Organizational Aspects of Supporting E-learning at University Level

Sandra Kučina Softić
University of Zagreb University Computing Centre, J. Marohnića 5, 10000 Zagreb, Croatia
sskucina@srce.hr

Zoran Bekić
University of Zagreb University Computing Centre, J. Marohnića 5, 10000 Zagreb, Croatia
zoran.bekic@srce.hr

Abstract: In the process of systematic implementation of e-learning, universities are facing a number of challenges in providing appropriate, high quality and sustainable support to teachers and students. In this paper we consider some organizational approaches to support e-learning at university level. A number of issues should be discussed to provide effective support to the teachers, students and institutions trying to implement e-learning. We are discussing centralized, decentralized and combined organizational models and the role of university e-learning centre, as focal point for systematic take-up and supporting of e-learning across the university. The paper is based on the experience derived from the Tempus project EQIBELT and on the experience of establishing and running the E-learning centre at the University of Zagreb.

Keywords: e-learning, e-learning centre, user support, higher education, organization model

1. Introduction

As information and communication technologies become more robust and easier to use, they increasingly permeate academic activities in higher education. E-learning has moved into the mainstream of educational design and can provide ways to enhance the quality of the learning experience. Traditional universities which are generally driven by research agendas with teaching and learning needs as secondary are now faced with new major challenges in the field of knowledge and education and have to respond to the new, modern and competitive global education market.

In order to implement e-learning, universities need to create a vision of the desired end state to begin any strategic planning. By creating top-down vision and positive environment that will foster e-learning development, a need for support is becoming an unavoidable issue.

As more courses implement e-learning, institutions are faced with the question, how to provide the necessary support resources to address their issues. Support issue is becoming critical in the light of the continued growth and success of e-learning in higher education. [6]

So the success of an e-learning vision and strategy depends not only on the availability of the technology, but also on the extent to which faculty (teachers) and students are supported in their way to explore and integrate technology into learning experience.[1]

2. E-learning Support Centre

The use of technology in higher education has become a standard component in many courses.

As institutions adopt e-learning and e-learning is systematically implemented as part of the university strategy or strategic decision, some important new issues arise:
• adequate and reliable technical infrastructure to support learning activities
• teachers’ and students’ technical skills to use e-learning tools
• redesign of the courses to incorporate e-learning effectively into their pedagogy

E-learning centres have a critical, central role in the systematic take-up of e-learning across an educational institution and must therefore be developed as part of a strategic plan, aligned to the institutional goals and vision. [7]

We find appropriate the following definition of an e-learning centre: a unit established for serving the learning needs of students and staff within an institution, for the development of
innovative curriculum pedagogy and state-of-the-art learning technology in real courses, and for the development of new learning technologies guided by theory and validated by observation of practice [2].

The work of an e-learning centre will have an impact on some significant aspects of the institution: directly or indirectly it will affect student learning, the academic staff who take up the use of e-learning in their teaching, and the development of e-learning resources and materials including generic and specific resources as well as reusable template designs for e-learning materials and online environments, to enhance and improve the quality of teaching and learning process, therefore the higher education in general.

As Bates stated “while many different approaches can be used to develop and implement e-learning, there is a consensus in the literature that to be sustainable, cost-effective and of high quality, some form of project management is needed” [3]. One of the tasks for e-learning centre is to provide such management role.

3. EQIBELT Consortium Conclusions on E-learning Centres

Some of e-learning technologies have been in use at the University of Zagreb for many years, but mostly as the individual activities of some teachers or as the technological possibility on few faculties. By responding to the demands of Bologna process and taking into consideration the quality as the most valued issue, university management has decided to officially implement e-learning at the university level. At the same time, University of Zagreb became a coordinator of Tempus project EQIBELT: Education Quality Improvement by E-learning which is supported and financed by the European Commission as part of the Tempus program [5].

The members of the EQIBELT Consortium are European universities with tradition and respectable experience in the implementation of e-learning: Vienna University of Technology, Austria, University of Edinburgh, UK, Estonian E-University, Estonia, Catholic University Leuven, Belgium, University of Vienna, Austria, University of Technology Valencia, Spain, University of Porto, Portugal and Helsinki University of Technology, Finland. Croatian members are University of Zagreb, University of Rijeka, University of Dubrovnik, Croatian Ministry of Science and Education and Croatian Academic and Research Network CARNet.

This project was a first step in the process of the implementation of e-learning and it made it possible for us to gather the experiences from respectable European institutions, share their best practices and the most appropriate ways and approaches for our own purpose.

One of the objectives and expected basic outcomes of the project was to shape and establish university e-learning centres at all participating Croatian universities, as well as the centre's operational procedures, rules and service level agreements.

A number of project activities were performed to collect and analyze the experience of EU university consortium members in the field of e-learning implementation and organization of effective and efficient support for teachers and students.

The best overview of lessons learned in the field of e-learning support was given in the conclusions of the EQIBELT workshop [4]. In the following paragraphs we present the highlights of these conclusions.

