

blended learning quality

Quality in Blended Learning

Work package 02 of the project Blended Learning Quality-Concepts Optimized for Adult Education

Glossary

Multilateral Grundtvig Project

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Glossary for Blended Learning

• A2A Avatar to Avatar:

Communication between two avatars, as a simulation of a face-to-face communication.

Adaptive Learning

Adaptive learning is a method for delivering education via computer-based programs that adapts the instructional sequence based on an individual student's responses and scores.

ADDIE

The foundational Instructional Systems Design model: Analysis, Design, Development, Implementation, and Evaluation. 1

• Adult education

is a practice in which adults engage in systematic and sustained learning activities in order to gain new forms of knowledge, skills, attitudes, or values.

• Android Application

An Android application is defined using one or more of Android's four core application components. Two such application components are defined in this package: Activity and Service. The other two components are from the android content package: Broadcast Receiver and Content Provider.

Android operating system

Android is a mobile operating system (OS) based on the Linux kernel that is currently developed by Google. With a user interface based on direct manipulation, Android is designed primarily for touchscreen mobile devices such as smartphones and tablet computers, with specialized user interfaces for televisions (Android TV), cars (Android Auto), and wrist watches (Android Wear).

• Animation

Animation is where a series of still images are linked together as part of a timed sequence. This makes the image appear to move. This is the same technique used when making cartoons.

Assessment

Assessment is a method for measuring a learner's level of comprehension and mastery of a given subject. Assessments can take many forms: a computer-scored test, a graded assignment, or an observed behavior. Assessment is a kind of test method.

Asynchronous Learning

When learners participate in an online learning course at different times, it is known as asynchronous learning. This might also be called eLearning or web-based training (WBT). Asynchronous learning allows learners to go through a course at their own pace and on their own schedule.²

• Bandwidth

Bandwidth is the measure of capacity of a communications channel. It measures the amount of data, which can be uploaded or downloaded in a specific measure of time.

Big Blue Button

Is an open source web conferencing system developed primarily for distance education.

Blended Learning

Blended Learning is an instructional approach that includes a combination of online and inperson learning activities. For example, students can complete online self-paced assignments by a certain date and then meet on-site or online for additional learning activities.³

¹ Niegemann, Domagk, Hessel 2007 p 627

² Boos, Müller, Cornelius 2009, p 144

³ Garrison, Vaughan 2008, p 5





• Blog

Short for 'web log', a blog is essentially an online journal or diary; generally, alongside their messages and/or entries, bloggers can also post photos, audio and video files to create their own mini web site. Blogs are ideal for use in education as reflective logs or as part of wider communities of practice. Viewers can comment on a blog, but cannot change it. A Blog is (in the most cases) in chronological order.⁴

Bloom's Taxonomy

Benjamin S. Bloom categorized six levels of competency: Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation. ISITE Design instructional designers use many paradigms, including Bloom's Taxonomy, to inform training design, development, and evaluation.⁵

• Chat

Chat is a text-based communication that is live or in real-time (synchronous). Once a chat has been initiated, either user can enter text by typing on the keyboard and the entered text will appear on the other user's monitor. Most networks and online services offer a chat feature.

Class

The community of teacher(s) and students organized around common goals of learning. Whereas "course" refers to the structure of content, assessments, and activities, "class" refers to the people engaged in the course.⁶

Closed Source Software

This is the opposite of 'Open Source' software. It means the software is the intellectual property of a specific company. For example 'Office' is a closed source application belonging to Microsoft. You will not be able to get hold of the source code as it is private property. With closed source software, the company sells a 'license' that defines how their customers can use the software. For example the license may be 'single user' or perhaps 'site license'.

• 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

The cloud, as it relates to learning, is an Internet-based repository of learning assets. With content in the cloud, the "trusted" version of content can be accessed by anyone and at any time.

Competency

Competency is the skill and intellect required for a person to perform a required function or position.⁷

• Computer-Based Training (CBT)

CBT refers to any type of course that runs on a computer, either on a CD, on a person's hard drive or on the Internet. 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*, *eLearning* and *Web-based Training (WBT)*.

