sources, communication on forums, watching YouTube videos etc.
(6) Occurs when people have a need to know something. They set their own learning objectives and acquire knowledge, skills and information in their own ways. This could be through asking questions, observing experts, practicing and conversing. It's the kind of natural learning humans do outside of a structured environment

Information and Communication Technologies —

Information Architect — See *Information Architecture*

Information Architecture — A description or design specification for how information should be treated and organized. In Web design, the term relates to the organization of online content into categories and the creation of an interface for displaying those categories

Information Learning System —

Information Model — Expression of concepts, relationships, constraints, rules, and operations to specify data semantics for a chosen domain of discourse

Information Process —

Information Processing System — Systematic performance of operations upon information, that includes data processing and may include operations such as data communication and office automation

Information Resource — Resource which has the property that all of its essential characteristics can be conveyed in a message

Information Society —

Information System —

Information Technology for Learning, Education and Training System (ITLET System) — Set of one or more computers, devices, associated software, peripherals, terminals, human operations, physical processes, personal needs and preferences profiles, information transfer means, that form an autonomous whole, capable of performing information processing or information transfer to support learning, education or training

Infrastructure — The underlying mechanism or system by means of which voice, video, and data can be transferred from one site to another and be processed

Installed LMS — (also called on-premise LMS, deployed LMS, in-house LMS) — Learning Management System installed at the client's server

Instance — A uniquely addressable occurrence of a condition such as a specific file format or educational context

Instant Messaging (IM) — Instant Messaging (often called just IMing) used to be referred to as real-time e-mail. IM is ideal for quick, little messages for touching base and saying hi or getting an answer without a formal e-mail

Instant Messenger — Software that lists users' selected "buddies" (friends, family, co-workers, and so forth) who are online, and enables users to send short text messages back and forth to them. Some instant messenger programs also include voice chat, file transfer, and other applications

Instantiation Type — Characteristic of an attribute of a data element specification indicating when the attribute is to be provided a value

Instruction — Instruction is the delivery of information and activities that facilitate learner's attainment of intended learning goals

Instructional Analysis — (Content Analysis) (1) Process of dividing an instructional goal or a learning task into steps/elements and skill objectives to achieve the goal. Provides data for developing lesson and unit objectives process of translating principles of teaching and learning into plans for instructional materials and activities.

(2) Instructional design involves the identification of the performance, skill and knowledge gaps of a particular group of people and creating or selecting learning experiences that close this gap. Instructional designers base their learning decisions on cognitive psychology, instructional theory and best practices.

(3) Starts with the training needs and goals of an organization and an understanding of the knowledge and skills gaps that learners need to work on. Instructional design bridges those gaps though the development of training experiences and is based on sound psychology, learning delivery best practices and use of the latest technology to deliver an effective, engaging experience.

(4) A practice of analyzing, designing and developing instructional materials and transferring them into an online curriculum.

(5) Also known as instructional systems design or e-learning design, instructional design involves analyzing learner or organizational needs and developing instruction to meet those needs. Instructional designers typically use technology, such as authoring tools and learning management systems (LMSs), to create course content. As part of this process, they may bring in subject matter experts (SMEs), LMS consultants, designers and technical experts to assist in the development and implementation of their learning program.

Instructional Design — (1) Instructional design refers to the systematic (6). Systematic and systemic instructional planning including needs assessment, development, evaluation, implementation and maintenance of materials and programs

Instructional Designer — (1) Someone who creates learning content based on instructional learning theory and design principals.
(2) The person who applies instructional learning theory to the organization and design of learning programs.
(3) Professional who performs consulting and development chores necessary to create instructional materials. Responsibilities: Gathers and analyzes information about content and skills. Determines performance objectives based on the results of information gathered. Writes the blueprint and draft materials. Works with media specialists to design visual instructional materials. Organizes assessments and prepares materials for the reviews required at each stage of the instructional development process. Make revisions specified by the project manager.
(4) An instructional designer practices the craft and science of instructional design. This person identifies the needs of a targeted audience and determines the best approaches for meeting the audience's needs. It could involve designing and writing online learning courses as well as writing the manuals needed for Instructor-Led Training. Some instructional designers also create graphics and use authoring systems to produce online courses.
(5) An instructional designer is a designer of educational experiences. Instructional designers typically have a structured methodology for defining learning outcomes, the means to assess if the outcomes are met, and an instructional strategy for transferring the knowledge.
(6) One of the key professionals involved in the creation of e-learning content. Typically, an instructional designer will be briefed on the business and training needs, and will use his or her understanding of the students' existing knowledge and skills to create learning content for courses. Practices the craft and science of instructional design. Content development software such as Adobe Articulate or Storyline are now popular parts of the toolkit for multimedia content creation.
(7) An individual who applies a systematic methodology based on instructional theory to create content for learning events.
(8) Person who develops learning content, using systematic methodologies and instructional theory

Instructional Goals — Brief statements describing the terminal tasks learners will perform as a result of the training

Instructional Strategies — Means by which the content and skills are transferred from the training delivery system to the learner. Examples include: demonstrations, role-plays, hands-on activities, practice, simulations, discussion, lecture, illustrated diagrams, step-by-step review; self-study exercises, reviews, on-the-job training, practice with coaching, video

demonstrations, examples, etc. Often organized by these categories: pre-instructional activities, content presentations, learner practice, feedback, and closure

Instructional System Design — (1) Term describing the systematic use of principles of instruction to ensure that learners acquire the skills and knowledge essential for successful completion of overtly specified performance goals.
(2) The name given to the process of creating instruction in order to close a performance gap that is due to a lack of knowledge and skills

Instructor — An Instructor, or Lecturer, usually focuses on teaching rather than research, although, unlike an adjunct, may serve on academic committees. These positions are usually non-tenure track

Instructor's Manual — Collection of written materials given to instructors to facilitate use of instructional materials. Includes an overview of materials, tests with answers, and relevant supplementary information

Instructor-Led Classes — In instructor-led classes, an instructor determines what happens with the content, pace of instruction, and evaluation
See also *Self-paced Instruction*

Intellectual Property (IP) — Set of external constraints applicable to an identified and specified set of recorded information (SRI) which govern access, distribution, and use of that SRI; and, whose source for these external constraints is one or more conventions, treaties, etc., as registered with the World Intellectual Property Organization (WIPO)

Intellectual Property Rights (IPR) — Project Co-Editors' Note: To be completed/update based on WIPO adapted to ITLET context

Intellectual Skills — A skill that requires some unique cognitive activity; involves manipulating cognitive symbols, as opposed to simply retrieving previously learned information

Intelligent Learning System —

Interaction —

Interaction, Content — Learning that takes place by engaging with materials. Where e-learning courses are based entirely on this learning approach, they are self-paced without facilitation or contact with other learners

Interaction, Interpersonal — Learning that takes place by engaging with other people, including other learners or a facilitator. This approach allows online courses to be done in learners' own time and space, but they are not "self-paced". Include discussion forums where learners can share ideas, discussion or collaborative work, and produce teamwork by a shared deadline

Interactive —

Interactive Content — Interactive content aids learning by encouraging users to actively engage with it. An authoring tool can be used to transform static content formats, like PowerPoint presentations, into an interactive course. Techniques to make e-learning content more interactive include adding drag and drop elements and prompting learners to complete an action before progressing to the next module

Interactive Learning — Places an emphasis on user interactions throughout the exercises to enhance engagement and immersion in the subject. This sort of training can also demand decision-making, branching and role based thinking and forms the bedrock of the scenario based approach to training

Interactive Media — Allows for a two-way interaction or exchange of information

Interactive Multimedia — (1) Interactive multimedia allows learners to provide input to an online course and receive feedback as a result of the input. The input might consist of a mouse click or drag, gestures, voice commands, touching an input screen, text entry and live interactions with connected participants.

(2) In the context of e-learning, learners to provide input within an online course in the form of selecting options, completing quizzes, etc., and receive feedback as a result. Interactive multimedia is present in many other fields, notably Gaming — an industry that has a major impact on the e-learning industry in terms of engagement theory and best practices.

(3) Media that is typically presented on computers and mobile devices that responds to a user's actions on the screen. Types of media that can be made interactive include text, images, video, audio, animation, etc. In e-learning, interactive multimedia is used to increase engagement in learners, and authoring tools are most commonly used to produce interactive modules.

(4) Allows learners to provide input to an online course and receive feedback. The input might consist of a mouse click or drag, gestures, voice commands, touching an input screen, text entry and live interactions with connected participants

Interdisciplinary — Interdisciplinary study means combining or involving two or more academic disciplines or fields of study

Interface —

International Standard — International standard where the international standards organization is ISO or IEC

Internationalized Resource Identifier (IRI) — Sequence of characters from the Universal Character Set. Similar to URIs and URLs, but able to use international characters and still be unique

Internet — The Internet is a global system of interconnected computer networks that use the standard IP address (Internet protocol) suite (TCP/IP)

to link several billion devices worldwide. Contrary to popular thought, the World Wide Web is not synonymous with the Internet but just one of its features, along with email, IM, and FTP

Internet of Things —

Internet-Based Training — Training delivered primarily by TCP/IP network technologies such as email, newsgroups, proprietary applications, and so forth. Although the term is often used synonymously with Web-based training, Internet-based training is not necessarily delivered over the Web, and may not use the HTTP and HTML technologies that make Web-based training possible

Internship — An internship is an opportunity to work at a firm for a fixed time period (up to 12 months) to gain practical training in the field. Whether paid or unpaid, it provides valuable experience for the student's career. Employment is not guaranteed at the end of the internship, but many employers use internships to train and evaluate future employees

Interoperability — (1) The extent to which hardware and software elements work together. e-learning standards like SCORM, xAPI (Tin Can) and AICC were developed to enhance the interoperability of online learning content and technologies.
(2) The ability of software or hardware components to work together

Interoperability — The ability of hardware or software components to work together effectively

Intranet — A LAN or WAN that transports information. An intranet is owned by a company and is only accessible to people working internally. It is protected from outside intrusion by a combination of firewalls and other security measures

IP (Internet Protocol) — The international standard for addressing and sending data via the Internet

IP Data Element — MLR data element which is used in the description of a SRI in order for the description, i.e., metadata, of the resulting metadata learning resource record (MLR-Record), to be MLR Part 6 compliant

IP Holder — Person in whom (claimed) Intellectual Property (IP) rights pertaining to an identified and specified set of recorded information (SRI) is vested

IP Multicast — Using the Internet Protocol, delivery of a learning event over a network from a single source to multiple participants

ISDN (Integrated Services Digital Network) — A telecommunications standard allowing communications channels to carry voice, video, and data simultaneously

ISO — International Organization for Standardization, an international federation of national standards bodies
See the *ISO Website*

ISP (Internet Service Provider) — A reseller of Internet access services

IT (Information Technology) — Computers and their information processing capabilities

IT Training — Combination of desktop training and information systems and technical training. Includes training in areas such as system infrastructure software, application software, and application development tools

Iterative Process — Non-linear process that offers the opportunity to return to parts of the process and make changes and revisions to the instructional process

ITFS (Instructional Television Fixed Service) — Microwave-based, high-frequency television used in educational program delivery

IT-Supported Learning, Education and Training — Any kind of learning, education and training (LET) facilitated/supported by information and communication technologies (used as a synonym: e-learning)

J

Java Applet — A small Java program launched through a browser

JavaScript — (1) JavaScript is the programming language of HTML and the web. Commands in JavaScript allow tasks to be completed by a browser when a user views a web page. JavaScript also manages communications between standards like SCORM or xAPI and an LMS.
(2) A scripting language that is simpler than Java and can add interactivity to Webpages. JavaScript commands allow tasks to be completed by the Web browser when a user views a Webpage. (For example, making a graphic change when a user moves the cursor over it)

JavaScript Object Notification (JSON) — A lightweight data-interchange format that is both easy for humans to read and write and easy for machines to parse and generate

JDBC (Java Database Connectivity) — An application program interface used to connect programs written in Java to the data in popular databases

JITT (Just-in-Time Training/Learning) — (1) Having appropriate learning available at the time a learner needs to use it. It usually takes the form of bite-sized courses that learners can access and complete while on-the-job. Support for mobile learning (mLearning) is an important factor in the delivery of just-in-time learning.
(2) A method of providing training when it is needed. Its advantages are: eliminates the need for refresher training due to subject knowledge loss experienced if training precedes, over an extended period of time (prevents decay if the learner cannot use the material upon returning to the job); prevents training being wasted on people who leave the job

before the training they received is used on the job; allows the learners to receive training when they need it, not weeks or months later.
(3) Refers to a type of training in which employees receive critical information when and where they need it. As opposed to completing a full training course, JITT training resources are brief, convenient and highly targeted to specific employee needs. These resources are easily accessible, applicable and available at the moment of need.
(4) A type of learning focused on gaining particular knowledge instead of learning everything

Job Aid — (1) A tool which can exist in paper form or on the computer which provides on-the-job instruction for a specific task.
(2) Teaching devices intended to be self-explanatory and self-instructional; a formalized set of textual and/or graphical step-by-step directions for accomplishing a task through one or more techniques.
(3) A source of information used to help employees successfully perform tasks in the workplace. Job aids may be physical objects or digital assets produced with the intention of supporting people in their roles

Just-in-Time — Characteristic of e-learning in which learners are able to access the information they need exactly when they need it

K

Kirkpatrick Model — The four-step training evaluation methodology developed by Donald Kirkpatrick in 1975. This model is the standard used for analyzing and evaluating the effectiveness and impact of training programs (in a team or organization). There are four levels to this model: Reaction > Learning > Behaviour > Results:
Level 1 — Reaction: refers to the students' reaction to the training (derisively called "smile sheets"). The extent to which learners find the training engaging and relevant to their roles;
Level 2 — Learning: refers to the measurement of actual learning (i.e., knowledge transfer). The extent to which learners glean the intended knowledge, attitude, skills, commitment and confidence from their training participation;
Level 3 — Behaviour: measures behavior change. The extent to which learners apply what they learned in the training to their jobs;
Level 4 — Results: measures business results. The extent to which the intended outcomes were achieved as a result of the training

Kirkpatrick's Four Levels of Evaluation — Concepts developed by Donald Kirkpatrick describing four levels for measuring the effectiveness of training (Reaction, Learning, Behavior, Results)
See *Kirkpatrick Model*

KMS (Knowledge Management System) — See *Knowledge Management*

Knowledge — Knowledge describes thought, fact or concept such as a cognitive task

Knowledge Base — Specialized repository used to store information and knowledge assets. LearnUpon provides all customers with access to a knowledge base of information developed to support the use of our LMS

Knowledge Construction — Making learners aware of how the absorption of knowledge is influenced by their belief system, experience, and background. Online learners benefit when they can apply pre-existing knowledge to assimilate new material

Knowledge Management — Capturing, organizing, and storing knowledge and experiences of individual workers and groups within an organization and making it available to others in the organization. The information is stored in a special database called a knowledge base

L

L&D (Learning and Development) — (1) Learning and development is a subset of Human Resources (HR) that aims to improve the skills, knowledge, and performance of individuals and teams through training.
(2) A strategy used by organizations to develop their workforce's skills and knowledge. Learning and Development teams are typically tasked with assessing the company's needs and creating learning programs and resources to address those needs

LAN (Local-Area Network) — A group of personal computers and/or other devices, such as printers or servers, that are located in a relatively limited area, such as an office, and can communicate and share information with each other

Language — System of signs for communication, usually consisting of a vocabulary and rules

LCMS (Learning Content Management System) — (1) Once distinguished from the term learning management system (LMS), the two are now mostly interchangeable. Like an LMS, an LCMS manages the creation, storage and delivery of e-learning content.
(2) A web-based administration program that facilitates the creation, storage and delivery of unique learning objects, as well the management of students, rosters, and assessments.
(3) A software application that allows users to create, publish, and manage learning content.
(4) A system used to create and manage the e-learning content. The main difference between an LMS and an LCMS is the target user.