☐ E-learning support centre should provide multidisciplinary support to teachers and students.

In general e-learning support centre can cover all fields of teaching and learning as well as information and communication technologies. Therefore, competences of support centre can be in: methodology and pedagogy, communication, instructional design, media development, graphic design, e-learning tools, ICT tools, testing and evaluation, project management and project coordination, team management, etc.

Experts in special skills such as: instructional design, graphic design, media development and project management can be in charge of the production of high quality educational multimedia content.

☐ It is important to recognize specific needs for support in the field of e-learning at a particular university / faculty / school.

In the process of implementation of e-learning in higher education it’s very important to give a support to the teachers and students
engaged in e-learning activities, to motivate them and challenge them to think in a new way.

For effectiveness of e-learning support centre it is necessary to recognize and analyze the specific needs of potential users (teachers and students) and provide them with qualitative support as well as explain to them the benefits of using e-learning. Established e-learning support centres should provide faculty and students with enhanced services and support related to online learning and instructional technology.

All faculty staff interested or engaged in the development of e-learning courses, students and the institution itself should be recognized as potential users of an e-learning support centre.

At the beginning, the centre should provide support to the teachers and in due time broaden its services to the student population. An institution will indirectly benefit from such a centre by improving the quality of education, efficiency, transparency and competitiveness.

Teachers' needs are usually recognized in the fields such as: technical support in the usage of ICT, providing of E-learning tools, applying ICT in teaching, providing quality assurance in teaching, multidisciplinary approach to teaching and learning, using different communication channels and tools to enhance teaching and learning, etc.

☑ Choose appropriate organizational model for support of e-learning at a particular university / faculty / school.

Organization and planning of e-learning support centre should be an integral part of an overall e-learning planning process and it should follow the general organizational model of the university / school.

Based on the conclusions from the 1st Policy Workshop in Dubrovnik on e-learning strategy and vision, e-learning in general and establishment and running of an e-learning support centre should be recognized by university and faculty management as an integral part of overall university organization and part of overall educational vision, strategy and practice.

Each of the Croatian universities, project consortium members, should find its own organizational model of e-learning support centre. Some may prefer centralized model (with a central support unit at the university level) and others will choose decentralized model (each faculty / school / department has its own support unit). [3] Based on current practices of (de)centralization and control of common university's services in a respective institution, various options are possible.

University of Rijeka has already defined its organizational model within the project "E-University". University of Dubrovnik will most probably choose centralized model and University of Zagreb, because of its size and diversification, is most likely to choose coordinated decentralized model, with a central unit at the university level. This model should ensure specialized resources and support, as well as coordination with the support groups at faculties acting as the first line support to the teachers and students.

Centres should foster project approach and team work.

☑ Define specific competences and services of e-learning support centre / group at a particular university / faculty / school.

Defining open and friendly policy of e-learning support centre is of great importance. People working in the centre should provide friendly image and try not to reject any professor with his/her request. As the first impression is very important, there should always be a way to say “yes” to all enquiries coming from teachers.

Gathering of competences and services which will enable the teachers to be efficient, effective and competitive in teaching, research and serving the society is the first important task to be fulfilled for every particular university or school.

It is important to find out which of the competences are most crucial for teachers at a particular university / school and then intensively provide support in these areas.

A centre can organize training courses for teachers on the development of new pedagogical skills and approaches needed in e-learning environment. It can provide computer or web-based instructional tools. Helpdesk within the centre can answer questions in the field of ICT and e-learning, so users will get immediate answers to their questions. At the same time, they will not have to worry about technical issues which will be covered by support centre experts.
E-learning support centre is a good place to establish and maintain university repositories of learning objects, but also the repositories of simple elements such as collections of photos, videos, animations and other multimedia objects that can be used in education and incorporated in e-learning courses.

Centres can provide technical support and services by ensuring central server and system administration for e-learning environment at university level.

One of the most important services an e-learning support centre can provide is promotion of e-learning by disseminating the information about e-learning and giving recommendations and models of usage of ICT in education.

✓ Provide real resources to an e-learning support centre to become operational and continuously effective.

In order to become operational and to provide real and sustainable support, e-learning support centres should have full time employees, as well as part time associates and other necessary resources.

It is important to appoint to e-learning support centre a number of full time employees with primary (only) task to provide support in the field of e-learning. It is impossible to provide long-term sustainable and quality support as part-time or voluntary job.

Necessary financial and technical resources should be provided to e-learning support centre for outsourcing experts in fields that are not available among the e-learning support centre staff and providing e-learning specific tools and environments that are not available at other places within a particular university / faculty. It is also important to provide resources for the promotion of e-learning and motivation and awarding teachers and students using e-learning technology.

Although the establishment process of e-learning support centre will be financed through EQIBELT project, it is of great importance to ensure, within the university plan and budget, employment of full time staff for the centre.

For sustainability of an e-learning support centre and its services it is also important to have clear organizational and financial decisions of university management and full and clear integration of the centre into university's management, organizational, financial and planning model.

