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Editorial: Blended learning

Blended learning, also known as hybrid or mixed learning, is an approach that has developed with tenacity in the field of education. It is by no means a new term or methodology.

To learn and teach in a blended way has been and continues to be an intelligent way of conforming to different training needs. However, when blended learning is analysed by comparing and contrasting it with e-learning, reflections and evaluations emerge that make it easier to comprehend the limitations and possibilities of the blended way of learning.

A key idea is choice. Being able to select the most convenient methods according to the detected needs is essential in blended learning. However, comparing blended learning with e-learning can cause controversy in some cases, making it hard to focus with precision on the real needs of people involved in learning.

In the end, what is relevant is not how cost effective the model is, although this is important. What really matters is achieving a way of learning that is meaningful and enables the acquisition of the most necessary skills.

In this issue of eLearning Papers, you can read several articles giving practical examples about how blended learning is applied and used in different contexts and institutions across Europe.

The article from blinc (Blended Learning Institutions' Cooperative) presents experiences and lessons learnt from three different blended learning projects, stating that the blended learning methodology makes it possible to adjust the learning offer to different learning styles and special learning requirements.

A case study, reported on by Pedro Leão Neto and Margarida Amaral, shows how the blended learning approach was used in the Faculty of Architecture at the University of Porto and how, as a result, the technology worked as a catalyst for a new form of teacher-student interaction.

Antonia Andrade Olalla, from the University of Alcalá, presents a proposal to adapt natural science teaching to the requirements of the European Space of Higher Education using blended learning methodology.

Katharina Schiederig's article demonstrates the results of a pilot course used to explore opportunities for blended learning in the field of political science at the Free University of Berlin, where, as a result of the pilot project, virtual learning has become a permanent feature of the curriculum.

Finally, an article by Rita Falcão de Berredo and Alfredo Soeiro presents a proposal for benchmarking learning objects.

Roberto Carneiro and Lluís Tarín



Tim Scholze
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“ Both projects are examples of how innovative, IT-aided learning concepts can be realised in various formal and informal learning environments with different learning groups, contents and objectives. ”

Keywords

Blended, case study, multicultural, projects

Full text

<http://www.elearningeuropa.info/files/media/media11897.pdf>

Successful Blended Learning Projects in 2006: Experiences in different formal, non-formal and informal learning environments

European partners from 11 countries working in the framework of the Blended Learning Institutions' Cooperative (blinc) have been applying web-based, mixed learning methodologies for different learning groups and contexts in three different projects.

The INTEGRATION project deals with intercultural staff training for organisations working with multiethnic clients and beneficiaries. Nine partners from six nations have been developing audiovisual learning and training materials. This was done by using videographic approaches in intercultural training, analysing given situations of intercultural encounters in a critical incident approach, and producing and documenting “intercultural micro-communications” as short online films.

In the framework of the Joint Environmental Management (JEM!) project funded by Socrates, Joint Actions Programme partners from five countries applied an eCoaching System for the introduction of environmental management in European schools. The content of the system consists of fully-fledged courses, training materials and accompanying guidelines for teachers, trainers or consultants. The applied system used in JEM! was developed in the framework of a project entitled “IEM in hospitals”, which was recognised as one of the five best projects out of 2,500 since 1992.

In the framework of JEM!, the approach was transferred to European schools. Training and counselling is performed using blended learning approaches and the entire system can be accessed on the interactive project website.

Both projects are examples of how innovative, IT-aided learning concepts can be realised in various formal and informal learning environments with different learning groups, contents and objectives. They clearly showed that the success is, to a major extent, determined by the quality of the instructional design applied in the blended learning contexts.

That is why the Advanced Blended Learning and Didactics (A-B-C-D) project (Grundtvig 1.1, 2005-2007) is aiming at the development of a comprehensive training course for Blended Learning Designers. In May and September 2007, the courses will be held in Athens and Bordeaux, introduced by a preliminary e-learning phase. The course will also offer opportunities to develop individual blended learning projects using Web 2.0 tools such as blogs, WIKI, e-portfolios and synchronous web-communication instruments including online conferences or Skype.



**Katharina
Schiederig**

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“ Virtual learning and ICT capacities have thus become a permanent component of the curriculum. Key factors for success were the approach to use e-learning to improve overall teaching methods, the tailored e-tutor system and the constant information and training policy. ”

Keywords

Case study, blended, implementation, best practice, university

Full text

<http://www.elearningeuropa.info/files/media/media11894.pdf>

Using e-learning for social sciences: practical lessons from the Free University of Berlin

Lessons can be drawn from the e-learning pilot project that was successfully implemented in the Department of Political Science at the Free University of Berlin, Germany, between 2004 and 2006. In the framework of the university-wide ICT (Information and Communication Technologies) strategy, the Blackboard platform was used to explore opportunities for blended learning in the field of political and social science.

The pilot project started in September 2004 and was followed by a second project between April 2005 and February 2006, jointly funded by the university and the German Federal Ministry for Education and Research. Over the course of the project, student e-tutors were trained in content management and support. Digital modules were developed and a range of training, information and support measures targeted at teachers and students were tested. The project was constantly monitored and evaluated after each project stage. More than 300 courses in the department have participated to date and e-learning has been extended to the entire Political and Social Science Faculty.

Virtual learning and ICT capacities have thus become a permanent component of the curriculum. Key factors for success were the approach to use e-learning to improve overall teaching methods, the tailored e-tutor system and the constant information and training policy. Other important factors were the support through university leadership and the university-wide e-learning programme/CeDiS, as well as the exchange with projects in other departments. Moreover, the project was permanently adapted during the slow start with the pilot and grew consistently through constant monitoring and evaluation. In conclusion, we would like to underline the importance of training, networking, IT infrastructure and consultation with students for the successful implementation of e-learning in any department.

