Training the educational manager

Lifelong Learning in practice

Petra H. G. Fisser

University of Amsterdam & the Dutch Digital University

buro@digiuni.nl

Abstract:

The University of Amsterdam has been implementing and supporting Blackboard as the electronic learning environment for the whole university. Implementing this environment has been centred around three pillars: technology, communication and didactics. These three pillars have proved to be important in this large-scale project in which both the faculties and a central support unit of the university were (and still are) involved. This article focuses on the didactics of the project and describes several products and methods from the University of Amsterdam and the Digital University, which have been used at the university to realise practical support for the useful application of an electronic learning environment in education and an effective strategy to accomplish this.

Key words:

didactics, higher education, implementation, Information and Communication Technology, learning environment, professional development, management, strategy, training

INTRODUCTION

The University of Amsterdam (UvA) has approximately 22.000 students and 3800 academic staff members. It is one of the largest universities in the Netherlands and until recently was regarded as one of the most traditional universities with regard to the use of ICT in education. This changed in 2000 when the implementation of a university-wide electronic learning environment started, based on experiences of enthusiastic and innovative teachers in the years before. This article gives a short overview of the

process of implementing Blackboard as the standard electronic environment for the university, a process in which an awareness that not only is the technology behind an electronic learning environment extremely important, but also the communication about and the didactics underpinning the electronic learning environment. The training that was developed at the university to emphasize the importance of the didactics of an electronic learning environment and the experiences with the training is described in more detail.

THE ELECTRONIC LEARNING ENVIRONMENT

In the 90's several faculties and departments of the UvA started experimenting with the possibilities of computer-assisted learning and gradually this developed to the use of Internet in education. In general this experimenting with Internet consisted of self-developed websites, some discussion boards and the use of e-mail as a communication tool. With the arrival of more enhanced systems for group work and the first electronic learning environments the interest in the use of learning technology increased even further.

During the monthly meetings of the ICT coordinators in the faculties the issue of using an electronic learning environment was discussed in detail. In order to avoid each faculty buying its own learning environment with the accompanying hard- and software it was decided that there should be a centrally supported electronic learning environment, accessible for all staff members, support by a central support unit. The central computing services unit of the university, the unit that among other things provides the faculties and departments with hard- and software, Internet connectivity and all the additional services and support, adopted this. The concrete responsibility for the implementation and support of the electronic learning environment Blackboard was put in the hands of the department of ICT in Education, the expertise group within the central computing services unit. This department consists of learning technologists with a focus on both the technique and the didactics of ICT in education. This group started in February 2001 with their ambitious project, to implement Blackboard as the university-wide electronic learning environment.

THE THREE-PILLAR MODEL: TECHNOLOGY, COMMUNICATION AND DIDACTICS

Implementing a university-wide electronic learning environment involves many aspects, actors and organisational issues (Fisser, 2001). Therefore it was decided that in order to assure success the process of implementation required a project-based approach with a focus on technology, communication and didactics. A project was initiated and organised around these three pillars (Benneker et al., 2001).

Technology

The general goal of the technology-pillar within the project was to guarantee the technical continuity. This comprises the maintenance and management of the hard- and software, exploring the developments with regard to integration of educational technologies, monitoring important developments in the learning technology-market, sharing experiences in relation to technique and technology with other universities and integrating the electronic learning environment with other systems of the university.

Communication

The communication-pillar of the project related primarily to the creation of awareness of the possibilities of an electronic learning environment, getting commitment of teachers and educational managers to start using the environment in education, and to stimulate the effective use of the learning environment. Furthermore, the communication-pillar provided information for all actors involved (instructors and managers, but also technical and educational support persons) about the functionality of the system, possible changes in software versions, etc. Finally, communication was provided about the products that were developed in the didactics-pillar of the project.

Didactics

The primary goal of the didactics-pillar was the staff development of the academic staff and an implementation model supporting educational managers in relation to the implementation process of the learning environment in the curriculum.

The staff development part of the didactics-pillar was aimed at teachers and had a focus on issues such as the way an electronic learning environment can be used in specific educational settings and how learning material can be made electronic and interactive. This with the idea that the didactical issues behind these issues is the centre of attention, not the technology.