✓ All existing and available resources and approaches at national, university and faculty levels should be used to support e-learning activities.

Because of the complexity and broadness of the process of implementation and support of e-learning, it is important to involve all stakeholders, all currently existing and available resources, including institutions as Srce and CARNet, as well as existing groups and experts in the field of e-learning within universities and faculties, in the synergic organizational model of supporting e-learning at each university.

Although each university should decide on its own educational strategy, approach and organizational model of using and supporting e-learning, it is a good idea to use existing resources at the national level, to exchange ideas and best practices and to discuss and agree on possible common approaches or resource pools.

4. Centralization or decentralization?

One of the key issues in shaping the organizational model for e-learning support system at the university level is choosing the level of centralization / decentralization of support services.

Starting from the fact that a similar question is usually discussed whenever the organizational models for IT/ICT services and support are on the agenda, it is not difficult to assume that two basic approaches are possible:

- **centralized model**, that is characterized by single organizational unit providing services and support and is usually most efficient from the university point of view and, in general, provides most diversified and extensive support services to the university community;
- **decentralized model**, that is characterized by multiple units with similar functionalities at different organizational units of the university (schools, faculties etc.) and is recognized as more tailored to end-user needs, but limited in scope and diversity of services and their sustainability.

As usually, in real life we are trying to use combination of these two major options and to balance advantages and disadvantages of both
options. The real challenge in this balancing process is to approach and tailor particular circumstances at a concrete university. The parameters that play important roles are the size of the university, its organization, including the level of the integration or independence of its organizational parts, pedagogical paradigms and principles, tradition and experience in common services in support, etc.

The perspective organizational model for larger universities is proposed by T. Bates as "coordinated decentralized model with a central unit at the university level" [3]. According to this model, there is a central unit (e.g. university centre for e-learning) which offers a variety of services on the university level and co-ordinates and ensure good co-operation between teachers and local support units. These local units (at faculties or large departments) would employ one or two persons providing support in using technology and e-learning to teachers.

5. E-learning Centre at the University of Zagreb

E-learning centre was established at the University of Zagreb at the beginning of the year 2007 as part of the University Computing Centre (Srce). Establishment of the E-learning centre was a decision of the Management Board of Srce, but it was highly fostered by the activities of the EQIBELT project and supported by the Rector and the Management of the University of Zagreb.

Following the Bates coordinated decentralized model with a central unit at the university level, E-learning centre in Srce is conceived as the focal point for a range of university activities in the field of e-learning.

Some of the basic objectives of the E-learning centre are:

- to provide support to teachers and students, but primarily to cooperate with and support e-learning groups and/or teams at faculties,
- to ensure a generally accessible e-learning platform (LMS/VLE),
- to ensure specific joint/centralized resources required for application of e-learning,
- to establish and support the university network of people supporting, using or promoting e-learning, and
- to promote and foster the implementation of e-learning at the University of Zagreb.

Contacts with local e-learning support groups at faculties, e-learning representatives at the faculties, academic committees, especially one for e-learning provides important feedback. Coordination among all involved institutional parties ensures the proper way of implementation of e-learning, promotes co-operations, common standards, exchange of experiences and best practices and avoids overlaps and contradictions in activities at university level.

In June 2007 E-learning Strategy of the University of Zagreb was accepted by the Senate. One of the activities within the E-learning Strategy is to ensure continuous functioning of the University e-learning centre.

The Centre also serves as the University Office for E-learning. Its purpose is monitoring and reporting on the implementation of E-learning Strategy, supporting the university network for e-learning, encouraging and coordinating production of university standards in the area of e-learning and supporting the operations of the University Commission for E-learning.

E-learning Centre provides platform for e-learning based on open source code (Moodle), enabling all teachers to move their courses toward e-learning environment. The Centre also provides technical and pedagogical support in using this platform. Very important part of the Centre’s activities is promotion of e-learning and encouragement of use of information and communication technologies in education. Also, the Centre is setting up the active network for dissemination of knowledge and experience in e-learning which will link experts, teachers and students.

Within the Centre, we try to provide multidisciplinary support and to recognize specific needs of our potential and existing users. Therefore, we communicate with the University of Zagreb faculty representatives about the ways and possibilities of implementation of e-learning at their institution levels. The Centre is very active in organizing events, workshops and lectures in order to disseminate information about e-learning and raise teacher’s awareness on advantages of e-learning and available support.
6. Conclusions

The growth of e-learning has a power to transform the way we teach and learn and to bring high quality education to everyone. As its adoption deepens and broadens so will the nature and intensity of support requirements.

To implement e-learning systematically and sustainably on university or faculty level, organized support in e-learning should be provided. In this work we present issues which should be raised in the process of organizing an e-learning centre.

It is important to reach a satisfactory balance in the level of centralization of e-learning services and support at the university level and to the specific situations at a concrete university, especially to adjust to needs of particular faculties and their teachers. The operations of E-learning support canters should be performed within the framework of university's overall strategy, operations and pedagogical paradigms.

7. References