• Content Management

Content management is a system of technologies and services that governs who can access the content, what can be done to it, and how it can be used, as well as governing its version history, translations, and publishing.

Course

We use this term for the structured set of goals and outcomes as designated by the teacher or

⁴ Niegemann, Domagk, Hessel, 2007 p 631

⁵ Graham, Stein 2014, p 85

⁶ Graham, Stein 2014, p 7

⁷ Kuhlmann, Sauter 2008, p22





institution. "Course" covers any of the following: university or college course, high school course or class, training program, seminar, or workshop.

Coursera

A for-profit education company founded by two Stanford University professors, Coursera offers more than 630 massive open online courses on a range of topics in partnership with universities. Courses are free, though students have to pay a fee to earn a verified completion certificate. Coursera offers several MOOCs recommended for credit by the American Council on Education.⁸

Courseware

Courseware refers to any instructional software that is delivered on a computer.

• Dick and Carey Model

This model describes all the phases of an iterative process that starts by identifying instructional goals and ends with summative evaluation.⁹

• Discussion boards

An online forum where students can interact with their classmates and instructor by posing and answering questions in the form of short posts. Participation in discussion boards is a requirement in many online courses.

• Distance Education or Distance Learning

Distance Education/Learning occurs when students and their instructors are in different geographical locations and the instruction occurs on an electronic device, such as a computer or mobile phone. The learning can occur in a synchronous environment, in which all participants are connected at the same time or in an asynchronous environment, when participants are engaged in learning at different times (see MOOC).¹⁰

E-Course

E-course is short for electronic course. Unlike a seminar that is attended in person with an actual presenter, E-course "lectures" are presented via the internet to your computer. Since E-courses are not live lectures, you can "attend" them at any time and view the material at your own pace. Taking an E-course is very similar to reading a manual or book, except that the charts, graphs and text are viewed on your computer screen. E-Courses are divided into several sections much like short chapters in a book.

• eLearning

eLearning (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. eLearning is education through any form of electronic device.

Email

Short for electronic mail, the transmission of messages over communications networks. The messages can be notes entered from the keyboard or electronic files stored on disk.

• Etiquette (or Netiquette)

In technology governs what conduct is socially acceptable in an online or digital situation. While etiquette is ingrained into culture, etiquette in technology is a recent concept. The rules of etiquette that apply when communicating over the Internet or social networks or devices are different from those applying when communicating in person or by audio (such as telephone) or videophone (such as Skype video). It is a social code of network communication.

• EULA

Stands for "End User License Agreement". This is a legal agreement to which you have to acknowledge acceptance before being able to install most software applications or services. The EULA dictates what you can and cannot do with the software. For example, you promise not to hold the developers liable for any problems the software may cause etc.

⁸ Coursera

⁹ Dick, Walter. & Cary, Lou (1990), The Systematic Design of Instruction, Third Edition, Harper Collins

¹⁰ Vaughan, Norman (2010), "Blended Learning". In Cleveland-Innes, Garrison 2010, p 13f





• F2F Face-to-Face

Face-to-Face training is common to traditional classrooms and lecture halls. Face-to-Face training is the most common example of Synchronous Training. 11

Flash

Adobe Flash (previously called Shockwave Flash and Macromedia Flash) is a set of multimedia software created by Macromedia and currently developed and distributed by Adobe Systems; available on some mobile platforms.

• Flipped classroom

A method of blended learning in which students use online resources to acquire knowledge outside of school and use class time to participate in discussions, group work or other interactive activities.

Formal education

Formal education is usually in school, where a person may learn basic, academic, or trade skills. Small children often attend a nursery or kindergarten but often formal education begins in elementary school and continues with secondary school. Post-secondary education (or higher education) is usually at a college or university.

• Formal Learning

Formal learning has a structure (curriculum, timetable, class structure ...) and, in general terms, has three basic ingredients: learning objectives, an assessment (which relates to the objectives) and a teaching strategy. Learning of this type is also known as "Structured Learning". Typically, structured Learning is "pushed" to a learner. The typical situation at school or studying at a university is formal learning.