Products that were developed in this respect were tailor-made workshops and discussions with the teachers. Most of these courses are directly related to the electronic learning environment Blackboard itself, such as the Blackboard Basics training, a hands-on training in which the teacher learns about the functionalities of the system and has the possibility to work with the system for several hours. Next to the Basics training, Didactics training was developed, aimed at the effective use of an electronic learning environment: not the functionalities of the system, but the educational design of the teachers' course is the central focus point. Based on the design of the course the academic staff learn how to use the electronic learning system as an effective tool to support education. The Blackboard Didactics training is a general training that can be adapted for specific needs (tailor-made training).

The main product that was developed for the educational managers and the ICT support persons is the "ICT in Education Implementation Model". This model can been used to support the implementation of the electronic learning environment on a department- or faculty-wide basis.

THE IMPLEMENTATION MODEL

The implementation model (Dekker, 2002) that was developed within the didactics-pillar consists of six steps:

- 1. Orientation
- 2. Describing the current situation
- 3. Determining the ambitions
- 4. Determining the interventions and activities
- 5. Carry out the interventions and activities
- 6. Evaluation

The first step of orientation is to raise the awareness within the department of what it is they want to do when implementing an electronic learning environment. Attention is paid to technical and financial issues, to gaining commitment from both management and academic staff, organising the support and staff development and planning the strategy for the implementation process. In step 2 a quick scan in which all relevant information about the department in relation to ICT in education is collected to describe the current situation.

The third step is one of the most difficult steps in the implementation model; determining the ambitions. Or, in other words, describing the goals and developing a vision; why do you want to implement an electronic learning environment department-wide? In this step in the implementation Petra H. G. Fisser

model one of the methods used is the development of scenarios to develop a vision. In these scenarios a specific future use of the learning environment is described, with consideration for the users and the context of the use of the environment. The scenario makes both the future and the expectations of this future tangible.

Based on the vision and ambition of the faculty of department a set of interventions and activities is determined. This is the actual plan for the implementation of the learning environment. The interventions and activities are aimed at creating commitment, communication about the process of the project, staff development for those involved, optimising support for the staff, increasing the involvement of the staff and continuing development and maintenance of the vision.

Evaluation, step 6 in the model, is not only carried out at the end of the project, but is an ongoing process. Based on experiences the project planning and content could be adapted to fit the specific needs of the faculty/department or its academic staff.

TRAINING THE MANAGER

The implementation model is just a support-instrument for the educational manager and his or her support staff. The educational managers at the university expressed their interest in a just-in-time training about strategies with regard to implementing an electronic learning environment or more general with regard to implementing ICT in education. This training was developed in a project of the Digital University consortium of which the University of Amsterdam is one of the members.

The role of the Digital University

The Digital University is a consortium of ten universities in The Netherlands. It focuses on the development and application of digital educational products and knowledge for higher education (Digital University, 2002). Important issues for The Digital University are a changing demand for education, combining working and learning, permanent education, the role of e-learning and the need for cooperation.

The Digital University aims to set up a relevant knowledge network, share expertise and, last but not least, share the financial burden of innovation. The projects of the Digital University can be divided in five programs:

- Digital testing, assessments and digital portfolio;
- Digital educational tools: tasks and resources;

- Learning and coaching from a distance: dual, virtual and international;
- Build up and disseminate expertise;
- Electronic Learning environments (standardization and interoperability).

Within the program of building and disseminating expertise several training programmes are developed. One of these programmes was aimed at educational managers. The programme was developed and tested by several partners of the Digital University consortium, including the University of Amsterdam.

Just-in-time training

The idea behind the training programme that was developed for the educational managers was that it should be a 'just-in-time' training. This meant that the course had to be developed in such a way that it was general enough to make a tailor-made training programme whenever a group of educational managers in a specific situation needed the training.

The goal of the training was to support the managers in making their vision on ICT in education explicit, to formulate goals and define a strategy to achieve these goals. The training consisted of three half-day meetings in which each of these components were discussed. The managers had to prepare the meetings beforehand in small groups using the electronic learning environment Blackboard. For each meeting an expert trainer was invited to give a small lecture about the subject and to answer the questions of the managers.

EXPERIENCES

Since the products of the didactics-pillar are made available we can see that there is a huge difference in both the need for and awareness of the availability of these products.

The Blackboard Didactics training is one of the most successful products. The content is evaluated as high-quality. It is however somewhat disappointing that the Blackboard Didactics training seems to be less interesting for academic staff then was expected. Especially if you consider that both the academic staff and the educational management have expressed their interest in this course many times. It seems that budget-cuts, the introduction of the Bachelor-Master system at the university and other changes in education have led to "tiredness" to do new things, including staff development. The participants in the Blackboard Didactics training have

Petra H. G. Fisser

evaluated the training as useful, so it will remain part of the staff development programme.

