Identifying and Promoting Best Practice in Virtual Campuses and E-Learning

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Abstract:
This roundtable reports on the work of a European Commission DG Education and Culture co-financed project 'PBP-VC Promoting Best Practice in Virtual Campuses' which is aimed at providing a deeper understanding of the key issues and success factors underlying the implementation of virtual campuses. A tentative model of issues underpinning best practice in virtual campuses which covers organisational, pedagogical, technological and student-related issues derived from an investigation into existing EACEA co-financed virtual campus initiatives within Europe will be outlined. The project is working towards developing a practical framework to help guide the process of creating best practice in virtual campuses, as well as raising awareness of issues and approaches to creating sustainable virtual campuses.

Introduction

At a European Commission workshop held in Brussels in 2005 to explore the issues associated with virtual campuses, the need for a critical review of existing projects in this area was identified (EACEA, 2005). The workshop highlighted a range of issues that affected the successful implementation and deployment of virtual campuses and their long term sustainability. It was felt that virtual campuses generally have very little contact and interoperability with each other due to:

- a general lack of awareness about other virtual campuses;
- a lack of self-promotion/dissemination by virtual campuses;
- cross-cultural and linguistic barriers to communication.

The two main recommendations were that:

- there should be support for the undertaking of a systematic critical review of existing virtual campus projects and the sharing of know-how;
- there should be the support for project proposals which demonstrate the successful expansion of virtual campuses, supporting the dissemination of replicable solutions for establishing virtual campuses and establishing a community of decision makers involved in setting up virtual campuses.

It was with these recommendations in mind that the Promoting Best Practice in Virtual Campuses (PBP-VC) project was formed and a project proposal submitted to the 2006 EACEA eLearning virtual campuses call. The PBP-VC project is a two year EACEA co-financed project aimed at providing:

- a deeper understanding of the key issues and critical success factors underlying the implementation of virtual campuses;
- a published practical framework to help guide the process of creating best practice in virtual campuses;

- published examples of best practice, case studies and use case scenarios;
- raised awareness of the issues and approaches to creating successful and sustainable virtual campuses;
- raised awareness of how institutional transformation can be brought about by the development and application of new models of teaching and learning for virtual campuses;
- raised awareness of how the successful implementation of virtual campuses contributes to the Bologna process and enhances the curricula and the quality of courses.

The PBP-VC project involves working with key stakeholders throughout the European Union in order to investigate best practice in virtual campuses. The findings from PBP-VC are aimed at helping institutions and other key stakeholders understand the issues surrounding virtual campus projects and the conditions necessary to help them progress to a strategic level and thereby achieve institutional transformation. If virtual campuses are to be sustainable, this presents a number of key economic, social, pedagogic and technological challenges that learning providers must address. Specific issues such as ensuring that virtual campus e-learning methods provide for cost effective and sustainable learning are vital to ensuring long term success. Much of the relevant data, results, conclusions and recommendations in relation to best practice gathered from numerous virtual campus projects is scattered across numerous publications held within a wide range of individual organisations, and is not easily accessible to the wider community. In addition, there is a vast number of websites and portals relating to individual projects with little cross-reference between them. As a result, the impact of important lessons gained from these projects and initiatives can be seriously diminished due to a lack of valorisation of previous and existing work.

There is an urgent need for an in-depth, systematic critical review of previous and existing best practice in relation to virtual campuses in relation to how new models of teaching and learning contribute to institutional transformation. Such a review needs to be undertaken from the perspective of the different stakeholders in order to provide a consolidated information resource that can help decision-makers in both the public and private sector formulate clear recommendations for future development, as well as consider the important issue of how to address key institutional transformation issues in a strategic and sustainable way.