• Forum

An Internet forum, or message board, is an online discussion site where people can hold conversations in the form of posted messages. They differ from chat rooms in that messages are often longer than one line of text, and are at least temporarily archived.

Gamification

An instructional approach that relies on elements of game design to keep students motivated and engaged during learning.

• Gender

We arbitrarily use either male or female genders in examples throughout our writing.

Goal

Sometimes called a course-level outcome or objective, we use "goal" to refer to learning objectives that are broad, harder to measure, and encompass several specific learning outcomes.¹²

- **HTML** (Hypertext Markup Language) The programming language used to create documents for display on the World Wide Web.
- Hybrid Learning Synonym for Blended Learning

• 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 Web pages. The term was coined by pioneering engineer Ted Nelson.

• ICT

Information and communication technology (ICT). ICT is defined as any computer-based resource, networked or stand alone, hardware or software.

• IMS (Instructional Management System) Global Learning Consortium. IMS is a global coalition of academic, commercial and

¹¹ Jung, Latchem, Herrington 2012, p 14f

¹² Stein, Graham 2014, p 81





government organizations, working together to define the Internet architecture for learning. IMS is focusing on developing technical specifications that will support a broad range of learning with a global perspective. Their specification development supports the needs of K-12, higher education and training around the world.

• Informal education

Informal education is when you are not studying in a school and do not use another particular learning method.

Informal Learning

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's the kind of natural learning humans do outside of a structured environment.

Informal learning is the learning that takes place during everyday activities, such as work, socializing, and extracurricular activities.

• Instructional Design

Instructional design involves the identification of the knowledge, information, and skill 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.

Instructional Designer

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.

• Interactive Multimedia

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.

• ISO (International Organization for Standardization, former International Standards Organisation)¹³

An international federation of national standards bodies.

• Java applet

A small Java program that usually executes within a web browser.

Knowledge management

The process of capturing, organizing, and storing information and experiences of workers and groups within an organization and making it available to others. By collecting those artifacts in a central or distributed electronic environment (often in a database called a knowledge base), KM aims to help a company gain competitive advantage.

• LAMS

Is a revolutionary new tool for designing, managing and delivering online collaborative learning activities. It provides teachers with a highly intuitive visual authoring environment for creating sequences of learning activities.

LCMS

The learning content management system (LCMS) is a software application that allows users to create, publish, and manage learning content.

¹³ Web: http://www.iso.org/iso/home.html [10/08/2014]



¹⁴ From: http://www.cybermediacreations.com/elearning/glossary.html [10/08/2014]

• Learner

This term is used when we refer to a student beyond a course, with respect to the ways people develop knowledge.

• Learning Management System (LMS)

A Web-based system of tightly integrated tools and technologies constructed to help teachers manage instruction, facilitate activities, and monitor learning. It is a commonly used virtual environment where learners engage with content and the class community. An LMS is sometimes called a Course Management System (CMS) or a Virtual Learning Environment (VLE).

• Learning object

A reusable, media-independent collection 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 Objectives

A learning objective describes what students should know or be able to do at the end of the course that they couldn't do before. Learning objectives should be about student performance.

Learning portal¹⁴

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.

Lesson

Sometimes referred to as modules, units, lectures, chapters, or sections, a lesson is a cohesive unit of instruction organized around specific learning outcomes, and containing learning activities and assessments. Lessons are the building block of any course. In a blended course, lessons contain activities that happen online as well as onsite.¹⁵

• Lifelong learning

Lifelong learning is the "ongoing, voluntary, and self-motivated" pursuit of knowledge for either personal or professional reasons. Therefore, it not only enhances social inclusion,

• Local Area Network (LAN)

A LAN is a network of computers which are connected together in a limited area, usually the same building or a couple of nearby buildings. LANs are usually high speed and they make use of connected peripherals such as printers.

Mashup

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

• Mobile Learning or mLearning

mLearning 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. mLearning that takes place on a hand-held device, such as a mobile phone, that can take place anytime and anywhere.