An LMS focuses on learners, while an LCMS is primarily used by content creators.
(5) Software used to author, manage and deliver learning content (typically via the web). While the LCMS's authoring and managing content component is chiefly what differentiates it from a learning management system (LMS), many modern LMSs also offer these functionalities.
(6) A software application that allows trainers and training directors to manage both the administrative and content-related functions of training. An LCMS combines the course management capabilities of an LMS (learning management system) with the content creation and storage capabilities of a CMS (content management system)

Learner Analysis — Data collected about learner group that is used to impact decisions throughout the instructional process. Components include learner group identification, general characteristics, numbers, and location, experience level, attitude, and skills that impact the training delivery system

Learner Guide — Resource used in the instructional process to enhance the learning during the training and, in some situations, to use as a reference tool following training

Learner-Centered Approach —

Learning Activity — Activity whose goal is a precise learning objective

Learning Analytics — (1) The measurement, collection, analysis and reporting of data accumulated during an online learning activity. Learning analytics allow for deep insight into the behaviours, competencies and experiences of learners in addition to accurately identifying areas for improvement in both the learner and the learning environment.
(2) Web analytics used to profile a learner and their interactions in an online program. It may encompass raw and analyzed data and is presented as individual data points, data tables, graphs, charts, etc. When delivered through e-learning software, learning analytics may be displayed in a designated dashboard and/or downloadable reports. Examples of learning analytics include course completion rates and quiz scores

Learning Asset — A set of accessible, sustainable and reusable learning resources

Learning Context — Actual physical or virtual location where learning occurs

Learning Data — Information that is produced about an individual or group of learners during the completion of an online learning course. It is traditionally captured in the SCORM format, with more recent e-learning initiatives capturing learning data in the xAPI format

Learning Environment — (1) Software designed as an all-in-one solution that can facilitate online learning for an organization. Courses created within the learning environment can be tracked with the same capabilities

of a learning management system (LMS), but the learning environment may not be able to track courses created outside of its system. Most learning environments also include an authoring capability for creating additional courses
(2) Instructional, interpersonal and physical characteristics of the classroom, which may influence student performance

Learning Experience — Any course, program, interaction or activity in which learning takes place. In e-learning, the learning experience typically refers to the interface wherein learners engage with the course content. The average learning management system (LMS) offers a learning experience (the interface utilized by the end user) in addition to an admin dashboard (used to create and manage the learning program)

Learning Experience Platform (LXP) — A cloud-based learning solution that focuses on delivering a personalized user experience. Building on the foundations laid by the LMS, the LXP looks to curate and aggregate content, create learning/career pathways, and build on skills development in the workplace

Learning Object — (1) A learning object is a piece of learning content that relates to a learning objective.
(2) A reusable, media-independent chunk of information used as a modular building block for e-learning content. Learning objects are most effective when organized by a meta data classification system and stored in a data repository such as an LCMS

Learning Objective — (1) The clear and measurable statement of the behavior that must be observed after training is concluded in order to consider the training a success. According to Robert Mager's work, a learning objective contains a condition statement, a performance statement, and a criterion statement.
(2) Learning objectives are a desired results that the person is expected to gain from interacting with the content.
(3) Brief statements (typically one sentence) used to communicate what learners can expect to learn from a course. Learning objectives are meant to be actionable; they tell learners what actions they will be able to perform upon successful completion of a course

Learning Objective — (1) A statement establishing a measurable behavioral outcome, used as an advanced organizer to indicate how the learner's acquisition of skills and knowledge is being measured.
(2) A description of a goal of training or learning in terms of the knowledge, skills, or performance expected of a learner. Learning objectives may be associated with instructional units of any size

Learning Outcomes — Learning outcomes are the result of successful learning and are measured by the demonstration of mastery of the learning objective

Learning Path — (1) Learning paths are used to build structured learning programs that guide learners through a series of courses. They allow admins to control the timeframe in which courses are made available to learners and the order in which they are completed.
(2) A sequence of steps a student needs to take to pass the course and get a certificate.
(3) Also known as a "learning pathway," a learning pathway is a route made up of multiple courses or lessons. The courses in a learning pathway are frequently based on a specific theme, skill or competency that learners are expected to master upon completion. Learning pathways are set up by a learning program administrator. While there is usually one route through the pathway, some offer route "branches" that enable learners to choose the path that is most relevant to them

Learning Platform — (1) A rather general term that refers to the underlying technologies people use to build and deploy e-learning. It usually refers the authoring software, the Learning Management System (LMS) or both.
(2) Internal or external sites often organized around tightly focused topics, which contain technologies (ranging from chat rooms to groupware) that enable users to submit and retrieve information

Learning Portal — (1) Learning portals are like 'mini LMSs' that enable you to manage and deliver training to your employees, partners, and customers in separate, unique environments. Each learning portal can be individually branded and customized to ensure it meets the specific needs of the learners who access it.
(2) Any Website that offers learners or organizations consolidated access to learning and training resources from multiple sources. Operators of learning portals are also called content aggregators, distributors, or hosts

Learning Resource — (1) Any entity that can be referenced and used for learning, education and training. A learning resource is also usually digital, and available via the Internet
(2) Resource used for learning, education and training
(3) A small, reusable digital component that can be selectively applied — alone or in combination — by computer software, learning facilitators or learners themselves, to meet individual needs for learning or performance support

Learning Snacks — Very small bits of learning that are available on-demand from any device at any time

Learning Space — An imaginary geography in which the learning enterprise flourishes. Mapped by market analysts and mined by consultants, this territory is a recent annexation to the business landscape

Learning Style Learning Strategy — Comprehensive view of procedures or routines that a learner uses to remember and recall information

Learning Styles — (1) Refers to an individual's preferred manner of processing material, or characteristic style of acquiring and using information when learning. Learning styles can be loosely grouped into physical and cognitive styles.
(2) The understanding that each individual learns differently. A person's "learning style" refers to their preferred way of consuming, processing, comprehending and retaining information. Learning styles are commonly grouped into seven categories:
Visual/spatial: Learning through pictures and images.
Aural/musical: Learning through sound and music.
Verbal/linguistic: Learning through words in speech and writing.
Physical/kinesthetic: Learning through the use of hands, body and sense of touch.
Logical/mathematical: Learning through logic and reasoning.
Social/interpersonal: Learning through working with others.
Solitary/intrapersonal: Learning through working alone

Learning System —

Lesson Plan — Formal design for a particular instructional segment. Can range from single-page outlines to comprehensive instructor manuals. Guides the teacher in producing and delivering the instruction

LETSI (Learning Education Training Systems Interoperability) — LETSI is an international non-profit federation dedicated to improving individual and organizational learning and performance

Level — (ITLET competency) position as assessed using criteria and method to determine amount, intensity, extent, or the like

Lexical Space — Attribute of a data element specification of a simple data element, which serves to specify the set of admissible strings for the content value of the simple data elements described by the specification

Lifelong Learning — All learning activities that take place throughout one's life. The goal of lifelong learning is to continually seek to improve your skills and knowledge in your personal, civic, social or work life. Lifelong learning is similar to self-directed learning, as those who engage in this type of learning share many characteristics—characteristics such as high self-confidence, active curiosity, self-discipline, comfort with autonomy, undying persistence and a strong desire to learn

Lightweight Directory Access Protocol (LDAP) — LDAP is used as a Single Sign On method in large organizations

Linguistic Indicator — Attribute of a data element specification which serves to specify whether or not the content value of data elements described by this specification are deemed to be linguistically neutral or not

Link — The result of HTML markup, a link signifies to a browser that data within a document will automatically connect with either nested data or an outside source. Used in the design of hypertext

LMS (Learning Management System) — (1) A learning management system (LMS) is a software application that is used to create, manage, deliver and track training. Typically includes functionality for course catalogs, launching courses, registering students, tracking student progress and assessments. A good LMS will allow you to deliver course content in a range of e-learning standards, sell online courses, assess and evaluate learner performance, deliver blended learning, brand or white label the LMS, integrate with third-party systems, and much more.

(2) A software platform for the delivery and reporting of training courses or educational programs. In an LMS, learning content is centralized and can be made available to users 24/7, in addition to the tracking and analysis of learning data for enhanced performance and continued learner improvement. Content can be changed or upgraded directly with very minimal administrative resources needed.

(3) Software (web) application used to plan, implement, and assess learning processes. An LMS provides instructors with a way to create and deliver content, monitor learner participation, and assess performance. An LMS provide interactive features such as threaded discussions, video conferencing, and discussion forums, etc. Examples include Moodle, WebCT (Blackboard), and Sakai.

(5) Software used for creation, managing and delivering e-learning content as well as communication with students and tracking their performance. There are Learning Management Systems hosted in the cloud and installed at the clients' websites. The courses are either created with the help of native LMS tools such as documents, quizzes, links or uploaded as SCORM/AICC packages.

(6) Traditionally, a learning management system was software used specifically for course administration, classroom management, learner enrollments and minimal learning analytics. However, many modern LMSs also offer content authoring and management functionalities that were once found only in learning content management systems (LCMSs).

(7) A software application for the administration, documentation, tracking, reporting and delivery of e-learning education courses or training programs. The technology platform through which students' access online courses, an LMS generally includes software for creating and editing course content, communication tools, assessment tools, and other features for managing the course. Colleges and universities use LMSs to deliver online courses and augment on-campus courses. Company training departments use LMSs to deliver online training, as well as to automate record-keeping and employee registration. Examples: Blackboard, Moodle, Curatr.

(8) Software that automates the administration of training events. The LMS registers users, tracks courses in a catalog, and records data from learners; it also provides reports to management. An LMS is typically designed to handle courses by multiple publishers and providers.

It usually doesn't include its own authoring capabilities; instead, it focuses on managing courses created by a variety of other sources.
(9) Integrated collection of information technology services used to administer, facilitate, or control the processes needed for learning, education, and training.
(10) Software system designed for the purpose of performing administrative and technical support processes associated with e-learning

LMS Administrator — A person who works for a company or as a contracted consultant to provide training on how to use and navigate a learning management system (LMS), offer technical support and customer service to all LMS users, troubleshoot problems when needed, teach other team members to administer the LMS and consult with trainers on ways to assign and deliver training through the LMS

LMS Integration — An LMS integration enables organizations to connect systems together and allows data to flow between an LMS and other systems. LMS integrations can be used to embed content in other systems, permit learners to log in using credentials from other systems or receive LMS notifications in other systems. An example of an LMS integration would be an integration with Salesforce, wherein learner progress data can be viewed from a company's Salesforce account

Localization — (1) The process in which a program is converted for delivery in a different country. Unlike "translation" which connotes a simple re-writing of words, localization includes re-writing for cultural and social differences as well.
(2) The translation and adaptation of learning elements (e.g., video captions, documents, text etc.) to specific languages based on locale.
(3) The tailoring of an offering to meet the specific needs of a geographic area, product, or target audience

Locator — Identifier that includes an access method

Log In/Log On — The process of establishing a connection over a network or modem with a remote computer to retrieve or exchange information

Log Off — The process of terminating a connection to a computer or network

LRN (Learning Resource Interchange) — Microsoft's Learning Resource Interchange, a format that gives content creators a standard way to identify, share, update, and create online content and courseware. LRN is the first commercial application of the IMS Content Packaging Specification

LRS (Learning Record Store) — (1) A system that works with xAPI (Tin Can) to collect, store and retrieve statements that track learning experiences. Data stored by an LRS can be presented in a way that is accessible and easy to interpret.

(2) A database that stores, manages and performs analysis on learning data. An LRS can be part of a Learning Management System (LMS) that supports the xAPI data format, or a standalone system, such as our own Learning Locker — the most widely installed LRS in the world

LSP (Learning Service Provider) — A specialized ASP offering learning management and training delivery software on a hosted or rental basis

LTI (Learning Tools Interoperability) — (1) The primary purpose of the LTI standard, created by the IMS Global Learning Consortium, is to connect learning systems, such as an LMS, with external service tools.
(2) A standard of cross-system operability created by the IMS Global Learning Consortium. It exists to connect learning systems, such as the LMS, with external tools in a way that is standardized; enabling enhanced accessibility of learning content across many institutions.
(3) Learning tools interoperability (LTI) is a standard developed by the IMS Global Consortium that provides a standard means to integrate learning content and tools from third-party vendors.
(4) A standard allowing LMS vendors to add integration with third-party services. It is a framework within which an LMS sends information about a learner to a third-party tool or software, enabling single sign-on, data exchange and a seamless user experience

LTS (Learning Technology System) — Information technology system used in the delivery and management of learning

Lurking — Reading the postings in a discussion forum but not contributing to the discussion

LXP / LEP (Learning Experience Platform) — A relatively new concept in the e-learning space. The idea is that while the LMS tends to be employer-centric as a place to manage essential training for onboarding, compliance, etc., the LXP is learner-centric — a place where employees should want to go and learn of their own accord, because the environment is enjoyable and enriching. Content may be curated from a range of external sources based on potential staff interests instead of, or at least in addition to, in-house training needs. Some industry commentators are describing such a system as a Learning Engagement Platform or LEP.
Many define LXP / LEP as being like Netflix for learning content, with key attributes being a slick UI, easy search functionalities and content recommendations based on user preferences and behaviour. These platforms are typically an add-on to an LMS, but we are likely to see the lines blurred between LMSs and LXPs / LEPs over the next few years, as employers will want the simplicity of an all in one solution

M

Machine Learning — The ability of computer programs to gather information and utilize it to make decisions without being explicitly programmed to do so. Personalized product or content recommendations in services such as Amazon or Netflix are a key example of machine learning

Macrostructure — (1) Arrangement of entries in a collection.
(2) Arrangement of data in each entry of a collection

Mahara — An open-source e-portfolio and social networking tool used in education institutions

Maintenance — Necessary modifications

Managed Hosting — Managed hosting refers to the hosting services provided by the hosting service provider. Lambda Solutions offers a fully managed hosting service, meaning that your Moodle or Totara site will be monitored by experienced webmasters

Management System — Set of interrelated or interacting elements of an organization to establish policies and objectives and processes to achieve those objectives

Mandatory — Value of the presence type attribute, used in a MLR application profile specification, segment specification, or composite data element specification, to specify that a segment group, segment, composite data element, stand-alone data element or component data element shall be used at least one time

Mandatory Data Element — Data element which shall be used to describe a learning resource

Mandatory Metadata Element — A metadata element for which a value must be assigned

Manifest File — The manifest is a nitty-gritty detail of SCORM. The SCORM package itself is a zip file that contains all of the content a course is made from, including media like SCOs (Shareable Content Objects), HTML and Flash files. The SCORM package also contains the manifest file, which determines the structure and contents of the course. The name of the manifest is always imsmanifest.xml and the file must be located in the root of the zipped package. If the manifest file is not located in the root of the zip, the course is not valid SCORM content package and it is likely you will run into issues when importing it into your LMS

Markup — Text or codes added to a document to convey information about it. Usually used to formulate a document's layout or create links to other documents or information servers. HTML is a common form of markup

Mashup — Mashup refers to the methodology for dynamically assembling learning programs from existing content and learning tools

Mastery Score — Defines the score a learner must achieve to pass a SCORM module. A mastery score is not compulsory, as some SCORM modules don't include a quiz and some quizzes don't require a passing score. For example, knowledge checks and practice quizzes are two types of assessment that typically do not require a mastery score

Matriculating — A Matriculating student is in a college or university as a candidate for a degree. Non-matriculating students are not actively working towards completion of a degree. Some schools limit the number of credits that a non-matriculated student may take in a semester

Maturity — Capability or performance level of the process

Meaning — Interpretation of a concept associated with a sign

Measurement — Measurement is a key activity in quality management and assurance. Especially, quality audit and assessment need measurement. Measurement is process of experimentally obtaining information about the magnitude of a quantity. Measurement implies a measurement procedure, based on a theoretical model. In practice, measurement presupposes a calibrated measuring system that should be subsequently verified

Media — Physical means selected or developed to communicate instructional messages. Examples include drawings, slides, audiotape, computer, model, etc.

