

# **JISC e-Learning Models Desk Study**

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## **Stage 1: Project Specific Glossary**

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## 1. Introduction

In the first stage of the e-learning models desk study a general glossary of terms for the e-learning and associated domains was created [1]. As the study progressed, it became clear that the glossary needed to be revised and refined to reflect the particular context of the study and some of the related projects. There has been no attempt to make this new glossary exhaustive. The criteria for selecting terms to be included were:

- Terms which are commonly used in the literature but often lacking an agreed definition. The definition given in this document is the one used and agreed in the context of the e-learning models desk study.
- Terms which are core or central to the e-learning models desk study approach. In many cases the definitions used are composites or chosen on a closest fit bases.
- Terms that may have been redefined or significantly modified to suit the approach adopted by the desk study.

However, terms which we felt are well understood, not critical to the study or are less contentious have not been included. Many of these are ‘lower level’ descriptions (e.g. problem solving, data etc), though the Master glossary (see [1]) does define some of these terms.

The glossary should be considered as a ‘living’ document. It is hoped that the community will comment on, modify, add or even remove terms over time. To aid this process the latest version of the glossary can be found on the JISC Website ([www.jisc.ac.uk/elp\\_outcomes.html](http://www.jisc.ac.uk/elp_outcomes.html)) or Development Bay (<http://cetis.ac.uk:8080/pedagogy>).

Comments can be added via the Development Bay or sent directly to the author ([cfowler@essex.ac.uk](mailto:cfowler@essex.ac.uk)).

## 2. The Glossary

**Apprenticeship [3].** A situated perspective where the teacher is the coach or expert and the learner learns mainly through observation, discussion and reflection on the expert's behaviour. Usually takes place in a 'real world' context.

**Associationist/Empiricist Perspective [2,3].** Learning by acquiring behaviours through defining sequences of component to composite skills. It emphasises task analysis, defining sequences of component-to-composite skills. It provides a highly focused set of objectives, described as learning competencies.

**Cognitive Perspective [2,3].** Learning as achieving understanding (i.e. a change in the underlying cognitive structure). It emphasises conceptual development, stressing the importance of learners constructing their own knowledge through active engagement. It also encourages a more meta-cognitive perspective – learning how to learn and encouraging the development of autonomous learners.

**Co-instructional Pedagogies [3].** A cognitive perspective where the learners are encouraged to adopt some of the role of the teacher (e.g. teach back).

**Constructional Pedagogies [2].** A Learner-centred approach where learners construct (or build) concepts through their active and individual experimentation and observation.

**Context [3]** is one characteristic of a learning activity (see also roles). It describes the nature of task (e.g. concrete), whether it is an individual or group activity, and the type of relationship between the learner and teacher (e.g. one-to-one).

**Designing for Learning [4].** Designing, planning, orchestrating and supporting learning activities as part of a learning session or programme.

**E-learning [1,4],** Learning facilitated and supported through the use of Information and Communications Technologies (ICT). Typically used to describe media such as CD-ROM, Internet, Intranet, wireless and mobile learning, audio- and videotape, satellite broadcast, interactive TV. Some include Knowledge Management as a form of e-learning.

**Effective Practice** Each different pedagogical approach will have specific principles which if followed should result in effective practice [see 2,3 & 7]. On a more generic level, there is a common set of principles that help define effective practice. These are:

1. Designing – creating appropriate lesson plans
2. Preparation – identifying resources and making them available
3. Communication –management of expectations, building relationships
4. Execution - clear instructions, proper observation and monitoring of performance
5. Assessment - Appropriate choice of method, and timely feedback

**Experiential learning [8].** Based on Kolb's (1984) experiential learning cycle that underscores the importance of some kind of dialectical interaction between action and reflection and has been widely used in studies of informal learning.

**Generic Learning Activity [3,4].** The totality of the purposeful or goal orientated learning behaviour being analysed. These are grounded by the 'goals' of the practitioner and not necessarily driven by any specific theoretical consideration.

**Generic Tool functionality [9,10].** A set of functions and features required by an e-learning tool to support teaching, learning and assessment activities. The functionality can then be used to choose a specific tool that meets the requirements.