Currently, the faculty is preparing a project proposal for the 2007 academic year to enhance content development and teacher training for a truly integrated blended learning approach.



Antonia
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“ Consequently, the teacher must update his or her knowledge of the new teaching systems, without underestimating the value of the traditional methods, and the student must be prepared for the new forms of learning.”

Keywords

Education, hypermedia, case study, blended, natural sciences, university

Full text

<http://www.elearningeuropa.info/files/media/media11971.pdf>

Blended learning as a proposal for European convergence in the teaching of natural sciences

The European Higher Education Area requires new education/ learning surroundings that meet the new requirements for this huge common space. The main aim of this article is to put forward an educational proposal that is in line with European adaptation in the field of natural sciences and helps to solve a large part of the current problem related to face-to-face teaching.

Taking the national credit system as a starting point, its adaptation to the ECTS system is analysed, for which we have selected a subject to which a blended learning methodology has been applied, using a system based on Web technologies to complement face-to-face training and the student's study hours, represented by the European credit.

In this proposal, the teacher will have to combine his or her training skills on the one hand, be an expert of the synchronous and asynchronous applications of the Internet as a tool to be taken into account on the other hand, and have the necessary individual skills as a tutor, since there will be a transformation from a face-to-face form to a partially distance learning form, trying to pick out the best features from the two forms. It will also be necessary to deal with the fact that the student will not only have to acquire knowledge as learning objectives, but also acquire a series of attitudes and abilities that prepare him or her for his or her professional future. This means that the subjects are no longer defined according to the knowledge to be transmitted and the hours that the teacher has to spend distributing such knowledge; rather, the subjects are based on the skills and abilities that need to be developed among the students in each case.

Consequently, the teacher must update his or her knowledge of the new teaching systems, without underestimating the value of the traditional methods, and the student must be prepared for the new forms of learning.



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“ The results from this case study highlighted, among other things, that the learning process that emerges from the creative use of an e-learning platform strengthens the teachers' capacity to work as a team. ”

Keywords

CAAD, e-learning, blended, communication

Full text

<http://www.elearningeuropa.info/files/media/media12070.pdf>

CAAD and e-learning: a blended approach

This case study was conducted by the senior lecturer in charge of the Computer Architectural Aided Design (CAAD) course, with the support and active collaboration of Instituto de Recursos e Iniciativas Comuns da Universidade do Porto (IRICUP). CAAD is an optional course for fifth-year students at the Faculty of Architecture of the University of Porto (FAUP).

The course evolves in a collaborative environment (teacher/student and student/student) to facilitate the exchange of ideas and design communication and the creation of an efficient learning context. The theoretical and empirical bases of the course highlight the concern that the potential of computers for communicating urban design should be used with critical awareness. Thus, the goal is to point out specific attributes for different representation methods and make students think about why they use different computer techniques and representations for presenting their design.

Within this context, it was important to adopt a set of teaching methods, communication techniques and specific software that enabled this course to differ from the traditional methods of teaching: demonstrative lecturing and students adopting a more or less passive role in the process. After innovating in relation to the tools used in the process of teaching/learning, one should not forget to change the methodologies to encourage students to engage in discussion and adopt an active role in the process. In my point of view, this must be the main goal. This was achieved through several types of information and software utilities, not only from a distance perspective, but also in relation to the face-to-face interaction in classes, where a problem solving approach for each group as their communication projects evolved was used.

The results from this case study highlighted, among other things, that the learning process that emerges from the creative use of an e-learning platform strengthens the teachers' capacity to work as a team. This means that this technology worked as a real catalyst for a new teacher/student interaction, making communication much easier and giving the students a more active role in the learning process.



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“ The bLO was applied in two different contexts. To test the applicability of this method, three modules on a Master Course in Construction were used. The information provided by this test was important to improve the tools, in particular the indicators system. ”

Keywords

Evaluation, learning objects, reusability, quality

Full text

<http://www.elearningeuropa.info/files/media/media12071.pdf>

A proposal for benchmarking learning objects

This article proposes a methodology for benchmarking learning objects. It aims to deal with two problems related to e-learning: the validation of learning using this method and the return on investment of the process of development and use: effectiveness and efficiency.

This paper describes a proposal for evaluating learning objects (LOs) through benchmarking, based on the Learning Object Metadata Standard and on an adaptation of the main tools of the BENVIC project. The Benchmarking of Learning Objects (bLO) method aims to contemplate the properties of LOs, their application and stakeholders, and proposes procedures and tools for evaluating LOs. This method does not intend to be a definite or closed system. It defines a working baseline for evaluating LOs, the first step for creating a more complex and more reliable evaluation system that is constantly improving.

The paper introduces the guiding principles of the bLO system that provided the guidelines for the development of the tools. This system includes three main tools, two of which were fully developed, and a complement to improve the applicability of the method. It includes a profiling tool based on the LOM, the benchmarking indicator system, and proposes a competence map as a mechanism for continuous improvement. Additionally, a weighting system for efficiency and effectiveness was developed as a complement to the indicators matrix.

The bLO was applied in two different contexts. To test the applicability of this method, three modules on a Master Course in Construction were used. The information provided by this test was important to improve the tools, in particular the indicators system. Later, the bLO method was used as an evaluation tool for some of the outcomes of the European Project entitled “E3: Electronically Enhanced Education in Engineering”. This project aimed to develop LOs that were exchanged and evaluated among the international partners.

Finally, the paper introduces several areas for future work, aiming at improving the system and integrating it with other systems.