Media Selection — Function carried out during development of instruction whereby various media are selected to enhance the quality of the learning

Media Type — Metadata for a representation that provides format specification and preferred interpretation for the representation

Mesh Network Topology —

Metadata — (1) Information about content that allows it to be stored in and retrieved from a database.
(2) Metadata is descriptive information about learning content.
(3)Data about data elements, including their data descriptions, and data about data ownership, access paths, access rights and data volatility.
(4) Data that describes any objects such as other data, processes, or digital or non-digital entities, data that is associated with objects typically used for purposes such as identification in information retrieval or resource discovery systems. It is also typically used for information management and/or integration purposes.
The purpose of metadata is to render each item (in the collection) uniquely identifiable; provide multiple pathways for finding each item; and, place the information contained in each item into context with other documents, items, information and knowledge

Metadata Element — Data element utilized as metadata for specifying a learning resource for which the definition, identification, allowable value(s) are specified through combinations of rules and attributes

Metadata Element Identifier (MEI) — Unambiguous, unique and linguistically neutral value, resulting from the application of a rule-based identification process

Metadata Item — "Metadata registry" instance of a metadata object

Metadata Learning Resource Record (MLR Record, MLRR) — Ordered set of MLR data elements describing a specific learning resource (and/or some entities related to that learning resource)

Metadata Object — "Metadata registry" object type defined by a metamodel

Metadata Registry (MDR) — Information system for registering metadata

Metatag — (1) Information about content that enables it to be stored in and retrieved from a database.
(2) An HTML tag identifying the contents of a Website. Information commonly found in the metatag includes copyright info, key words for search engines, and formatting descriptions of the page

Method for Competency Assessment — Instrument or tool to judge and/or to assess an acquired or demonstrated competency

Method (in Quality Approaches) — (1) One or a set of instrument(s) or tool(s) to assure and/or to manage quality in processes
(2) Material measure within some aspects of quality characteristics
(3) Methods are instruments or tools to assure or to manage quality in processes. The methods include physical methods and abstract or conceptual methods. There are various types of methods from the subjects of management science, pedagogy, psychology, engineering, statistic, biology, etc.

Metrics for Competency Assessment — Material measure within some aspects of competency characteristics material measure used to determine the value of specific aspects or characteristics of competency

Metrics in Quality Approaches — The term of "metrics" has been used in many senses in education and engineering publications. In this standard, it is defined as "material measure within some aspects of quality characteristics." In other word, it is a way of assigning a certain value using methods of measuring or testing in order to quantify a quality object from the standpoint of quality characteristics, such as scale, criterion, degree, weight, magnitude, interval, ratio, or standard rate, etc.
In ISO VIM (International Vocabulary of basic and general terms in Metrology) "material measure" is defined as device reproducing or supplying, in a permanent manner during its use, quantities of given kinds, each with an assigned value

Microlearning — (1) A way to deliver training content to learners in bite-sized, focused bursts. Each unit or module focuses on an individual learning objective.
(2) A method of delivering content to users in small, specific bursts, allowing users to control what and when they learn. For example, a piece of educational content or information may be delivered in the size of a tweet.
(3) Microlearning breaks down instructional content into brief modules, typically a lesson that takes only minutes to complete instead of hours. Studies have shown that people remember what they are taught when it is broken down into easily absorbed bits. Microlearning mimics how we learn best

Minimum Viable Product (MVP) — In product development, the minimum viable product (MVP) is a product with just enough features to satisfy early customers and to provide feedback for future development

mLearning (Mobile Learning) — (1) This is learning that is conducted on a mobile device, like a smartphone or tablet. mLearning can occur anywhere at any time. The movement from desktop to portable devices has had a big impact on the development of online learning content. Instructional designers increasingly need to develop responsive mobile learning content that can adapt to the many devices learners now use.
(2) Learning that takes place anytime and anywhere via such hand-held wireless devices as cell phones, personal digital assistants (PDAs), tablets, or laptop computers.
(3) mLearning (mobile) stands for mobile learning, and it allows users to access learning content through mobile device technologies, creating a learning environment that available to anyone with a mobile device.
(4) Its main idea is to let students study whenever they are and whatever device they use. For mLearning to happen the LMS needs to be either mobile responsive or have a mobile app. The courses need to be designed with the help of HTML5 compatible authoring tools.
(6) Otherwise known as m-learning, mobile learning is learning that takes place on portable devices. Its main benefit is that it offers learners the flexibility of learning when and where they want.
(7) e-learning facilitated by mobile devices and not constrained by location or movement

MLR Data Element — Data element which is either a simple MLR data element or a composite MLR data element

MLR Data Element Specification — Data element specification that is a MLR simple data element specification or a MLR composite data element specification

MLR Metadata Element — MLR data element utilized as metadata for specifying a learning resource

MLR Segment Specification — Description of a MLR segment, including the specification of the position, requirements and maximum number of occurrences of the MLR data element specifications constituting the MLR

Modality — Learning styles and learning modalities are often spoken of interchangeably. We commonly consider four modalities: visual (seeing), auditory (hearing), kinesthetic (moving), and tactile (touching). Educational environment must consider whether the student learns best through hearing, seeing, moving, and touching

Model — Example or pattern that prescribes relationships in a normative sense

Modem — Computer equipment that allows computers to interact with each other via telephone lines by converting digital signals to analog for transmitting and back to digital for receiving

Moderate —

Moderator —

Module — (1) Instructional package with a single integrated theme that provides the information needed to develop mastery of specified knowledge and skills, and serves as one component of a total course or curriculum.
(2) In LearnUpon's LMS, a module is a basic block a course is built from. A module can consist of any course material, such as a video, document, SCORM file, or an exam or survey

Mononymy — Relation between designations and concepts in a given language in which one concept has only one designation

Monosemy — Relation between designations and concepts in a given language in which one designation only relates to one concept

MOOC (Massive Open Online Course) — (1) This is an online course aimed at unlimited participation and open access via the web. It is generally used for more academic focused training and education.
(2) MOOC is an acronym for Massive Open Online Course. It is a model for online course delivery that is free to the public and has no limits on attendance.
(3) Free online courses offered by top colleges and universities. The main idea is to give an opportunity to study to anyone independently of income and location. A fee is applied only if a student wants to get a certificate to confirm the knowledge.
(4) An online course delivered to large numbers of users at any one time, MOOCs can be applied for both corporate training and the delivery of educational content.
In addition to the delivery of content, MOOCs often facilitate collaborative discussion and interactions between both students and teachers, or instructors and learners.

Moodle (Modular Object-Oriented Dynamic Learning Environment) — (1) Open source learning platform mostly implemented in education settings. One of the main benefits of open source platforms like Moodle is that they are free and can be highly customized. Companies should be wary of the value a "free" learning platform can deliver an alert to the costs quickly accrued in maintaining, updating and supporting an LMS without a vendor. Despite its initial low cost and apparent flexibility, Moodle's is actually quite expensive to maintain and adapt over time.
(2) A free and open source Learning Management System widely used in education institutions. Moodle is vastly customizable with the use of plugins and allows for learning environments to be tailored for the specific needs of institutions

Moral Rights — Right to claim authorship of the work and right to object to any mutilation or deformation or other modification of, or other derogatory action in relation to, the work which would be prejudicial to the author's honor or reputation

Motor Skills — Executive subroutines and past skills learned through practice

Multicasting — The transmission of information to more than one recipient. For example, sending an email message to a list of people. Teleconferencing and videoconferencing can also use multicasting. See also broadcasting and unicasting

Multi-Channel Publishing — Allows the same content to be transformed into different delivery formats. This typically includes PDF, Word, HTML, and standard formats such as SCORM, AICC, Common Cartridge, ePub, DITA, and more

Multimedia — (1) Refers to the presentation of information and instruction through a combination of graphics, audio, text, or video. Multimedia instruction is often interactive.
(2) Encompasses interactive text, images, sound, and color. Multimedia can be anything from a simple PowerPoint slide slow to a complex interactive simulation

Multimedia Learning — A cognitive theory — multimedia learning is based on three main assumptions: there are two separate channels (visual and auditory) for processing information; there is limited channel capacity; and that learning is an active process of filtering, selecting, organizing, and integrating information. This theory was first popularized by Richard E. Meyer in his book Multimedia Learning published in 2001.

Multiple Intelligences — (1) Theory introduced by Howard Gardner defining eight types of intelligence: logical-mathematical, musical, spatial, bodily/kinesthetic, linguistic, interpersonal, intrapersonal, and naturalist intelligence. Instead of viewing intelligence as a general ability, the multiple intelligences theory asserts that different learners can excel in different areas.

(2) This theory proposes that humans possess more than one type of intelligence. Popularized by Howard Gardner who suggested seven different types of intelligence (i.e., visual/spatial, verbal/linguistic, logical/mathematical, bodily/kinesthetic, musical/rhythmic, interpersonal, and intrapersonal), spanning three domains (i.e., the physical, cognitive and affective domains)

N

Namespace — Designation used to disambiguate objects within a particular scope

Narrowband — In data transmission, speeds from 50 Bps to 64 Kbps. See also broadband

Navigation — Describes how learners move through a course, website or document. Good instructional design should make navigation clear, simple and engaging for users

Near Field Communication (NFC) — The ability of two devices to wirelessly interact with each other and exchange data when placed in a near proximity. An example of near field communication is a contactless card payment

Needs Assessment — Tool used to identify "the gap" between what is already known and what needs to be learned. Needs assessment uses questionnaires, surveys, interviews, observation, etc. to collect data. Phases:
1) List goals,
2) Determine whether or how well the identified goals are being achieved,
3) Determine gaps between the desired and actual performance,
4) Set priorities.
Types:
1) Normative,
2) Felt,
3) Expressed or demand,
4) Comparative,
5) Anticipated or future,
6) Critical-incident.

Nesting — Placing documents within other documents. Allows a user to access material in a nonlinear fashion, the primary requirement for developing hypertext

Netiquette — Netiquette is a set of rules or standards people follow to keep the online environment pleasant and safe. Netiquette is all about communicating respectfully and politely and avoiding stereotyping. Setting those ground rules early can prevent misunderstandings

Network — Two or more computers that are connected so users can share files and devices (for example, printers, servers, and storage devices)

Nomadic Learning — Form of learning in which a learner has continuity of service across different sessions, and possibly, different locations

Nomadicity — Tendency of a person, or a group of people, to move from one location to another with relative frequency

Non-Profit University — Both non-profit and for-profit schools confer degrees, but their focus and composition are quite different. Non-profits are the traditional schools you likely picture when you think of college- such as liberal arts colleges, community colleges, and state universities. These schools receive funding from a variety of sources such as the government, tuition fees, and donations. The money that these schools earn often goes directly back into the schools themselves

Norm-Referenced Test — Type of test that compares the performance of a student with the performance of other students

Not SQL (NoSQL) — Typically refers to a type of database that is non-relational, but instead stores everything in a "document" format. For instance, Mongo is a NoSQL database

O

"One Size Fits All" e-Learning Model — A learning model suitable for all types of learners independently of their skills and the level of knowledge

Object Class — Set of ideas, abstractions, or things in the real world that are identified with explicit boundaries and meaning and whose properties and behavior follow the same rules

Objectives — (1) Course or learning objectives define the knowledge or skills learners are expected to gain from a training program. The development of course content should be goal-driven. Understanding who learning content is created for, and what they should learn from it, will shape how it's designed and presented. Defining clear objectives also helps to assess the effectiveness of a course after its completion.
(2) The desired outcomes for the training event (what the training should accomplish in terms of performance the learners should exhibit in the learning environment in order to be considered competent); consist of three components (the performance, criterion and standard); are congruent with the tasks and testing strategies. (Objectives can also be established for on-the-job performance, business or impact performance, or ROI)

ODBC (Open Database Connectivity) — An application program interface to access information from numerous types of databases, including Access, dBase, DB2, and so forth

Off-the-Shelf Content — (1) Content that is designed and sold as is, with no personalization or modification, to a training provider. Often used in the case of compliance training, where universal rules and instruction are applicable.
(2) Often called 'Generic' or 'Ready-to-Go', Off the Shelf content has been developed to be useful for a relatively large user base across multiple organizations. The opposite is bespoke content that is made to order for a specific organization. Off-the-shelf e-learning covers a certain area of knowledge or skill that could be relevant to multiple customers

OID (Organization Identifier) — Identifier designated by a global registration system of organizations

OJT (On the Job Training) — (1) Training that takes place in a normal working situation. This can be captured by an LMS like LearnUpon with self-awarding and approval features, or via xAPI.
(2) Employee training that occurs while the individual is working in the role. A trainer or supervisory role is typically present to offer hands-on guidance and support

Onboarding — (1) This is the process of integrating a new employee, partner, or customer into an organization and familiarizing them with the organization's products and services.
(2) The process of acclimating a new employee, channel partner or customer to an organization and / or the organization's products and services. Onboarding typically includes orientation and training on topics relating to the company, operational processes and the business' product offerings

One-to-One Evaluation — The first stage in formative evaluation, referring to direct interaction between the designer and individual tryout student

Onground Environment — The traditional classroom environment, also known as face-to-face (F2F)
See also *ILT*

Online — The state in which a computer is connected to another computer or server via a network. A computer communicating with another computer

Online Assessment — (1) Often used interchangeably with e-learning and web-based training. Any form of learning conducted on a computer and usually over the internet.
(2) The evaluation of specific skills and competencies conducted via the web. Online assessments are also known as e-assessments and may consist of quizzes, questionnaires, assignments or surveys

Online Community — Meeting place for learners on the Internet. Designed to facilitate interaction and collaboration among people who share common interests and needs

Online Courses — A series of lessons most often delivered through a web browser or app on desktop or mobile devices. An online course is a web-based environment for learning that often includes learning activities, assessments, discussions and various types of learning resources

Online Education — Online education is about connecting the student to instruction and educational materials by way of the Internet. Other terms used include Virtual learning, Cyber learning, and e-learning

Online Learning — (1) A term used to describe distance or correspondence classes conducted via the Internet.
(2) The term online learning is often used synonymously with e-learning. It is an umbrella term that includes any type of learning accomplished on a computer and usually over the Internet.
(3) Frequently used synonymously with e-learning and meaning the same as web-based training, online learning describes education or training where materials are distributed, and communication takes place, over the Internet.
(4) Learning delivered by Web-based or Internet-based technologies. See Web-based training and Internet-based training
(5) Learning enabled via connection to a computer network

Online Learning Environment — A "virtual training space" which involves communication via an internet-based format — usually an LMS such as Moodle, but also any other medium including email, Skype, etc.