**Instructional Pedagogies [2].** A didactic mode of teaching, based on teacher centric and transmission-based models of teaching and learning.

**Instructional System Design (ISD) [2].** ISD consisted of guidelines and procedures for the decomposition of complex tasks into learning hierarchies and detailed prescriptions for the design of instructional programs based on such hierarchies. A theme in this work was the use of taxonomies representing different levels of complexity in learning outcomes. Different levels of intellectual skill were identified: discriminations, concepts, rules and higher order rules.

**Learning Design Specification (LDS) [5,6].** Created by IMS as a standard way to specify most learning activities. The specification attempts to provide a means of expressing the approach that best suits the learning objective you have. It achieves this by assuming that most pedagogic approaches have a similar model at their core: a Method prescribing various Activities for learner and staff Roles in a certain order. The conceptual vocabulary is simply there to flesh out the Methods, Roles and Activities.

**Learning outcomes [1,2].** The desired results from undertaking a specific learning or set of learning tasks. In general terms these outcomes can be classed as academic, generic competences, individual reflexivity and skill-based.

**Mapping Tables [3]** define a set of theoretically defined requirements for an effective 'e-learning solutions' for practitioners. Ideally the solutions (represented by rows) can be illustrated more specifically through case studies of effective practice.

**Models of e-learning [2]** describe where technology plays a specific role in supporting learning. These can be described both at the level of pedagogical principles and at the level of detailed practice in implementing those principles.

An **Ontology** is a formal representation or specification of a knowledge domain. It describes the structural relationships between concepts (or between classes and subclasses) – simple ontology or taxonomy, and the relationship or 'slots' between the properties of those concepts or classes.

**Pedagogical frameworks [2]** describe the broad principles through which theory is applied to learning and teaching practice.

**Practitioner Approach [7].** A combination of the internal beliefs, classroom experiences and understandings gained from education theories, which practitioners use to underpin their professional practice.

**Roles [3]** one characteristic of a learning activity (see also context). Roles define the ‘locus of control’ (teacher or learner) in terms of who defines the learning objectives, selects the learning tasks and provides feedback.

**Scaffolding [1,2, 8]** A term derived from Vygotsky’s theories of learning. The process by which the instructor assists the learner by providing extra support or altering the learning task so that the students can solve problems or perform tasks more easily. To be effective scaffolders, teachers must be sufficiently expert in their domain to judge individual learning needs, and sufficiently skilled as teachers to adjust dynamically, continuously to switch between the novice's and expert's perspectives.

**Situated Learning Pedagogies [3,8].** Knowledge is contextually situated and learnt through a process of social engagement and identification with a community (of practice).

**The Situative or Situationist Perspective [2,3].** Learning as developing social practice. It encourages the definition of learning objectives in terms of the development of disciplinary practices of discourse and representation. It also focuses on learning outcomes that are dependent upon the establishment of collaborative learning outcomes, and on learning relationships with peers. This perspective also encourages us to formulate learning outcomes in terms of authentic practices of formulating and solving realistic problems.

**Social Constructional Pedagogies [3].** Where learners work in groups, constructing their knowledge through a social rather than individual process.

**Taxonomy** is a formal representation of structural relationships between classes and subclasses within a given domain. It normally takes the form of a hierarchy and is related to the notion of a ‘simple’ ontology. In the context of e-learning models desk study, it has been used to describe the relationship between theoretical perspectives, specific theories/models and pedagogical frameworks.

**Teaching Activities [3].** A series of ordered actions required by the practitioner to meet predefined learning goals and outcomes. The exact set of activities is defined by the practitioner’s approach and the broader learning context. The sequenced set of activities can be used to derive a generic set of tool functionality to support teaching (e.g. presentation and dissemination – see generic tool functionality).

**Theories of learning [2]** provide empirically-based accounts of the variables which influence the learning process, and provide explanations of the ways in which that influence occurs.

### 3. References

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- [10] Conole, G., June 2004, *Report on the effectiveness of tools for e-learning*