Towards the Development of a Best Practice Framework for Virtual Campuses

As part of the initial work carried out by the PBP-VC project, a literature-based investigation was conducted into the 2004, 2005 and 2006 EACEA co-financed virtual campus projects. The investigation involved looking at papers, reports and web-based content relating to the projects. In addition, several face-to-face knowledge elicitation sessions took place with a range of stakeholders, researchers and developers associated with EACEA virtual campus projects. The participants were selected because of their detailed knowledge, experience and understanding of best practice within the context of virtual campuses. The purpose of the sessions were to explore the more qualitative and interpretive aspects of best practice within the context of virtual campuses by exploring the viewpoints of different stakeholders for example, project coordinator, external evaluator, learning technologies expert. The interpretive based research was conducted using a form of systems map or 'mind map' which has been successfully used as an important first stage of a subjective approach to the process of eliciting views and opinions about some area of interest prior to the development of a computer-based information system. The subjective approach is known as the Appreciative Inquiry Method (West, 1995; West and Stansfield, 1999; West and Thomas, 2005) and its developers claim that it is an effective way of enabling interpretive inquiry. The use of the systems map or 'mind map' technique proved to be a highly successful means of eliciting important qualitative knowledge from the stakeholders, virtual campus researchers and decision makers. As a result of the interpretive based knowledge elicitation sessions, an initial model of issues underpinning best practice was developed which is shown in Figure 1.