Online Training — Web- or Internet-based training

Open Badges — An accomplishment recognition initiative developed by the Mozilla Foundation. 'Open Badges' refer to a method of packaging information about achievements and fulfilled goals and embedding it into a portable image file; acting as a digital badge

Open Platform — A computer and network design concept that dictates that all users will have the ability to access, create, and publish information, as well as understand each other's information

Open Source — A piece of software with a source code that is freely available for the public to modify to suit their individual needs. Often, changes are shared and the software is collaboratively improved upon

Open Source Software — (1) Software for which the source code is publicly available for use and development free of charge. Moodle is an example of open source software that's used widely in specific kinds of e-learning environments, like universities
(2) A program in which the source code is available to the general public for use and/or modification from its original design free of charge, i.e., open. Open source code is typically created as a collaborative effort in which programmers improve upon the code and share the changes within the community.

(3) Software that meets each of nine requirements listed by the non-profit Open Source Initiative in its Open Source Definition

Open University — University that offers distance learning at university level

Optional Data Element — Data element which may be used to describe a learning resource

Optional Metadata Element — A metadata element for which a value may be assigned, at will

Order Relation Semantics — Attribute of a data element specification which serves to describe, when data elements are ordered, the meaning of the order of appearance

Ordered Indicator — Attribute of a data element specification which serves to indicate whether or not the order of the occurrences of repeatable data elements described by this specification is significant of not

Original Equipment Manufacturer (OEM) — A term often used in e-Learning as "OEM License", referring to software that is sold to computer builders and hardware manufacturers (OEMs) in large quantities, for the purpose of bundling with computer hardware

Origination Site — The location from which a teleconference originates

Outcomes — Describes the knowledge or skills learners are expected to gain from engaging with course content. While objectives describe what an instructor intends learners to learn, outcomes record what learners actually learned

Outsource — Make an arrangement where an external organization performs part of an organization's function or process

P

Packet — A bundle of data transmitted over a network. Packets have no set size; they can range from one character to hundreds of characters

Para Block — A foundational object in most content structures. It is an all-purpose object that contains a collection of the most common document objects (text, images, videos, tables, lists, etc.)

Participant — (1) A person or agent that receives and (usually) composes and sends expressions or messages in a collaborative environment. A participant can be assigned one or more roles in this environment
(2) An interactive entity such as a human being, an artifact such as an interactive computer process (enabled by appropriate software, data and interfaces), or a set of such entities and/or artifacts acting and reacting as a single entity

Partner Training — (1) Partner training, or reseller training, gives partners the tools they need to be successful members of an organization. This can include product training, sales training, support training or marketing guidance.
(2) Also known as channel partner training, partner training is education delivered by a company to the organizations that market or sell its products and services. Partner training topics typically include product knowledge, compliance, brand standards, selling skills and sales process

PCI (Payment Card Industry Data Security Standard) — This describes whether or not a vendor is adhering to the appropriate industry standards of payment information collection and processing. If you are selling courses online, it is advisable to use an LMS that is PCI compliant or, like LearnUpon, integrates with PCI compliant transaction engines

PDA (Personal Digital Assistant) — Handheld computer device used to organize personal information such as contacts, schedules, and so forth. Data can usually be transferred to a desktop computer by cable or wireless transmission

Pedagogy — (1) Derived from the Greek for "to lead", pedagogy is an instructor-centered approach to educational activities in online and face-to-face environments. In e-learning, pedagogy involves selecting the best methods to convey information to learners
(2) An educational approach characterized by teacher-centeredness. The teacher is viewed as an authority figure and students are not generally involved in decisions/actions in regard to learning.
(3) The methodology and practice of teaching, specifically in K-12 education. Pedagogy considers theories of learning and student needs and applies them to teaching strategies. It informs teachers' actions, judgments, decisions and interactions with students. Pedagogy serves as the foundation upon which andragogy and heutagogy were built

Performance — Performance is the component of a learning objective that describes what the learner should be able to do at the completing of the instruction

Performance Analysis — Actions taken to discover the cause of the performance discrepancy

Performance Discrepancy — Gap that exists between the Actual Performance (the current performance of learner) and the Desired Performance (required or requested performance)

Performance Gap — See Performance Discrepancy

Performance Objective — Describes what the learner should be able to do on-the-job (as opposed to what the learner should be able to do within the learning environment as a result of the training). Detailed description of what students will be able to do when they complete a unit of instruction. Also known as behavioral objective or instructional

objective. Criteria for assessing the performance — Audience Behavior, Condition, Degree (ABCD)

Performance Support — The electronic performance support system (EPSS) is an online support program that allows users to access the information and training resources that support work performance

Permissions — Permissions govern a user's rights to create, write, update, and delete files

Person — Entity, recognized by law as having legal rights and duties, able to make commitment(s), assume and fulfill resulting obligation(s), and able of being held accountable for its action(s)

Personalization — (1) Personalization matches the needs of a learner to the available learning resources in the organization. A personalization system uses a user profile to determine how to match the user to the content.
(2) Tailoring Web content to an individual user. Can be accomplished by a user entering preferences or by a computer guessing about the user's preferences

Personas — Personas (or Learner Personas) are considered and detailed profiles designed to reflect the goals, interests, education background and specific skills of learners. They are used by Instructional Designers to help understand their audience when designing courses or learning initiatives, ensuring courses are engaging and relevant to the end user

Pilot Test — The last step in the Field Trial (the third phase of formative evaluation). Data collected is provided to the client who uses it to make the final decision about whether to proceed with implementation

Plan of Study — The plan of study document details the course groupings term-by-term that are used to create the student's course schedule and helps guide decisions around which courses to take next

PLE (Personal Learning Environmen) — Are systems that help learners take control of and manage their own learning. This includes providing support for learners to

- set their own learning goals
- manage their learning; managing both content and process
- communicate with others in the process of learning and thereby achieve learning goals.

A PLE may be composed of one or more sub-systems: as such it may be a desktop application, or composed of one or more web-based services

Plug-In — An accessory program that adds capabilities to the main program. Used on Webpages to display multimedia content

Podcast — Digital audio files used by millions of listeners to learn about a huge range of subjects. One popular e-learning podcast is hosted by Connie Malamed and started in 2013.

Many instructors and course developers have started to create podcasts to share their expertise with learners and the e-learning world in general

Point-to-Multipoint — Transmission between multiple locations using a bridge

Point-to-Point — Transmission between two locations

Point-to-Point Protocol (PPP) — A data link layer (layer 2) communications protocol used to establish a direct connection between two nodes

POP (Point of Presence) — The geographic location of a particular switch or service

Portal — (1) A web site that aggregates disparate content and services into a unified user interface.
(2) A Website that acts as a "doorway" to the Internet or a portion of the Internet, targeted towards one particular subject
See also *Learning Portal*

Post — To place a message in a public message forum. Also, to place an HTML page on the World Wide Web

Practice Item — (1) A question or learning activity that serves as an informal validation and reinforcement of instruction.
(2) A sample question that precedes a test, designed to ensure that the learner understands the mechanics of the testing system.
(3) A question or learning activity that allows learners to test whether they can apply the skills and knowledge just learned

Practices — Reinforcement activities that give the learner an opportunity to apply skills and knowledge. Often the system provides mentoring and feedback. Variants are case study, learning activity, practice quizzes, practice test, testing quiz, and practice labs

Practicum — A practicum is a course of study for teachers, doctors, nurses, etc., that involves actually working in the area of study and using the knowledge and skills that have been learned in a school

Prescriptive Learning — (1) A process in which only coursework that matches a learner's identified skill and knowledge gaps is offered to him or her, with the goal of making the learning experience more meaningful, efficient, and cost-effective.
(2) Prescriptive learning is a methodology that pre-tests a user against a set of learning objectives, measures their baseline knowledge, and adapts the curriculum delivery

Private Communication — Electronic communication (email) sent to the personal email mailboxes of one or more individuals as opposed to a public conferencing forum

Private School — A private college is supported by tuition, endowment, and donations, unlike a public college, which is often supported by state funds. Private colleges often offer the best financial aid and more personal

attention, but it is important for students to review each college's specific attributes in relation to their educational needs

Problem-Based Learning — A learner-centered approach that is similar to Scenario-Based Learning. In this approach, learners are presented with a problem and gain knowledge from the development of a solution

Problem-Based Storytelling — Teaching how to solve the problem with the best results

Procedure Standard — Standard that specifies procedures to be followed

Product — Entity as a result of a process developed or used for learning, education and training purposes.
There are four generic product categories, as follows: software (e.g. web-based trainings, communication tools, learning (content) management systems); hardware (e.g. computers, web-cams); processed materials such as learning resources (e.g. educational components, learning objects, web services); services (e.g. tutoring)

Proficiency — (ITLET competency) progress, advancement or improvement in a competency including skill, knowledge, attitude, and competency related concepts which is used to identify level or degree of a competency by judgment or measurement. A proficiency may have proficiency levels

Proficiency Level — (ITLET competency) level of competency proficiency that is position, in other words degree or grade, which is segmented or specified for competency proficiency as a certain class, stage or possession state. Value of a proficiency level is quoted to persons as formal or informal representation of competency proficiency

Proficiency Level Sequence — (ITLET competency) a value set of proficiency level. The sequence can be of several types: nominally expressed steps as ordinal degree, numbered steps as ordinal degree (increasing or decreasing), continuance as interval scale or ratio scale by number, SDT (e.g. pass or not). All these different ways can express a degree of proficiency level

Program Manager — The initial college representative that a prospective student will speak with when researching admission requirements for a particular program is the program manager. The program manager will assist potential students through the application and/or admission process up until the applicant begins his or her first course

Project — A specific, finite task with a well-defined set of predetermined outcomes

Projection System — A device for showing video, television, or computer images on a large screen

Protocol — A formal set of standards, rules, or formats for exchanging data that assures uniformity between computers and applications

Prototype — A functional version of a new process and/or product, usually in an unfinished state, whose effectiveness and efficiency to be tested

Prototyping — Process of assembling produced and/or revised instructional elements, and of testing, revising, summatively evaluating, and preparing the system for marketing

Provider — Institution or company delivering products, services or solutions for learning, education or training purposes

Proximity Beacons — The Proximity Beacon API is a cloud service that allows you to manage data associated with your Bluetooth Low Energy (BLE) beacons using a REST (see Representational State Transfer) interface. In e-learning, proximity beacons can be used to designate "learning zones", and deliver educational to content to people's mobile devices once they have entered the designated zone

Psychomotor Domain — The division of Bloom's taxonomy of educational objectives that references those objectives and test items demonstrating manipulative and/or motor skills

Public Communication — Electronic communication sent to a public conferencing forum, listserv, or mailing list where one message is distributed to all list members

Publication (of a Fixed Performance or a Phonogram) — Offering of copies of the fixed performance or the phonogram to the public, with the consent of the right holder, and provided that copies are offered to the public in reasonable quantity

Publishing Tool — A software application or program that allows people to publish their own e-learning courseware to a specific location, such as an Internet server

Pull Technology — Specifically requesting information from a particular source. Downloading Web pages via a Web browser is an example of pull technology. Getting mail is also pull technology if the user initiates a request to retrieve it. Contrast with push technology
See also *Push Technology*

Push Technology — (1) Push technology, or server push, is a style of Internet-based communication where the request for a given transaction is initiated by the publisher or central server.
(2) Transmitting data from an internal network or a cloud-based service to the user's computer or mobile device. Notifications for a wide variety of events such as stock quotes and Facebook posts are pushed in real time
See also *Pull Technology*

Q

QTI — The IMS question and test interoperability (QTI) is an XML standard for assessment times and tests that enables them to be interoperable across delivery systems

Quantified Self — Tracking and analyzing personal data in a numeric format to gain a deeper understanding of behaviors with a view to implementing changes and improvements

Question Pool — Also known as a question bank, is a group of reusable questions from which an exam or survey can be created

R

RAM (Random-Access Memory) — Temporary storage for data and program instructions

Rapid Authoring — Rapid authoring describes a class of desk-top authoring tools that create e-learning content

Rapid Learning — A process of creating courses within shorter period of time, within smaller budget, making fewer efforts and involving minimum resources

Rapid Prototyping — An ISD application model first used in the software industry that features instruction offered in early draft form with the stated purpose of obtaining increased input from multiple stakeholders during the revision process in order to produce a superior product

Readmission — Students become inactive for various reasons, and there are different types of inactive statuses. Should an inactive student decide to return to college, procedures are determined depending on the student's inactive status. Typically, any student wishing to be readmitted must not have an outstanding balance or be delinquent on any student loans

Realm — Technical data organized as a collection of zero or more registers that serve as a unit

Real-Time Communication — Communication in which information is received at (or nearly at) the instant it is sent. Real-time is a characteristic of synchronous communication

Receive Site — A location that can receive transmissions from another site for distance learning

Reclamation — De-assignment of designation(s) for a registration and its subsequent de-registration

Register — (1) Set of tables (paper, electronic, or a combination) containing the assigned designations and the associated information
(2) Technical data organized as a set of tables and their relationships