• **MOOC** Massive open online courses

These courses, commonly known as MOOCs, are entirely online and open to anyone with an Internet connection. MOOCs differ from typical online courses in two ways: They can draw hundreds or thousands of students; and they are usually, but not always, free. Students enrolled at universities offering MOOCs can get credit for the courses. The American Council on Education has also recommended several MOOCs for credit.





¹⁵ Stein, Graham 2014, p 5





• Moodle

Moodle is a free, online Learning Management system enabling educators to create their own private website filled with dynamic courses that extend learning, any time, anywhere.¹⁶

MP3 (MPEG-1 Audio Layer-3) MP3 employs a compression technique, with bits of information being discarded to allow data to be compressed into files that are relatively small in comparison other sound files.¹⁷

• Multi-Channel Publishing

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

Multimedia refers to the presentation of information and instruction through a combination of graphics, audio, text, or video. Multimedia instruction is often interactive.

• Non-formal education

Non-formal education includes adult basic education, adult literacy education or school equivalency preparation. In non formal education an adult (or a youth who is not in school) can learn literacy, other basic skills or job skills. There are other possibilities. Home education, individualized instruction (such as programmed learning), distance learning and computer-assisted instruction are some of these possibilities.

• Online Community of Practice (OCoP)¹⁸

A also known as a Virtual Community of Practice (VCoP), is a Community of Practice (CoP) that is developed on, and is maintained using the Internet.

• Online community

A meeting place for people on the Internet. Designed to facilitate interaction and collaboration among people who share common interests and needs. Online communities can be open to all or by membership only and may or may not offer moderator tools.

• Online Learning

The term online learning is often used synonymously with eLearning. It is an umbrella term that includes any type of learning accomplished on a computer and usually over the Internet.

Online

Synchronous (real-time) or asynchronous activities happening on the World Wide Web or via Internet technologies.

Onsite

Meeting or activities happening face-to-face, in the traditional classroom setting.

- Oovoo¹⁹
- OoVoo is a video chat and instant messaging client developed by OoVoo LLC for Microsoft Windows, Windows Phone, Mac OS X, Android and iOS.
- Open source

Any program whose source code is made available for use or modification as users or other developers see fit.

• Opensim²⁰

OpenSimulator is an open source multi-platform, multi-user 3D application server. It can be used to create a virtual environment (or world) which can be accessed through a variety of clients, on multiple protocols. It also has an optional facility (the Hypergrid) to allow users to visit other OpenSimulator installations across the web from their 'home' OpenSimulator installation. In this way, it is the basis of a nascent distributed Metaverse.

¹⁶ Moodle

¹⁷ Fraunhofer Institute

¹⁸ From: http://en.wikipedia.org/wiki/Community_of_Practice [10/08/2014]

¹⁹ Muchmore, Michael (July 30, 2008). "OoVoo Goes High-Res, Adds Web Client". pcmag.com. [10/08/2014]

²⁰ From: http://opensimulator.org/wiki/Main_Page [10/08/2014]





Outcome

A specific, measurable statement of desired learning - whether knowledge, behavior, attitude, etc. upon successful completion of a learning experience.

Personalization

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.

Podcast

This term has been popularized by the use of MP3 players (iPods specifically) and is essentially a multimedia broadcast hosted on a web site. It can be audio or video, and is delivered in a format that is compatible with computers and most mobile devices, generally MP3 or MPEG-4. A podcast can be regularly updated and automatically downloaded through software such as iTunes and RSS feeds.

• Rapid Authoring

Rapid authoring describes a class of desk-top authoring tools that create eLearning content.

Repurpose

Repurposing content means using existing content by adapting it to a new context.

• **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.

- RLO (reusable learning object) A collection of RIOs, overview, summary, and assessments that supports a specific learning objective.
- SCORM

The sharable content object reference model (SCORM) is a collection of specifications and standards for eLearning that enable compliant courseware to be launched and tracked, as well as to provide the same experience to a learner across compliant learning management system

• Second Life²¹

Is an online virtual world, developed by Linden Lab (a company based in San Francisco) and launched on June 23, 2003; and which in 2014 has about 1 million regular users, according to Linden Lab, who owns Second Life

• Self-Paced Learning

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.