The implementation model on the other hand has gained much interest from both educational managers and support persons in the faculties and departments. But also persons from outside the university see the implementation model as a useful means to guide the implementation of an ICT-related innovation. Based on the experiences so far, there are some areas of attention that should be worked out in the near future in relation to the use of the model. Most important in this is the starting-point of the faculty or department itself, and not an organisation such as the expertise group in a central university unit, should be the owner of the project. This leads to more commitment and awareness in the faculty or department. But it also raises questions about the responsibilities and roles of the persons within the faculty and the responsibilities and roles of the learning technologists of the central support unit. Who should carry out which parts of the model? When does the faculty need the support and advice of the central support unit? And, does it need this support and advice?

The knowledge that has been build up at this moment suggests that the orientation stage (step 1 in the model) requires someone from outside the faculty, someone who asks questions and thereby raising awareness about the actual problems. Also, guidance in the process of developing the vision and the strategy is usually appreciated by the faculty managers. Carrying out interventions and activities seems to be something that faculties and departments prefer to do themselves, but with monitoring (at some distance) by the learning technologists from the central support unit. The same is true for the evaluation part of the model. Probably the responsibilities and roles of the persons within the faculty and those of the learning technologists of the central support unit will differ between projects, but this is something that should be taken into account during the first step of the model.

Unfortunately, the training for the educational managers was the least successful part of the products that were developed. The training was tested by offering it to a group of educational managers of three different universities. Although the training was evaluated as a high-quality training which was very useful, half of the participants did not finish the course and only participated in one or two of the three meetings. The main concern of the participants was lack of time: three meetings were too much to schedule in their day-to-day activities. Also, the preparation that was required before each meeting was seen as useful, but had no priority in relation to the regular tasks of the manager. The suggestion was made to make the training less time consuming: a one-day meeting with different kinds of documentation such as literature, check lists etc.

Based on these experiences a new programme is now under development, considering the suggestions made by the managers. The idea of the new programme is to offer two support methods for the managers: a checklist (based on the implementation plan as described before) and a consultancy trajectory. The checklist can be used as a preparatory activity to describe what the educational manager wants with ICT in education, establish the goals and how to get commitment from the academic staff. The consultancy will provide a trajectory in which the actual implementation of ICT in education will be carried out based on the outcomes of the checklist. The implementation will be realised by a working group consisting of members of the faculty and an external consultant.

CONCLUSIONS

This paper focused on the didactics (and more implicit on the communication) that is involved when implementing ICT in education, especially related to training and supporting educational managers. It seems that even though educational managers express a need for training, what they really want in practice is support. This support can be divided into two kinds of support: instruments/paper resources and human resources. The implementation model is a good example of a useful paper resource. It gives guidance in the steps to take when implementing a faculty-wide ICT-project. Next to a quick-scan methods are offered to think about and develop a vision and a strategy to accomplish the implementation. But these paper resources need human resources to carry out the implementation. Part of these human resources can be found in the faculty or department itself. The ICT-coordinator, teachers, support staff, etc. can carry out parts of the implementation process. For some parts of this process it can be useful to consider hiring external consultants or learning technologists.

Overall it can be said that educational managers have a busy schedule. They do not have the time for 'just another ICT-project'. The ICT application has to have an added value, it needs to be integrated in the curriculum or it has to serve a specific goal before the manager will give the implementation process priority. Supporting the educational manager with both paper and human resources, or more importantly, make him or her aware that he or she needs these resources is the next challenge.

Petra H. G. Fisser 141

REFERENCES

Benneker, F., Leijen, M. van, Schaap, M., & Veugelers, M. (2001). VELO, *Voortzetting Elektronische Leeromgeving [Continuing the Electronic Learning Environment]*. Amsterdam: Expertise group ICT in Education.

- Dekker, P.J. (2002). *Implementation model ICT in het onderwijs [Implementation model ICT in education]*. Amsterdam: Expertise group ICT in Education.
- Digitale Universiteit (2002). Strategisch samenwerken aan vernieuwing [Strategic cooperation for educational change]. Utrecht: Stichting Digitale Universiteit.
- Fisser, P. (2001). *Using information and communication, a process of change in education*. Enschede: Twente University Press.