Registration — Assignment of an unambiguous designation to a registration in a way which makes the assignment available to interested parties

Registration Authority — Entity responsible for administering the registration provisions of a standard

Registration Authority Process — Procedure standard the describes the maintenance and change processes of one or more registers

Registration Designation — Designation that is associated with the registration aspects of the registration process

Registration Item — Unit of registration that contains technical data and administrative data

Registration Status — Status in the life cycle of a registered item

Registration Target — Intended table, register, or realm for the registration of the registered item

Registry — System and its administration that implement one or more registers

Registry Item — Metadata item recorded in a metadata registry

Registry Metamodel — Metamodel specifying a metadata registry

Relation Database Management Service (RDBMS) — A relational database is a very typical database format, which splits up data into different "tables" that can be "related" with IDs. SQL is a relational database

Reliability (Test) — The degree to which a test instrument consistently measures the same group's knowledge level of the same instruction when taking the test over again

Repeatability Indicator — Attribute of a data element specification which serves to specify whether or not data elements described by this specification may be used only once, or more than one, in the description of a learning resource

Representational State Transfer (REST) — A software architecture style consisting of guidelines and best practices for creating scalable web services

Repurpose — (1) To revise pre-existing training material for a different delivery format. For example, instructor guides and student manuals are often repurposed into web-based training.
(2) Repurposing content means using existing content by adapting it to a new context

Requirement — Need or expectation that is stated, generally implied or obligatory

Residency — A residency is a three to four day in-person workshop often required by online graduate level programs. The residency incorporates faculty-to-student and student-to-student interaction, access to instructional

and other resources, exposure to and socialization in the field of study, and suitable academic advising

Resolution — The clarity of the image on the video display screen

Resource — (1) Entity that can be identified and referenced by an unambiguous and stable identifier in a recognized identification system.
(2) Anything that might be identified

Resource Class — Set of resources that can be identified by listing or description of boundaries and meaning and whose properties and behavior follow the same rule

Resources — Learning materials often stored in an LMS are referred to as resources. Learners can use resources like help guides or dictionaries to support their learning independently

Responsible Organization — Organization or unit within an organization that is responsible for the contents of a registered item

Responsive Design — Responsive design is essential for software and courseware intended for use on mobile devices. It is a type of web development that allows the appearance of a website to dynamically adapt to a range of screen sizes. A good LMS should be mobile responsive for the convenience of users

Responsive Design LMS — An LMS which layout adjusts to the screen of a device used

REST (Representational State Transfer) — Describing how one system can communicate state with another, an API that adheres to REST (or is RESTful) does not require the client to know anything about the API structure. The server only needs to provide whatever information the client needs to interact with the service

Retention Rate — This refers to how long the learner remembers what they learnt. Of course, the more they remember, the more likely they will incorporate it into their everyday work practices. This is the hallmark of a great training course

Reusable Learning Objects (RLOs) — (1) Object or set of resources that can be used for facilitating intended learning outcomes, and can be extracted and reused in other learning environments. Associated with e-learning resources that can be used in multiple learning environments.
(2) A collection of RIOs, overview, summary, and assessments that supports a specific learning objective

Reuse — Reused content is linked to multiple contexts. A single change to a reused object will update all the contexts in which it's being referenced

RFP (Request for Proposal) — A document produced by a company seeking goods or services and distributed to prospective suppliers. Suppliers then provide proposals based on the criteria specified within the RFP

RIO (Reusable Information Object) — A collection of content, practice, and assessment items assembled around a single learning objective. RIOs are built from templates based on whether the goal is to communicate a concept, fact, process, principle, or procedure. (Pronounced "REE-O")

ROI (Return on Investment) — (1) A common business term, in e-learning ROI, references a ratio of the profit accrued by an investment versus the cost of the investment. Usually expressed as a percentage Training professionals are now often required to demonstrate the ROI of learning programs and software to leadership teams. In learning departments, ROI is sometimes calculated by comparing the cost of providing training to the tangible results of training, for example, a decrease in accidents or increase in the number of payments processed, an increase in number of calls handed or a decrease in error rate. The ROI of an LMS is often calculated by comparing the reduced costs of e-learning to historical costs of face-to-face training

(2) A performance indicator measuring the profit after all costs deducted. In relation to e-learning costs include the cost of course development, LMS, authoring tools, etc.

Role — (1) The function assumed or part played by a participant in a collaborative environment. This function or part is associated with activities, permissions and/or responsibilities. Typically, terms such as "teacher," "facilitator" or "student" can be used to designate these functions, parts or roles.

(2) A profile or listing of rights and responsibilities specified for a potential or actual member of a collaborative group. By assigning a single role or several roles to a collaborative group member, the aggregate rights and responsibilities associated with the role(s) are transferred to this participant

Roleplay — In e-learning this term usually refers to exercises which involve at least two people who are asked to complete interactive tasks facilitated by a computer program. As the names suggests this normally involves the people involved being invited to perform roles e.g. Customer and Assistant being a natural one. It is a natural extension of the scenario paradigm and can fit well with system simulations

RSS (Really Simple Syndication) — Technically, RSS stands for "RDF Site Summary", but it is commonly referred to as "Really Simple Syndication". RSS Is a family of Web feed formats used to publish frequently updated content such as blog entries, news headlines, and podcasts in a standardized format.[2] An RSS document (which is called a "feed", "web feed", or "channel") contains either a summary of content from an associated web site or the full text. RSS makes it possible for people to keep up with web sites in an automated manner that can be piped into special programs or filtered displays

RSS Feeds — An RSS feed will alert you when a site you are interested in adds new content. It's a convenient way to stay up to date on news or opinions from various sources

S

SaaS (Software as a Service) — (1) A service hosted in the cloud by an LMS vendor so that customers do not need to install the system locally. Eliminating the installation of an LMS reduces demands on the customer for software maintenance and in-house technical support. Choosing a cloud-based LMS eliminates costs generated by purchasing and installing hardware and allocating resources to manage it. However, a self-hosted platform can be a better fit in scenarios where every application in an organization must follow the same architecture.
(2) Software that is licensed to a company or individual on a subscription basis. SaaS has notable benefits, such as cost savings resulting from the absence of hardware installations, maintenance and upgrades. Additionally, SaaS products are easily scaled to suit the precise needs of the customer as the software is hosted externally by the vendor. This benefit extends to development and upgrades, as SaaS users can simply log on to a service that is consistently maintained.
(3) Hosting of data and software applications on a network. The data stored is accessible to users through the web in a centralized location

Sales Training — Training focused on developing an employee's skills and techniques related to creating sales opportunities and closing deals for a company. The goal of sales training is to prepare a salesperson to effectively influence prospects' buying decisions

Scaffolding — Scaffolding is the collection of resources given to online learners to help them achieve their goals. That can include praise, dividing a task into manageable steps or offering tips to help them overcome an obstacle. As the online learner progresses, resources are slowly removed. The goal is to provide a learner with the guidance they need to become confident and empowered. The result is that they are able to participate in self-guided learning activities without assistance

Scalability — (1) Scalability refers to the extent to which an LMS can expand to handle a growing number of courses, concurrent users, and request response times. It is an important requirement for organizations that intend to grow or have unpredictable usage patterns. Most companies need an LMS that is flexible enough to adjust as numbers of admins and learners rise and fall. Most cloud-based learning management systems are flexible enough to adapt to agile environments.
(2) The degree to which a computer application or component can be expanded in size, volume, or number of users served and continue to function properly

Scalable LMS — An LMS that allows increasing the number of seats on demand

Scale — Ordered set of values, continuous or discrete, or a set of categories to which the attribute is mapped

Scenario-Based Learning — A type of learning in which a learner becomes a part of the story and achieves different outcomes depending on certain decisions

Scenario-Based Training — A Scenario is a framework for exercises, where the learning experience is hung around a realistic situation or story. It presents an exercise where the student is invited to imagine a situation and is sometimes called immersive learning. Read our post on creating scenario-based training with e-learning to learn more. In learning scenarios are often referred to as instructional scenarios

SCO (Shareable Content Object) — SCO allows the elements of the SCORM package that can be reused across a range of tools and platforms. When all of the elements of the package are SCORM compliant, the content should be understood by all compatible learning platforms and tools

SCORM (Shareable Content Object Reference Model) — (1) Perhaps the most ubiquitous set of standards, SCORM was developed by Advanced Distributed Learning (ADL) and applied when developing LMS content. SCORM defines how online learning content speaks to, and tracks results back to, an LMS. The acronym indicates that SCORM is interoperable: a piece of content that is easy to reuse, share and repurpose across e-learning tools and platforms. The Sharable Content Object part of the term refers to the units of online learning material the learning management system (LMS) intends to impart to learners. In essence, the "SCOs" are the building blocks of digital instruction.

(2) A collection of standards ensuring content compatibility with any SCORM compliant LMS. A SCORM compatible content is created with authoring tools and can be reused and transferred to a new LMS with no need to spend money and efforts on the content remaking.

(3) An XML-based framework used to define and access information about learning objects so they can be easily shared among different Learning Management Systems (LMSs).

(4) A set of specifications that, when applied to course content, produces small, reusable learning objects. A result of the Department of Defense's Advance Distributed Learning (ADL) initiative, SCORM-compliant courseware elements can be easily merged with other compliant elements to produce a highly modular repository of training materials.

(5) A set of technical standards used by creators of learning content and learning management systems to ensure that all e-learning content can "communicate" together. The goal is to provide the same experience to a learner across compliant learning management systems.

(6) A standard that ensures instructional content will link with and appear correctly within the LMS if both the instructional content and the LMS are SCORM compliant

SCORM Files — Sharable Content Object Reference Model is a collection of standards and specifications for web-based e-learning. It defines communications between client side content and a host system (called "the run-time environment"), which is commonly supported by a learning management system. SCORM also defines how content may be packaged into a transferable file called "Package Interchange Format"

SCORM Package — A zip file created for upload to a SCORM compliant LMS. The package is created by selecting the export to SCORM option in the authoring tool used to create course content. All the elements of the course (like text, images, video, navigation settings, and quizzes) will be used to create the SCORM package. The package understands the SCORM protocol and can be reused and imported to any LMS that supports SCORM

Screen Reader — (1) Software that lets blind users access computer screens and web pages. Screen readers read out the text, or text equivalent, on computer screens and web pages. Popular screen readers are JAWS and Window Eyes.
(2) Computer software that speaks text on the screen. Often used by individuals who are visually impaired

Script — A program or set of instructions not carried out by the computer processor but by another program. Code is interpreted at run time rather than being stored in executable format

Scripting Language — See *Script*

Scroll — To move text and images on a computer screen in a constant direction — down, up, right, or left

Seamless Technology — Technology that is easy to use, intuitive in nature, and is not the focus of the learning experience
See also *Transparent Technology*

Secure Assertion Markup Language (SAML) — Security Assertion Markup Language (SAML, pronounced SAM-EL) is an XML-based, open-standard data format for exchanging authentication and authorization data between parties — typically in the context of Single Sign On

Security — Security refers to the protection of user data and content

Segment — (1) A group of metadata elements specific to an application profile.
(2) A non-normative label used to categorize a set of metadata elements

Segment Group — Identified hierarchical set of segments and/or segment groups

Segment Specification — Description of a segment, including the specification of the position, requirements and maximum number of occurrences of the data elements constituting the segment

Self-Directed Learning — (1) A learner-initiated learning exercise in which an individual recognizes their own learning needs, develops personal goals, identifies appropriate resources and evaluates their learning outcomes. This learning is performed independently without the guidance of an instructor.
(2) A learning environment in which students are given a great deal of responsibility for and input into their own learning. The role of the teacher becomes to facilitate or guide learning rather than direct it.
(3) A process in which individuals work autonomously to identify their learning needs, develop learning goals, find appropriate resources, implement learning strategies and evaluate their learning

Self-Assessment — Process by which the learner determines his or her personal level of knowledge and skills

Self-Paced Instruction — Self-paced instruction allows you to determine your schedule
See also *Instructor-Led Classes*

Self-Paced Learning — (1) A type of asynchronous instruction, self-paced learning allows learners to control the pace and timing of their progress through course materials.
(2) When a learner is able to consume educational content at a rate which suits them, as facilitated by instructional design that allows the learner to control the rate of content delivery.
(3) Self-paced learning refers to the type of instruction that allows a person to control the flow of the courseware. It implies the learning environment is asynchronous.
(4) A type of learning directed by a student, not an instructor. A student determines the amount of time to study as well as a comfortable place to access the courses from.
(5) If learners are able to access and use education and training materials at a time that suits their schedules and preferences, this is known as self-placed learning. Without the traditional classroom timetable, learning is open to those with other commitments, such as paid employment or childcare responsibilities.
(6) Offering in which the learner determines the pace and timing of content delivery

Self-Regulation — A primary component of self-guided e-learning, self-regulation involves thinking and acting without relying on the opinions of others. It usually requires determination, focus, and self-control, as the learner must overcome challenges and apply the knowledge they have gained in order to achieve their objectives

Semantic Analysis — In linguistics, is the process of relating syntactic structures, from the levels of phrases, clauses, sentences and paragraphs to the level of the writing as a whole, to their language-independent meanings

Semester — A "semester" system (from the Latin meaning "six-monthly") divides the academic year into two terms, which are usually 14–20 weeks each. Some schools follow a trimester (three terms a year) or even a quadmester (four terms a year) schedule
See also *Academic Term*

Sentiment Analysis — Refers to the use of natural language processing, text analysis and computational linguistics to identify and extract subjective information in source materials

Sentinel Value — Element of a value space that is not subject to a datatype's properties and characterizing operations

Service — (1) Intangible entity that is the result of at least one activity performed at the interface between the supplier and customer.
(2) Generally consists of the following three elements: use of tangible products, application of knowledge and skill, and human labour or activity

Service Organization — Institution or company that provides an intangible product that is the result of at least one activity performed at the interface between the supplier and customer

Service Provider (SP) — In a Single Sign On environment, the SP is the service that talks to an IdP in order to get user information. Can be used in the context of SAML, e.g. "Your Active Directory system will act as the SAML IdP, whereas Curatr will be the SAML SP"

Session — (1) Academic Term.
(2) Period of time during which a user of a computer can communicate with an interactive system, usually equal to elapsed time between logon and logoff. (IEEE Standard Dictionary of Electrical and Electronics Terms)

Simple Data Element — Data element containing a single data element value

Simple Data Element Specification — Set of attributes characterizing a simple data element

Simple Metadata Element — Metadata element that is a simple data element

Simple Term — Term containing only one root

Simulation — (1) A highly interactive application that allows learners to model or role-play a scenario. Simulations are designed to allow learners to practice skills in a risk-free environment.
(2) In e-learning a simulation is an instructional scenario where the learner is invited to interact with a facsimile of a real world object to help achieve learning objectives (intake of breath). The target object can be diverse as a computer system, a complex device such as piece of machinery or a human body. A key goal of the simulation is to make

the user interactions as realistic as possible given the limitations of the device the e-learning will be running on
See also *Systems Simulations*