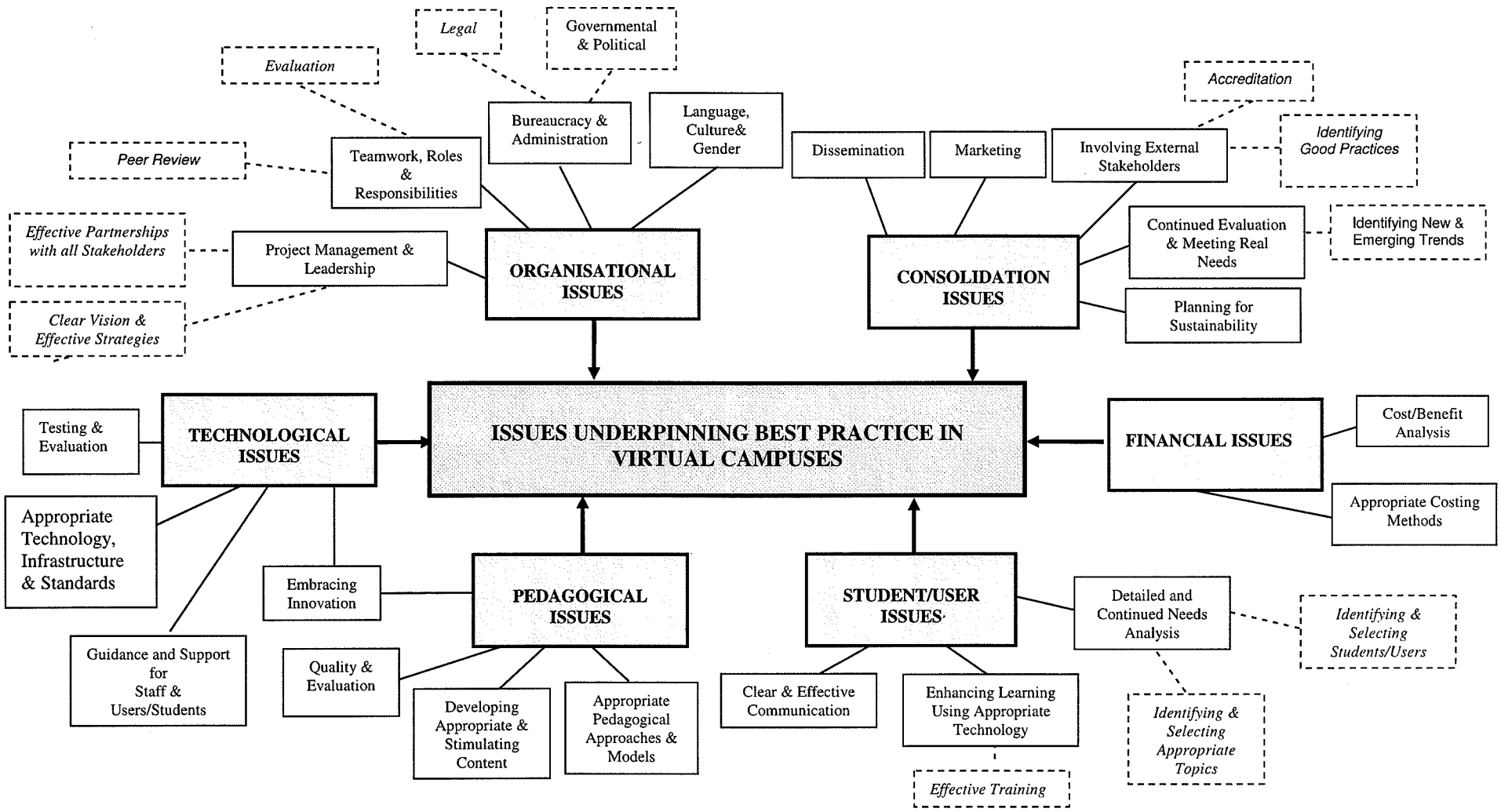

Figure 1: A tentative model of the key issues underpinning best practice in virtual campuses

Organisational Issues

In many ways these issues can often be the most difficult to address because they comprise many human/'soft' elements which cannot be easily quantified or addressed using traditional organisational and management approaches and techniques. Such issues include bureaucracy and administration that can differ markedly among virtual campus partners and cause significant problems in attempting to provide seamless, coherent educational experiences and exit awards, particularly when a course is delivered between numerous partners across international boundaries and cultures. Also related to this issue is differing government, political and legal systems which can affect important concerns such as copyright in terms of publishing and the ownership of materials and courses that have been developed. The problem of language and culture was highlighted by some virtual campus projects and initiatives in relation to many of the courses having to be delivered in English which could be the second or third language of some of the staff and students. In addition, certain institutions and subject areas may have a cultural resistance to e-learning and the concept of virtual campuses which may lead to problems in the uptake and successful completion of courses. Also included within organisational issues are the problems relating to effective teamwork and agreeing on roles and responsibilities and ensuring that all partners work well together in achieving the outcomes of the virtual campus project. The adverse affect of this issue can be reduced in situations where the project partners have worked with each other on previous projects and initiatives in which effective teamwork has already been established within the partnership.

In relation to project management, many participants highlighted the importance of having an effective leader for a virtual campus project with a clear vision, effective project management skills and strong leadership skills. This is particularly important when interacting with several international partners where there may be a range of different cultures and attitudes in relation to how people work and learn. In addition, many participants highlighted the importance of not only leading the project team but also establishing effective partnerships with internal and external stakeholders associated with the virtual campus throughout the project lifecycle.

Technological Issues

The issues of effectively utilising and harnessing technology can present a number of problems both in terms of getting the technology infrastructure set up, as well as overcoming peoples' attitudes to the technology. This issue can be problematical in situations where it might be difficult for the partners to initially agree on the adoption of common platforms and software, particularly if certain institutions adopt different Virtual Learning Environments. Such issues can also be affected by different cultural attitudes in relation to the role of technology in enhancing learning. Many of the virtual campus projects and initiatives highlighted the importance of providing sufficient guidance and support to both staff and students in the use of the virtual campus platforms and technologies. The attitudinal and cultural problems associated with technology were highlighted by a number of virtual campus projects who noted that it was often staff who appeared to have the greatest difficulties in learning to use new technologies, which was often compounded by the negative attitudes of some staff towards the burden of having to learn new skills and master new technologies. Also identified as being an important issue was the need to frequently evaluate and monitor the use of the virtual campus platforms to ensure that staff and students were using them in the most effective way. In addition, some virtual campus projects noted that through evaluation they were able to determine which were the most popular virtual campus functions which sometimes were not always the ones that the developers might have intended.