• Skype²²

Is a freemium voice-over-IP service and instant messaging client, currently developed by the Microsoft Skype Division. The name was derived from "sky" and "peer".

Social constructivism²³

Is a sociological theory of knowledge that applies the general philosophical constructivism into social settings, wherein groups construct knowledge for one another, collaboratively creating a small culture of shared artifacts with shared meanings.

Social Learning

Social learning is a learning process that takes place through social contexts, such as through observation, the use of models, and the imitation of others.

• Social Media Learning 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

²¹ From: http://en.wikipedia.org/wiki/Second_Life [10/08/2014]

²² From: http://en.wikipedia.org/wiki/Skype [10/08/2014]

²³ From: http://en.wikipedia.org/wiki/Social_constructivism [10/08/2014]





share it. Examples of social media learning can occur through online social networking platforms, blogs and microblogs (like Twitter), online talk radio and wikis.²⁴

• Streaming Media

Streaming media refers to video and audio that is downloaded to a computer from the Internet as a continuous stream of data and is played as it reaches the destination computer.

• Student

The individual who is taking the online course (i.e. the trainee, class member, or participant).

• Synchronous Learning

When learners participate in an online learning course at the same time but in different locations, it is known as synchronous learning. Synchronous learning allows learners to interact with the instructor and other participants. This is done through software that creates a virtual classroom.²⁵

• Teacher

The course designer/developer, instructor, professor, facilitator, or trainer. In cases where the distinction between teacher/instructor or designer/ developer is important, the context should make that clear.

• The Virtual Learning Community™

Is a support network in teaching and learning, technology, and training for distance learning professionals in the NC Community College System.

• Twitter

It is a free-ware social network and micro-blogging service, allowing users to write short messages (limited to 140 characters) and read others coming from the same service (known as tweets).

Video Conferencing

Video conferencing refers to 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.

Virtual Classroom

The virtual classroom refers to 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.²⁶

• Virtual Reality

Virtual reality is a 3-D environment, which is created artificially by using computer hardware and software. The user wears special gloves, headset and goggles; sometimes they might wear a full body suit. The clothing contains sensors, which picks up the users position and movement and integrates them into the virtual environment. This makes them feel like they are totally immersed in the virtual world.

• Virtual Worlds

Three-dimensional simulation environments in which persons are represented by their "avatars", customized figures whose appearance can take human or other shapes.

• vLearning:

Learning that takes place in a Virtual Environment, or Multi User Virtual Environment (MUVE).

• Web 2.0 tools

New concepts and tools introduced by Web 2.0 or the Social Web that are able to operationalise a more social-centric vision.

• Web 2.0

A term given to an evolution of the World Wide Web; it describes a range of technologies and functionality that enable anyone to have a presence on, and 'author' content on, the World

²⁴ Becker, Naamann, Gravano 2010, p 291

²⁵ Stein, Graham 2014, p 19f

²⁶ Kuhlmann, Sauter 2008, p 110





Wide Web. Encompasses technologies such as blogs, wikis and sundry other forms of interaction. Provides many opportunities for interaction via mobile devices. A main issue of Web 2.0 is the interactivity of the user.

- Web-Based Training (WBT) WBT refers to all types of digital instruction in which the learning material is presented via the Internet.
- WEBINAR (WEB-based semINAR)

A webinar is a seminar or workshop in which the facilitator and participants view the same screen at the same time. 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.

• Wi-Fi

Sometimes known as 'wireless broadband' or wireless fidelity, this is the trade name for the popular wireless technology used in home networks, mobile phones, video games etc.

• Wiki

A type of web site that allows users to easily add, remove, or otherwise edit or change the site's content. This ease of interaction and operation makes a wiki an effective tool for collaborative authoring.²⁷

²⁷ Kuhlman, Sauter 2008, p 59, 148f





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