Single Sign On (SSO) — An authentication service that allows users to sign into multiple platforms using a single set of credentials

Single-to-Multiple Term Equivalence — Relation among terms where the source language cannot be matched by an exactly equivalent term in the target language, but the concept to which the source language term refers can be expressed by a combination of two or more existing preferred terms in the target language

Situated Learning — Learning that occurs in a classroom situation with specific physical and social contexts. Knowledge is facilitated by learners interacting with the setting

Skill — Physical, usually involving motor tasks

Skill Gap Analysis — Compares a person's skills to the skills required for the job to which they have been, or will be, assigned. A simple skill gap analysis consists of a list of skills required along with a rating of the employee's level for each skill. Ratings below a predetermined level identify a skill gap

Skills Inventory — A list of skills or competencies that an individual possess, usually created by self-evaluation

Skype — A video, voice and instant messaging software application to communicate with people over the internet

SLA (Service Level Agreement) — An agreement between a service provider and its customers that defines obligatory performance standards and which services will be provided during the working relationship. It should include expectations about the implementation, hosting, performance, maintenance, and support of an LMS. An SLA must also document the consequences of not meeting expectations

SLIP (Serial Line Internet Protocol) — A means of allowing a user to connect to the Internet directly over a high-speed modem. SLIP is older and used less frequently than PPP
See also *Point-to-Point Protocol*

Slow Scan Converter — Transmitter or receiver of still video over narrowband channels. In real time, camera subjects must remain still for highest resolution

Smallest Permitted Maximum (SPM) — A declaration regarding the upper limit of the size of a data element value, which has a variable size. Typical data elements whose specifications define SPMs are character strings, records, arrays, bags, sets, and the kind

Small-Group Evaluation — The second stage of formative evaluation, referring to the use of a small number of tryout students who study an instructional

program without intervention from the designer and are tested to assess the effectiveness of the instruction

SME (Subject Matter Expert) — (1) An individual with specialist knowledge about a topic or subject area covered in a course. Instructional designers collaborate with subject matter experts to develop engaging content that's informed and accurate beyond the expertise of their own domain. In the business sector, anyone in an organization could serve as an SME on topics specific to their role. For example, an instructional designer may interview a director of sales to develop sales training content for an online course.
(2) An individual who is recognized as having proficient knowledge about and skills in a particular topic or subject area

SOAP (Simple Object Access Protocol — XML-based messaging protocol for exchanging information among computers

Social Learning — (1) According to Albert Bandura's social learning theory, the process of learning is affected by the environment we learn in, and interactions we have. We learn by observing and imitating the behavior of others. In e-learning, social learning can occur in discussion forums within LMSs, chats on various platforms (Curatr), live virtual sessions or even on social media (Facebook). Social learning is the 20% in the 70:20:10 model.
(2) A learning concept recognizing that undertaking training/ educational courses in a collaborative forum in which ideas can be discussed and concepts freely explored contributes to much higher engagement and retention than more traditional teacher/learner environments. Information associated with learning such as courses, certificates and grades is displayed on students' social profiles evoking the effect of competition, striving for improving knowledge and skills not to lag behind the peers.
(3) A cognitive process that occurs through social interactions with the goal of making sense of new information and ideas. It is based on the ideas of Social Learning Theory, which emphasizes the significance of adopting new behaviors through observing and imitating others.
(4) Learning with and from others. This can happen through direct and indirect contact. Direct contact is the in-person interaction between learners in a training room setting, or an informal on-the-job setting. Indirect contact is what we do on social media like LinkedIn, Twitter, online course discussion boards, etc.

Social Media Learning — Refers to the acquisition of information and skills through social technologies that allow people to collaborate, converse, provide input, create content and share it. Examples of social media learning can occur through online social networking platforms, blogs and microblogs (like Twitter), online talk radio and wikis

Soft Skills — Business skills such as communication and presentation, leadership and management, human resources, sales and marketing, professional development, project and time management, customer service, team building, administration, accounting and finance, purchasing, and personal development

Software — A set of instructions that tell a computer what to do; a program

Solution — Subcategory of products containing software, hardware and processed materials developed or used for learning, education and training purposes

Solutions Architect — Usually sitting within the solutions development team, a solutions architect is often responsible for the design of one or more applications or services within an organization. They help provide strategic direction in solving technical problems while working closely with clients and customers to ensure their specific product needs are met

Spaced Learning — A learning method that aims to maximize retention, in which condensed "bite size" content is repeatedly delivered to learners over a period of time. Intervals are left between the delivery of learning content, the size of which can be adjusted depending on the audience, content and objectives. Content may be presented in different media formats each time, or in the same format

Spam —

Specification — A plan or protocol agreed between a number of bodies or organizations. In e-learning, a specification usually describes an established approach to the development of content or software. Once a specification has been recognized by an official body, it becomes a standard, like AICC, SCORM or xAPI (Tin Can)

SPOC (Small Private Online Courses) —

Sponsor/Client — Person paying for the project and who has requested that the project be undertaken

SQL (Structured Query Language) — Language for accessing information in a database and updating entries

SSL (Secure Socket Layer) — Secure Socket Layer is the standard in security technology for the encryption of links between a web server and a browser. All data passed between the web server and browsers remain private and secure

SSO (Single Sign-On) — A single set of credentials that allows users to access multiple applications in your organization while only needing to log in once. When SSO is implemented, users do not need to login to access applications, like your LMS, separately

Stakeholder — A person with a vested interest in the successful completion of a project. Stakeholders in e-learning often include the developer, the facilitator, the learners, the learners' managers, customers, and so forth

Stand-Alone Data Element — Simple data element that shall not be comprised in any composite data element

Stand-Alone MLR Data Element — MLR data element that is a stand-alone data element

Standard — (1) Once an e-learning specification has been recognized by a governing body like IEEE or ISO it becomes a standard. Popular e-learning content standards include SCORM, xAPI, and AICC.
(2) A standard is a custom or norm that is required to be met by all parties

State API — Part of the wider xAPI specification, State API allows learning activities without their own database to store some basic bookmarking data or settings

Statement API — Statement API is essentially the heart of "Tin Can" (xAPI) and deals with the tracking and reporting of learning activities

Story-Based Learning — A framework for exercises where the training is accompanied by an unfolding story or narrative to help guide the learner and stimulate their thought processes. In e-learning, this is highly similar to scenario-based training, but with a focus on putting the learner through a precise journey

Storyboard — (1) A key part of the process of developing e-learning courseware, storyboards are simple and effective for course builders. Originated in cartoon animation as illustrators would roughly sketch frames for approval by stakeholders before drafting final content. Storyboards are usually mapped with tools like PowerPoint, Word, and Visio
(2) A collection of frames created by a developer that detail the sequence of scenes that will be represented to the user; a visual script.
(3) The process of illustrating an e-learning or training course through text and mockups. Storyboards typically include screens that outline placeholders for learning elements that are to be developed. They are helpful in visually communicating ideas and concepts, as well as helping teams get organized and aligned on the development plans for their e-learning or training programs

Storyboarding — A design technique for showing as individual scenes the proposed sequence of visual and audio elements in a production using some form of optically projected media, e.g., television, slid/tape, interactive video

Storytelling — A process of presenting data by means of entertaining and memorable stories

Streaming Media — Audio and/or visual content that is played as it is being downloaded. Thus, an Internet user does not have to wait for a video clip to download fully as it allows watching the clip as the footage downloads. Requires a media player program

Structured Authoring — In a structured authoring environment, users must follow a predetermined set of rules for how to structure their content. XML authoring is structured authoring

Structured Query Language (SQL) — A standardized language used in database management. Various versions exist: MSSQL, MySQL, SQLite

Student-Centered Approach to e-Learning — A way of teaching in which a student is put at the very center of the learning process. A teacher adjusts a curriculum, materials delivery and class activities to the student's skills and the level of knowledge. The student-centered classroom allows students not to just pass, but to learn in a deep and fundamentally appropriate way

Styles — Style defines the presentational aspects of a print or Web document. It includes the fonts, sizes, colors, margins, and more

Sub-Competency — Competency definition (REF) that is nested within a competency framework (REF) as a child or a parental competency definition

Submitting Organization — Organization or unit within an organization that submitted the application for a registered item

Subordinate Concept, Narrower Concept — Concept which is either a specific concept or a partitive concept

Success Coach — Upon acceptance into a program and beginning his or her first course, the student will be assigned a specific success coach that will be their main resource throughout their time in the program. The success coach assists with course planning, scheduling, etc., until the student graduates

Successive Approximation Model (SAM) — (1) Introduced as an alternative to ADDIE, the more agile instructional design approach of SAM consists of repeated small steps that are aimed to solve common pain points, such as scheduling and budgeting.

Although like ADDIE it emphasizes collaboration, efficiency and repetition, SAM is a more cyclical process which can be scaled and extended to suit varying needs. This method offers benefits such as greater visibility to the project team and a faster time to launch. Using a cyclical process, SAM encompasses two models:

SAM1: The more basic process that is ideal for smaller teams or projects. It includes three iterations using the common instructional design steps of Analyze, Design and Development.

SAM2: For more complex projects, this process includes eight iterative steps that are spread across three phases: Preparation, Iterative Design and Iterative Development

Summative Evaluation — (1) Usually carried out at the end of the ADDIE process, Summative Evaluation assesses the value of a learning program at the end of the development cycle. The aim is to determine whether a training program is effective as is, or needs to be amended. In contrast to formative evaluation, summative evaluation focuses on the outcomes of a learning program.
(2) The process of collecting data following implementation (of at least one training class/event) in order to determine how well it satisfies the instructional goals

Superordinate Concept, Broader Concept — Concept which is either a generic concept or a comprehensive concept

Synchronous Learning — (1) Instructor-led learning in a virtual classroom setting. During this kind of event, learners log on at the same time regardless of geographical location and an instructor guides the class.
In this virtual classroom setting, the instructor maintains control of the class, with the ability to "call on" participants. In most platforms, students and teachers can use a whiteboard to see work in progress and share knowledge. Interaction may also occur via audio- or videoconferencing, Internet telephony, or two-way live broadcasts.
(2) Whether in a face-to-face classroom environment or online in a live lecture or webinar, synchronous learning involves instructors and learners communicating at the same time. When people need to conduct education or training as a group at the same time, but being in the same place is not possible, it can be facilitated by virtual classroom software (Skype or webinar, for instance). Even in asynchronous courses, instructors may include synchronous components, such as weekly meetings

Synergy — The dynamic energetic atmosphere created in an online class when participants interact and productively communicate with each other

System — System describes interdependence, dynamic, synergistic and responsive to the environment

System Architecture —

System Requirements — The technological conditions required to run a software application. Includes the operating system, programming language, database, hardware configuration, bandwidth, processing power, and so forth

System Simulation — True to life representation of an organization's in-house software or systems, allowing staff to practice using them in a safe environment. Learning of this type has proven to be highly effective with 90% retention rates as opposed to 30% for oral presentation. Read our

blog post on effective system simulations in e-learning to learn more. Often the simulations are embedded in realistic scenarios and/or with plausible narratives

Systematic — Following procedures or rules describe systematic

T

Talent Management System (TMS) — HR focused software that facilitates four key areas of talent management: Recruitment, Performance Management, Learning and Development, and Compensation Management. It develops on traditional HR management systems with the ability to provide strategic assistance to organizations when meeting long term, human capital focused business goals.
It is commonly used by human resources (HR) professionals to hire and retain talent

TBT (Technology-Based Training) — The delivery of content via Internet, LAN or WAN (intranet or extranet), satellite broadcast, audio or video tape, interactive TV, or CD-ROM. Includes CBT and WBT

Teacher — An entity that teaches

Technical Architect — Persons generally responsible for defining the overall structure of a program or system, identifying the technical needs of their organization and those of their clients, and completing large-scale projects. They are also responsible for testing systems to satisfy quality standards

Telecommunication — The science of information transport using wire, radio, optical, or electromagnetic channels to transmit and receive signals for voice or data communications

Telecommuting — Working at home but connecting to one's office by way of a computer network

Teleconferencing — Two-way electronic communication between two or more groups in separate locations via audio, video, and/or computer systems

Terminal —

Terminography — Part of terminology work concerned with the recording and presentation of terminological data

Terminological Data — Data related to concepts or their designations

Terminological Dictionary — Collection of terminological entries presenting information related to concepts or designations from one or more specific subject fields

Terminological Entry — Part of a terminological data collection which contains the terminological data related to one concept

Terminological Phrase — Word combination containing at least one term and a number of other lexical items, the choice of which being restricted by the term in question

Terminologization — Process by which a general language word or expression is transformed into a term

Terminology Planning — Activities aimed at developing, improving, implementing and disseminating the terminology of a subject field

Terminology Processing — Part of terminography concerned with computer aspects of database creation, maintenance and extraction of terminology from texts

Terminology Work — Work concerned with the systematic collection, description, processing and presentation of concepts and their designations

Test Criteria — The component of a learning objective that describes the quality or standard of performance that will be considered acceptable

Text — (1) The wording of anything that can be expressed in written form, using a specified character set. The use of markup languages derived from this specified character set is admissible
(2) Reinterpretable representation of information in a formalized manner suitable for communication, interpretation, or processing
(3) Data in the form of characters, symbols, words, phrases, paragraphs, sentences, tables, or other character arrangements, intended to convey a meaning and whose interpretation is essentially based on the reader's knowledge of some natural language or artificial language

Text-Based Training — Delivery of content through books and manuals

Thematic Arrangement (Thematic Order) — Macrostructure in which the terminological entries are arranged in thematic sections

Theory-Based Learning — Theory-based learning is learning on the basis of systematic knowledge development by others. Using scientific knowledge is the foremost example of theory-based learning
See also *Applied Learning*

Thin Client — (1) A network computer without hard- or CD drives that accesses programs and data from a server instead of storing them locally.
(2) Software that performs the majority of its operations on a server rather than the local computer, thus requiring less memory and fewer plug-ins

Thread — A series of messages on a particular topic posted in a discussion forum

Tin Can API (Experience API) — (1) Commonly used to refer to the (experience) xAPI.
The successor to SCORM (aka xAPI). Essentially does the same job as SCORM, but addresses many problems and weaknesses of the SCORM standard, which was designed not long after 2000 when the web was in its infancy. It also introduces a host of new functionalities and complexity

with that. Therefore, it is debatable whether it will really replace SCORM in the long run. One big advantage is that it supports content being played outside of the LMS. For example, on an app on a phone with an intermittent internet connection.
(2) The next generation of SCORM e-learning standard allowing tracking learning activities happening outside the LMS (like attending conferences, writing blogs, social communication etc.)
(3) An evolution of SCORM, Tin Can allows the "communication" between different learning systems to update a learner's progress with training

tLearning — tLearning stands for tablet learning, and it is a specific mode of mLearning in which learning content is accessed through tablets, such as iPads and Androids

Touch Screen — Input device used to simplify user input and response. The user touches the screen to control the output, working with menus or multiple-choice decision points. Allows some simulation of hands-on training; for example, pointing to parts on a machine

Trainer (Instructor or Facilitator) — (1) This is the person who will be presenting the portions of the training that require lecture, facilitation, or other types of live coordination.
(2) An entity that supports, facilitates or mediates training

Training — Development of skills and/or understanding through procedurally defined activities focused on a specific application

Training and Development — Company activities targeted at improving employees' job performance. Training and development takes a production-centered and focuses on developing employees' technical skills, whereas learning and development also takes a person-centered and problem-solving approach to human resource development (HRD).