Pedagogical Issues

The choice of appropriate pedagogical models and approaches underpinning virtual campuses is of great importance since it has a big impact on the educational experience of the students, in which problems in this area can affect issues relating to student retention and negative attitudes towards e-learning and a lack of active participation. Cultural factors among different international partners can play a key role in determining the extent to which pedagogical models and approaches adopted are successful. Therefore, it is vital that the pedagogy underpinning a virtual campus supports and enhances the students' experience in learning a particular subject area. Providing proper guidance for students can be an important factor in underpinning success and retention. A number of virtual campus projects reported that many of their students felt that once they had received appropriate support and guidance they

felt more positive towards their studies. Some virtual campus projects identified peer support among students being part of good practice since students were able to help each other in overcoming certain problems which gave them a greater sense of ownership and participation in the virtual campus project. Also underpinning pedagogical issues is ensuring the quality of the teaching materials developed and evaluating them on a regular basis and in particular addressing specific student needs in an effective way.

Student/User Issues

The importance of focusing on the needs and learning experiences of the student was highlighted by all the participants who took part in the initial knowledge elicitation sessions. Important elements associated with these issues are the need to have in place clear and effective communication strategies in order to be able to interact with students at different levels, whether using formal or informal mechanisms. In addition, the importance of conducting detailed and continued needs analysis with students was highlighted as being a key action underpinning best practice which helped in identifying appropriate topics and students that took into account the different culture, language and gender composition of a particular virtual campus project.

Financial Issues

Whilst all the projects received significant funding from the EACEA to enable them to develop their virtual campuses and run them during the course of the funding period, issues relating to finance are important, particularly if a virtual campus project is to be encouraged to run and become sustainable beyond the EACEA funding period. To enable this to take place appropriate costing methods and effective cost/benefit analysis is vital if a virtual campus is to become sustainable. Therefore, appropriate pedagogical approaches and models have to be adopted that attract students to register on virtual campus courses and also attract funding in terms of fees from students and institutions. Very little work has been conducted into determining the true costs and benefits of providing e-learning courses and running a virtual campus, particularly in comparison to more traditional face-to-face teaching. In relation to the virtual campus project investigated, little attention appeared to be been given to exploring whether they could be self funding and financially sustainable once the initial period of external funding had expired and thus whether the model and approach adopted for the development of the virtual campus could be financially viable.

Consolidation Issues

It is important that the benefits achieved from the development and running of a virtual campus are not lost once the formal EACEA funding period has elapsed. Therefore, consolidation issues reflect the kind of activities that can help achieve this such as developing adequate marketing and dissemination plans targeted at groups of key stakeholders such as students, government bodies and companies. With regard to dissemination, during the literature-based investigations conducted by the PBP-VC project, it was often difficult to find detailed information in the form of reports and papers on specific virtual campus projects and initiatives. This highlights the need for projects and initiatives to make reports and findings more freely available to the wider e-learning and virtual campus community, particularly in relation to reflecting upon the results and outputs of projects and initiatives, and identifying best practice. A number of virtual campus projects and initiatives highlighted the need to gain accreditation from professional bodies relating to their particular subject area in order to attract fee paying students to their courses, as well as gain increased standing within their professional community. In terms of planning for sustainability, the importance of sustainability was identified by all the participants as being key to achieving the long term aims and objectives of a virtual campus project. Sustainability was viewed as being a key goal and activity that should be considered throughout the lifecycle of a virtual campus project, particularly at the planning stage, rather than just being an area for consideration once a virtual campus had been implemented.

Conclusions

If virtual campus and e-learning initiatives are to be successfully developed and implemented within diverse environments, then a range of key organisational, technological, pedagogical and student-related issues need to be addressed. Where virtual campus-related courses operate across several international boundaries then there are important cultural factors that need to be recognised in relation to the diversity of students undertaking the course, staff and tutors running the course, as well as the different bureaucracies within which each partner institution must operate. This paper has presented some of the key issues underpinning best practice in virtual campuses. Over the next twelve months, a detailed framework for promoting best practice will be developed, as well as best practice case studies and use-case scenarios. The PBP-VC is in the process of establishing a Virtual Campus Special Interest Group comprising researchers, developers, decision-makers and other stakeholders at both European and global levels which is aimed at providing a forum through which key issues relating to the development of virtual campuses can be explored. The PBP-VC project team are confident that the results from their work will generate interesting debate among the virtual campus community in raising key issues which underpin the successful implementation of learning solutions within diverse environments, as well as contribute to a better understanding of best practice and sustainability.

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