Training Management System (TMS) — Software used to organize and deliver training content and manage schedules and records. While a learning management system (LMS) focuses mostly on e-learning management, a training management system focuses chiefly on instructor-led training (ILT)

Training Needs Analysis — The process of evaluating training to identify gaps between employee needs and the training offered. A training needs analysis is typically the first step in the training process. It allows trainers to pinpoint problems and determine how the training will successfully solve those problems

Training Specialist — Also known as training and development specialists, training specialists help plan, develop and deliver training programs. These professionals assess an organization's needs and produce programs that seek to improve employees' skills and knowledge

Transparent Technology — Technology that is easy to use, intuitive in nature, and not the focus of the learning experience
See also *Seamless Technology*

Transponder — Satellite transmitter and receiver that receives and amplifies a signal prior to retransmission to an earth station

Tryout — The testing of a prototype or some subset of its elements, under actual or simulated conditions that are representative of those in the targeted system

Tuition Assistance — Employer tuition assistance includes a variety of employer-sponsored programs to help employees and their dependents pay for college. In many cases, the funds received from these programs will be excluded from income and are tax-free

Tutor — A person or computer system that helps a learner

U

UI (User Interface) — The means by which the user and a computer system interact. In particular, it refers to the use of input devices and software

Unicasting — Communication between a sender and a single receiver over a network. For example, an email message sent from one person to one person

Unique User Identifier (UUID) — An identifier unique to a user in a system. Commonly will take the GUID format

Uplink — The communication link from a transmitting earth station to a satellite

Upload — To send a file from one computer or server to another

Urchin Tracking Module (UTM) — A UTM code is a simple code that you can attach to a custom URL in order to track a source, medium, and campaign name. This enables Google Analytics to tell you where searchers came from as well as which campaign directed them to you

URL (Uniform Resource Locator) — (1) Informally known as a web address. If you are using a web-based LMS, you will usually be given a sub-domain such as companyname.lms.com.
(2) The address of a homepage on the World Wide Web. For example, http://www.e-kazan.info

Usability — The measure of how effectively, efficiently, and easily a person can navigate an interface, find information on it, and achieve his or her goals

User Acceptance Testing (UAT) — The last phase of the software testing process. During UAT, actual software users test the software to make sure it can handle required tasks in real-world scenarios, according to specifications

User ID — It enables the network operating system to retrieve your files so that you can access them. It also enables levels of access to be set for different users. User IDs do not need to be kept secure. It is your password which makes your account secure

User Profiles — A visual display of personal data associated with a specific user, or a customized desktop environment

User Role — A predefined role (often by the system administrator) that includes tasks that allow users to view basic information about the report server

UX (User Experience) — Refers to an individual's reaction to the use of a particular product, system or service. It generally describes the emotional reaction to the use of the system mainly in light of its ease of use or the satisfaction it provides

V

Validation — Confirmation by examination and by resulting evidence that particular requirements for a specific intended use are fulfilled

Validity — The degree to which a test measures what it was designed to measure

Value-Added Services — In the context of the e-learning industry, value-added services include custom training needs assessment and skill-gap analysis, curriculum design and development, pre- and post-training mentoring and support, training effectiveness analysis, reporting and tracking tools, advisor services and implementation consulting, hosting and management of Internet- or intranet-based learning systems, integration of enterprise training delivery systems, and other services

Verification — Confirmation by examination and by resulting evidence that specified requirements have been fulfilled

Version — Unique version identifier of an administered item

Video Conferencing (Videoconferencing) — (1) The use of video technology (both hardware and software) to create a virtual meeting between two or more people in different physical locations. Participants can see and hear each other through this technology.
(2) Using video and audio signals to link participants at different and remote location

Video Learning — The delivery of learning content via video. Considered an effective method, e-learning videos are designed to be short, engaging and thought provoking in order to maintain the attention of the audience

Virtual Classroom — (1) A digital classroom learning environment that takes place over the Internet rather than in a physical classroom. It is implemented through software that allows an instructor and students to interact.

(2) Where a live education or training environment is created online and accessed via digital devices, this is known as a virtual classroom. Learners and instructors need to use the same virtual classroom software to communicate, and this might be downloaded as a desktop application or mobile app, or accessed online with cloud-based software.
(3) An online classroom where learning and collaboration happen. There is a chat, whiteboard, video and audio capabilities enabled.
(4) The online learning space where students and instructors interact.
(5) A digital classroom learning environment that takes place over the Internet rather than in a physical training room. It is implemented through software that allows an instructor and students to interact

Virtual Community — See *Online Community*

Virtual Learning Environment (VLE) — (1) A web based platform to organize resources, courses and users, often within an educational institution.
(2) A software system designed to facilitate teachers in the management of educational courses for their students, especially by helping teachers and learners with course administration.
(3) A web-based interface through which learning materials are delivered to end users
See also *Learning Experience*

Virtual Network Computing (VNC) — A graphical desktop sharing system that uses the Remote Frame Buffer protocol (RFB) to remotely control another computer

Virtual Reality (VR) — (1) Perception of being physically present in a non-physical world. It is created by surrounding the user of the VR system within an environment, sound, and other stimuli. It provides an engrossing sense of immersion, imagination, and interaction to increase engagement. VR is becoming more prevalent in e-learning as instructional designers work towards making more engaging content for learners.
(2) The computer generated construction of a 3D environment that can be interacted with by a user, often with a headset and/or gloves fitted with sensors to allow for the realistic interaction and manipulation of objects. Virtual reality has application in online compliance training as it can safely simulate dangerous scenarios

Virtual Residency — In some programs, students are not required to travel to campus to complete their residency requirement, but instead interact online at specific times with classmates and professors using webcams and audio. Students may have up to four such virtual residencies throughout the program

Vocabulary — Terminological dictionary which contains designations and definitions from one or more specific subject fields

Vod (Video on Demand) — See *CoD*

Voice Thread — An interactive collaboration and sharing tool that enables users to add images, documents, and videos, and to which other users can add voice, text, audio file, or video comments. Used in many courses taught online to interact with faculty, students, and peers

VoIP (Voice over Internet Protocol) — A set of rules that allow for the use of the Internet to make voice calls or video calls over the internet. This technology is of particular importance to e-learning due to the fact that this is the basis for webinar technology

Volatility, Uncertainty, Complexity and Ambiguity (VUCA) — Refer to unfavourable business environments that sometimes cannot be avoided. For instance, a business that operates globally is subjected to vastly varied regulations, values, cultures, currencies and markets; which can be considered a complex environment

Vortal — Vertical portal; a portal that targets a niche audience

VPN (Virtual Private Network) — A private network configured inside a public network. Offers the security of private networks with the economies of scale and built-in management capabilities of public networks

W

W3C — World Wide Web Consortium, an organization developing interoperable specifications, software, and tools for the WWW

WAN (Wide-Area Network) — A computer network that spans a relatively large area. Usually made up of two or more local area networks. The Internet is a WAN

WAP (Wireless Application Protocol) — Specification that allows Internet content to be read by wireless devices

Wearables — Wearables refer to hardware that can be worn and interacted with on the body. Examples include smart watches, fitness trackers, pedometers and smart glasses

Web 2.0 — A term often applied to a perceived ongoing transition of the World Wide Web from a collection of websites to a full-fledged computing platform serving web applications to end users. It refers to a supposed second-generation of Internet-based services — such as social networking sites, wikis, communication tools, and folksonomies — that emphasize online collaboration and sharing among users

Web-Based Training (WBT) — (1) Delivery of learning content via a web-based application or internalized intranet. Content may be hosted within a web-based application (such as an LMS), or retrieved from external sources to allow a diverse and up-to-the-minute consumption of learning content.

(2) Delivery of educational content via a Web browser over the public Internet, a private intranet, or an extranet. Web-based training often provides links to other learning resources such as references, email, bulletin boards, and discussion groups. WBT also may include a facilitator who can provide course guidelines, manage discussion boards, deliver lectures, and so forth. When used with a facilitator, WBT offers some advantages of instructor-led training while also retaining the advantages of computer-based training.
(3) WBT refers to all types of digital instruction in which the learning material is presented via the Internet.
(4) Instructional or training technique, which utilizes the Web environment. Also known as e-Learning

Web Page — A web document that is suitable for the World Wide Web and the web browser. A web browser displays a web page on a monitor or mobile device

Web Resource — Information resource that "lives on the World Wide Web"

Web Stack — Software stacks in Web development environments. The stack of software, mainly comprised of open source software, will contain an operating system, Web server, database server, and programming language. One of the most well-known web stacks is LAMP

Web-Based Learning — On-line learning that uses web technologies
See *Web-Based Training*

Webinar — (1) An online workshop, in which an individual or multiple people "host" a session, which is then broadcast to participants. The host will "share" their screen to all participants, enabling them to explore subjects and dictate learning visually, and in real time. Webinars are often used for software demonstrations and are a common communications tool in the e-learning industry.
Usually the webinar has an audio component that the facilitator controls and functionality that allows participants to chat by entering text, answering polls, raising their hands and asking questions

Website — A set of files stored on the World Wide Web and viewed with a browser such as Internet Explorer or Netscape Navigator. A Website may consist of one or more Webpages

Weekly Format — The course is organized week by week, with a clear start date and a finish date. Each week consists of activities. Some of them, like journals, may have "open windows" of, say, two weeks after which they become unavailable

Whiteboard — (1) A touch-friendly online whiteboard app that lets you use your computer, tablet or smartphone to easily draw sketches, collaborate with others and share them with the world

(2) An electronic version of a dry-erase board that enables learners in a virtual classroom to view what an instructor, presenter, or fellow learner writes or draws. Also called a smartboard or electronic whiteboard

White-Labelling — With white-labeling, you have the ability to remove learnupon.com from your sub-domain. You also remove all traces of your LMSs branding and set up a personalized reply-to from email address. For some companies, simply branding an LMS is not enough. Those companies use the white-label feature to remove all indications that a platform was not developed in-house

Wiki — (1) A wiki is a collection of web pages designed to enable anyone who accesses it to contribute or modify content, using a simplified markup language. The goal is to create a way for many people to contribute and edit information so that knowledge is built and shared widely in a very short amount of time.

(2) A type of content management system, a wiki is usually a web application which allows people to add, modify, or delete content in a collaboration with others.

(3) A collaborative content database that displays information through web pages. Unlike average websites, wikis are different because of their collaborative component. With a wiki, content can be edited by any of its users. Businesses often use wikis to document company information and employee resources, as well as give workers the opportunity to collaborate and contribute to the content

WML (Wireless Markup Language) — XML-based language that allows a reduced version of Webpages text to be displayed on cellular phones and personal digital assistants

Workflow — Describes the sequence of tasks and the approvals needed to drive content through a production lifecycle

Workplace Training — Learning that takes place while employees are on the clock. It usually includes a combination of off-the-job and on-the-job assessments that are relevant to the training provided. Also known as trade, industry or employee training

Workstation — A device, often a microcomputer that serves as an interface between a user and a file server or host computer. A computer or a computer terminal

WWW (World Wide Web) — A graphical hypertext-based Internet tool that provides access to homepages created by individuals, businesses, and other organizations

X

xAPI (Experience Application Programming Interface, formerly Tin Can) — (1) Often seen as the next evolution of SCORM, xAPI redefined some of the fundamental practices of tracking learning experiences. The major difference between xAPI and SCORM is the type of learning each can track. While SCORM is limited to recording online learning, xAPI can track almost any activity. xAPI delivers a far more detailed view of learner progress, both online and offline. The kinds of learning xAPI tracks include reading a webpage, attending an event, borrowing a library book, playing a game, blended learning, and team-based learning.
(2) A specification for learning technologies that makes it possible to collect data about the wide range of learning experiences a person has, both online and offline.
(3) Develops on existing API functions by recording data in a consistent format using a universally applicable vocabulary.
Learning in both online and offline environments can be recognized and recorded using xAPI, which also allows for vastly different systems to communicate this learning data securely and efficiently.
The xAPI vocabulary format consists of an "Actor > Verb > Object" structure. In simple terms, this may look like John Smith > Completed > Learning Activity.

XML (Extensible Markup Language) — (1) This is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable. It allows you to define your own tags for the transfer of data between two computer systems.
(2) The next-generation Webpage coding language that allows site designers to program their own markup commands, which can then be used as if they were standard HTML command

Z

ZPD (Zone of Proximal Development) — Developed by Soviet psychologist Lev Vygotsky, the ZPD theory examines what a learner can achieve with and without the help of an instructor

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Карпенко, О.М. Телеобучение: монография / О.М. Карпенко. Москва: Издательство СГУ, 2008. 799 с. URL: http://biblioclub.ru/index.php?page=book&id=275176 (Дата обращения 31.05.2019)	*ИКТ в образовании,*
Киселев, Г.М. Информационные технологии в педагогическом образовании: учебник / Г.М. Киселев, Р.В. Бочкова. 2-е изд., перераб. и доп. Москва: Издательско-торговая корпорация «Дашков и К°», 2016. 304 с. URL: http://biblioclub.ru/index.php?page=book&id=452839 (Дата обращения 31.05.2019)	*ИТ в образовании, информационные технологии обучения*
Киян, А.В. Опыт управления качеством педагогических технологий дистанционного обучения: монография / А.В. Киян; НОУ ВПО Московский институт энергобезопасности и энергосбережения, Кафедра гуманитарных и социально-экономических дисциплин. Москва: МИЭЭ, 2010. 92 с. URL: http://biblioclub.ru/index.php?page=book&id=336033 (Дата обращения 31.05.2019)	*Дистанционное обучение, Педагогические технологии*
Киян, А.В. Педагогические технологии дистанционного обучения: монография / А.В. Киян; НОУ ВПО Московский институт энергобезопасности и энергосбережения, Кафедра гуманитарных и социально-экономических дисциплин. Москва: МИЭЭ, 2011. 204 с. URL: http://biblioclub.ru/index.php?page=book&id=336034 (Дата обращения 31.05.2019)	*Дистанционное обучение, Педагогические технологии*
Козлова, Т.В. Студент в среде e-Learning: учебно-методический комплекс / Т.В. Козлова, К.А. Саркисов, А.Н. Козлов, Д.В. Волков. Москва: Евразийский открытый институт, 2011. 116 с. URL: http://biblioclub.ru/index.php?page=book&id=93228 (Дата обращения 31.05.2019)	*Электронное обучение*

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Колбышева, С.И. Организация учебной деятельности слушателей дистанционной формы обучения: методические рекомендации / С.И. Колбышева. Минск: РИПО, 2016. 42 с. URL: http://biblioclub.ru/index.php?page=book&id=485935 (Дата обращения 31.05.2019)	*Дистанционное обучение*
Колкова, Н.И. Технологии создания электронных информационных ресурсов: Учебное пособие / Колкова Н.И., Скипор И.Л. М.: Литера, 2012.294 с.	*Электронные образовательные ресурсы*
Колокольникова, А.И. Базовый инструментарий Moodle для развития системы поддержки обучения / А.И. Колокольникова. М.; Берлин: Директ-Медиа, 2016. 291 с. URL: http://biblioclub.ru/index.php?page=book&id=439690 (Дата обращения 31.05.2019)	*Moodle*
Кононова, О.В. Проектирование информационно-обучающей веб-среды с элементами геймификации. Вопросы организации текстового и игрового контента / О.В. Кононова. СПб.: Университет ИТМО, 2017. 73 с.	*Информационно-образовательная среда, геймификация, организация контента*
Коротенков Ю.Г. Информационная образовательная среда основной школы / Ю.Г. Коротенков. Академия АйТи, без даты, 152 с. URL: http://eor.it.ru/eor/file.php/1/metod_material/Uchebnoe_posobie_IOS.pdf (Дата обращения 31.05.2019)	*Электронное обучение, дистанционные образовательные технологии, информационно-образовательная среда*
Красильникова, В. Использование информационных и коммуникационных технологий в образовании: учебное пособие / В. Красильникова; Министерство образования и науки Российской Федерации, ФГБОУ ВПО «Оренбургский государственный университет». 2-е изд. перераб. и дополн. Оренбург: ОГУ, 2012. 292 с. URL: http://biblioclub.ru/index.php?page=book&id=259225 (04.06.2019).	*ИКТ в образовании*
Красильникова, В.А. Использование информационных и коммуникационных технологий в образовании: учебное пособие / В.А. Красильникова. М.: Директ-Медиа, 2013. 292 с. URL: http://biblioclub.ru/index.php?page=book&id=209293 (Дата обращения 31.05.2019)	*ИКТ в образовании*

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Кулагина, И.В. Психодиагностика в организации: практикум / И. В. Кулагина. Тольятти: Изд-во ТГУ, 2017. 172 с.	*Психодиагностика*
Курочкин, В.Н. Теоретические аспекты сервисной деятельности: информационные и коммуникационные технологии, образовательные услуги: монография / В.Н. Курочкин, А.В. Щербина, Л.П. Грищенко, под ред. д.э.н. проф. А.Ю. Архипова. Ростов-на-Дону: Дониздат, 2015. 196 с.	*Информационные и телекоммуникационные технологии, Образовательные услуги*
Л	
Лисицына, Л.С. Педагогический дизайн электронных курсов / Л.С. Лисицына. СПб: Университет ИТМО, 2018. 67 с.	*Педагогический дизайн, Электронные курсы*
Лобачев, С. Основы разработки электронных образовательных ресурсов: учебный курс / С. Лобачев. 2-е изд., исправ. М.: Национальный Открытый Университет «ИНТУИТ», 2016. 189 с. URL: http://biblioclub.ru/index.php?page=book&id=429160 (Дата обращения 31.05.2019)	*Электронные образовательные ресурсы*
М	
Матвеев, Е. Быстро и легко. Сетевые игры: в локальной сети, через модем, через интернет/ Е. Матвеев, А. Ремин. Учебное пособ. М.: ЛУЧШИЕ КНИГИ, 2003. 400 с.	*Сетевые игры*
Мещерякова, И.Н. Возможности электронного обучения в развитии познавательной активности студентов: учебно-методическое пособие / И.Н. Мещерякова. М.: Издательство «Флинта», 2014. 63 с. URL: http://biblioclub.ru/index.php?page=book&id=279813 (Дата обращения 31.05.2019)	*Электронное обучение*
Минин, А.Я. Информационные технологии в образовании: учебное пособие / А.Я. Минин; Министерство образования и науки Российской Федерации, ФГБОУ ВПО «Московский педагогический государственный университет». Москва: МПГУ, 2016. 148 с. URL: http://biblioclub.ru/index.php?page=book&id=471000 (Дата обращения 31.05.2019)	*ИТ в образовании*

Описание	Ключевые слова
Моисеева, М.В. Интернет-обучение: технологии педагогического дизайна/ Моисеева М.В., Полат Е.С., Бухаркина М.Ю., Нежурина М.И. М.: Издательский дом «Камерон», 2004. 216 с.	*Интернет обучение, Педагогический дизайн*

Н

Нагаева, И.А. Дистанционные образовательные технологии в современном образовании: монография / И.А. Нагаева. Москва; Берлин: Директ-Медиа, 2018. 159 с. URL: http://biblioclub.ru/index.php?page=book&id=500303 (04.06.2019).	*Дистанционные образовательные технологии*
Нужнов, Е.В. Мультимедиа технологии: учебное пособие / Е.В. Нужнов; Министерство образования и науки РФ, Южный федеральный университет. 2-е изд., перераб. и доп. Таганрог: Издательство Южного федерального университета, 2016. Ч. 2. Виртуальная реальность, создание мультимедиа продуктов, применение мультимедиа технологий в профессиональной деятельности. 180 с. URL: http://biblioclub.ru/index.php?page=book&id=493255 (Дата обращения 31.05.2019)	*ИТ в образовании, Виртуальная реальность*

О

Околелов, О.П. Дидактика дистанционного образования / О.П. Околелов. Москва: Директ-Медиа, 2013. 98 с. URL: http://biblioclub.ru/index.php?page=book&id=139771 (Дата обращения 31.05.2019)	*Дистанционное образование, дидактика*
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Осетрова, Н.В. Книга и электронные средства в образовании / Осетрова Н.В., Смирнов А.И., Осин А.В. М: Издательский сервис; Логос, 2002. 144 с.	*Электронные образовательные ресурсы*

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Печников, А.Н. Электронное обучение: учебное пособие/ Печников А.Н., Аванесова Т.П., Шиков А.Н., Военная академия связи имени Маршала Советского Союза С. М. Будённого. СПб.: ВАС, 2014. 73с.	*Электронное обучение*
Подольский, В.Е. Повышение эффективности региональных образовательных компьютерных сетей с использованием элементов структурного анализа и теории сложности/ Подольский В.Е., Толстых С.С. М.: «Издательство Машиностроение-1», 2006. 176 с.	*Образовательные компьютерные сети*
Полат, Е. С. Дистанционное обучение в профильной школе: учеб. пособие для студ. высших учебных заведений / Е.С. Полат, А. Е. Петров, М. А. Татаринова и др., под ред. Е.С. Полат. М.: Издательский центр «Академия», 2009. 2008 с.	*Дистанционное обучение*
Полат, Е.С. Педагогические технологии дистанционного обучения: учеб. Пособие для студ. высш. учеб. заведений / Е. С. Полат, М. В. Моисеева, А. Е. Петров и др.; под ред. Е.С. Полат. 2-е изд., стер. М.: Издательский центр «Академия», 2008. 400 с.	*Дистанционное обучение*
Полат, Е.С. Современные педагогические и информационные технологии в системе образования: учеб. Пособие для студ. высш. учеб. заведений / Е.С. Полат, М. Ю. Бухаркина. 2-е изд., стер. М.: Издательский центр «Академия», 2008. 368 с.	*Информационные технологии в обучении*
Полат, Е.С. Современные педагогические и информационные технологии в системе образования: учеб. пособие для студ. высш. учеб. заведений / Е.С. Полат, М. Ю. Бухаркина. М.: Издательский центр «Академия», 2007. 368 с.	*Информационные технологии в обучении*
Полат, Е.С. Теория и практика дистанционного обучения: Учеб. пособие для студ. высш. учеб. заведений / Е. С. Полат, М. Ю. Бухаркина, М. В. Моисеева; Под ред. Е. С. Полат. М.: Издательский центр «Академия», 2004. 416 с.	*Дистанционное обучение*

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Попов, В. Б. Основы информационных и телекоммуникационных технологий. Мультимедиа: учеб. пособие / Попов, В. Б. М.: Финансы и статистика, 2007. 336 с.: ил.	*ИКТ в образовании*
Попов, Н.С. Методика разработки мультимедийных учебных пособий: Монография/ Попов Н.С., Мильруд Р.П., Чуксина Л.Н. Изд-во Машиностроение-1, 2002.-128 с.	*Мультимедийные учебные пособия*
Практикум дистанционного обучения / Под ред. В. Кухаренко. К.: Миллениум, 2003. 196 с.	*Дистанционное обучение*
Р	
Равал С. Децентрализованные приложения. Технология Blockchain в действии / С. Равал. СПб.: Питер, 2017. 240 с.	*Blockchain*
Роберт, И.В. Толковый словарь терминов понятийного аппарата информатизации образования/ И.В. Роберт, Т.А. Лавина. М.: ИИО РАО, 2009. 96 с	*Информатизация образования, Словарь*
Рулиене, Л.Н. Дистанционное обучение: сущность, проблемы, перспективы / Л.Н. Рулиене. Улан-Удэ: Издательство Бурятского госуниверситета, 2010. 272 с.	*Дистанционное обучение*
Руткаускьене, Д. Технологии и ресурсы электронного обучения / Руткаускьене Д., Кубилюнас Р., Гудониене Д., Цыбульскис Г., Сук А.Ф., Синельник И.В., Сидоренко А.Ю., Осина Т.Г. Харьков: Изд-во «Точка», 2011. 352 с.	*Технологии электронного обучения, Электронные образовательные ресурсы*
С	
Савельев, Д. А. Информационное право и электронное государство. Вводный курс: Учебное пособие / Савельев Д.А. СПб: НИУ ИТМО, 2012. 71 с.	*Информационное право, Персональные данные*
Сарафанов, А.В. Интерактивные технологии в дистанционном обучении: Учеб.-метод. пособие / А. В. Сарафанов, А. Г. Суковатый, И. Е. Суковатая, С. И. Почекутов, И. Н. Сушкин, К. Н. Захарьин, С. И. Трегубов, А. Н. Шниперов, Б. М. Бидус, В. А. Комаров, А. В. Казанцев, Е. В. Бобрович. Красноярск: ИПЦ КГТУ. 2006. 146 с.	*Дистанционное обучение, Интерактивные технологии*

Описание	Ключевые слова
Сергеев, А. Г. Введение в электронное обучение: монография / А. Г. Сергеев, И. Е. Жигалов, В. В. Баландина; Владим. гос ун-т имени Александра Григорьевича и Николая Григорьевича Столетовых. Владимир: Изд-во ВлГУ, 2012. 182 с.	*Электронное обучение*
Смирнов, А.В. Электронное обучение физике: исторические и терминологические аспекты: монография / А.В. Смирнов, С.А. Смирнов; Министерство образования и науки Российской Федерации, ФГБОУ ВПО «Московский педагогический государственный университет». М/: МПГУ, 2014. 108 с. URL: http://biblioclub.ru/index.php?page=book&id=275048 (Дата обращения 31.05.2019)	*Электронное обучение*
Смирнов, С.Д. Педагогика и психология высшего образования: От деятельности к личности: учеб. пособие для студ. высш. учеб. заведений / С. Д. Смирнов. 3-е изд., стер. М.: Издательский центр «Академия», 2007. 400 с.	*Высшее образование, Педагогика, Психология*
Смолянинова, О.Г. Оценивание образовательных результатов в течение всей жизни: электронный портфолио: монография / О.Г. Смолянинова; Министерство образования и науки Российской Федерации, Сибирский Федеральный университет. Красноярск: СФУ, 2016. 362 с. URL: http://biblioclub.ru/index.php?page=book&id=497693 (Дата обращения 31.05.2019)	*Электронный портфолио*
Смолянинова, О.Г. Технология электронного портфолио в образовании: российский и зарубежный опыт: монография / О.Г. Смолянинова. Красноярск: Сибирский федеральный университет, 2012. 332 с.	*Электронный портфолио*
Современные образовательные технологии: Терминологический словарь / Под ред. проф. В. К. Поспелова. М.: Финакадемия, 2009.92 с.	*Обрвзовательные технологии*
Соловов, А. В. Электронное обучение: проблематика, дидактика, технология/Соловов А.В. Самара: «Новая техника», 2006. 464 с.	*Электронное обучение*

Описание	Ключевые слова

Т

Тавгень, И.А. Дистанционное обучение: опыт, проблемы, перспективы/ И.А. Тавгень, под ред. Ю.В. Позняка. Мн.: БГУ, 2003. 227 с.	*Электронное обучение, дистанционные образовательные технологии*
Тимкин, С.Л. Вводный курс в информационно-образовательную среду открытого образования (ИОС ОО): Учебное пособие / С.Л. Тимкин. Омск: Изд-во ОмГУ, 2005. 136 с.	*Информационно-образовательная среда, Открытое образование*
Тихомиров, В.П. Виртуальная образовательная среда: предпосылки, принципы, организация / В.П. Тихомиров, В.И. Солдаткин, С.Л. Лобачев; Международная Академия Открытого Образования. М.: Издательство МЭСИ, 1999. 164 с.	*Виртуальная среда знаний, Дистанционное обучение*
Тихомиров, В.П. Виртуальная образовательная среда: предпосылки, принципы, организация / Тихомиров В.П., Солдаткин В.И., Лобачев С.Л., Международная Академия Открытого Образования. М.: Издательство МЭСИ, 1999. 164 с.	*Виртуальная образовательная среда*
Тихомирова, Е. Живое обучение: Что такое e-learning и как заставить его работать / Елена Тихомирова. М.: Альпина Паблишер, 2016. 238 с.	*Электронное обучение*
Трайнев, В. А. Интенсивные педагогические и информационные технологии. Том 2. Теория и методология учебных деловых игр/ Трайнев, В. А. Матросова, Л. Н. Трайнев, И. В. М.: Прометей, 2000, 257 с.	*Информационные технологии в обучении, Деловые игры*
Трайнев, В. А. Дистанционное обучение и его развитие (Обобщение методологии и практики использования)/ Трайнев В. А., Гуркин В. Ф., Трайнев О. В. М.: Издательско-торговая корпорация «Дашков и К°», 2006. 294 с.	*Информационные технологии в обучении, Дистанционное обучение*
Трайнев, В. А. Интенсивные педагогические и информационные технологии. Организация управления обучением. / Матросов В. Л., Трайнев В. А., Трайнев И. В. М.: Прометей, 2000, 354 с.	*Информационные технологии в обучении, Управление обучением*

Описание	Ключевые слова
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Корректор *Шамонова А.М.*
Технический редактор, компьютерная вёрстка *Александровой М.Н.*

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