ENHANCING STUDENT MOBILITY IN A DIGITAL WORLD

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Recent developments in European Higher Education

The past 10 years have seen substantial changes in many aspects of European Higher Education, both as a consequence of policy and practice decisions by the member states of the EU itself and also as a result of pressures and developments from beyond Europe.

In the first group of ‘change drivers’ we can identify the political instrumentalist agenda for change (‘modernisation’) of European HE as a means to ensure that it adequately supports the vision for a ‘knowledge economy’ able to compete at the highest levels in the global economy. Resulting from this vision have come various actions and programmes designed to achieve this goal, through harmonisation of the diversity of degree structures of the individual states (‘Bologna Process’); establishment of a common Higher Education Area, including a Research Area to coordinate developments and support; creation of a mechanism to facilitate mobility of students and lifelong learners through a transparent educational credit scheme (ECTS), and a Supplement to the degree or diploma that makes clear the knowledge and competences attained in the graduate’s curriculum (Diploma Supplement). The importance of mobility of learners and workers in the expanding Europe as a means to ensure that best value is
gained from their skills and for their intrinsic personal development has been repeatedly emphasised, and support programmes have been put in place and strengthened to maximise uptake and minimise disincentives and barriers. In higher education the most important of these actions is the Socrates Erasmus Programme begun in 1987. Although the Erasmus Programme is a very important support for exchange students, and has become a ‘shorthand’ name to describe this type of short-duration, credit-bearing study visit by a student to a university in another country within an existing degree programme, it is important to remember that many such visits take place by students outside the Erasmus Programme, funded by themselves or other agencies (so-called ‘freemovers’ [1]).

Recently, the recognition that there will be limits to the extent that these physical mobility measures can overcome some barriers to student mobility, for example family commitments, combined study and employment, especially amongst the increasing percentage of older students, has resulted in an emphasis also on ‘virtual mobility’ (VM). The EC eLeaing Programme states: “Development of existing instruments, in particular those concerning virtual mobility as a complement and reinforcement for physical mobility (virtual Erasmus); recognition and validation schemes (based on ECTS); information and guidance services, and any other synergies between virtual and traditional models.”

VM takes advantage of developments in e-learning to enable students to take courses or modules at another university as part of the degree programme in their ‘base’ university. Although presently limited in scope as experience of such education is explored by universities and their teaching staff as well as by students, it offers a route to expansion of international education in
the near future. Most work is currently at Masters degree level, and the Erasmus Mundus Programme directly supports some of this developmental activity.

Beyond Europe internationalisation of higher education is also high on the agenda of all developed countries to gain income and expand influence, and of importance to developing countries as a route to enhancing national skills and knowledge. Commercial education providers are filling gaps in provision by traditional universities, and due to their flexibility and agility are often at the leading edge of innovation, especially in distance education. Cheaper world travel has enabled more independent student mobility in addition to the support schemes offered by national governments, and as a consequence the number of students in Europe who hail from beyond its boundaries has risen substantially, and come to represent a vital income stream for some universities and countries. Such students have choices in where to study and so high quality educational and support provision is essential to maintain recruitment.

An excellent introduction to all these topics, plus links to the EU sources can be found at the Europe Unit website at: http://www.europeunit.ac.uk/home/index.cfm

**Digital technologies in universities**

One of the most obvious changes in higher education to an outside observer taking a snapshot view of universities 20 years ago and today would be the pervasiveness of information and communications technology (ICT). Clearly some universities have embraced ICT more enthusiastically than others, but even in universities with low central and systematic management of ICT,
individual faculties and departments have adopted technology in its various forms, especially email and websites. All recent surveys agree that uptake is widespread [2,3,4]. These developments are global and reflect wider changes in the permeation of technology throughout almost all aspect of society and everyday life. Computers of various types are everywhere, and staff and students spend much of their time working and studying with and through them, as well as using them for social communications and information gathering. Mobile phones are in extensive use, and many now interface with the internet, bridging the gaps between the fixed or laptop PC, the network and the mobile user.

Summarising the major uses of ICT in universities and colleges, we see these types of developments becoming more common, and in some cases essentially ubiquitous:

- Learning and teaching with technology (e-learning);
- Digital libraries (e-journals, e-books, online databases & help);
- Integration of digital databases holding staff, student and course records;
- Portals as single gateways to digital resources;
- Email as a major or the dominant communications channel;
- Single/reduced sign-on to authenticated systems (eg to portal, email, library);
- Secure off-campus access to restricted resources (eg via VPN, proxy);
- Websites as a major or the dominant method of information provision.
The majority of students still study in a campus setting, although now with such a significant level of technology-supported education that the expression ‘blended learning’ probably describes the experiences of the majority. However, the ability to release education from the constraints of the campus and the timetable through the use of technology, whilst maintaining communications as well as distribution of information and learning materials, has enabled increased development of distance education by single courses and degree programmes as well as whole universities. These experiences are likely to feed back into and re-shape mainstream on-campus education overtime.

**The digital student 2007**

Uptake of technology by students, especially young adults, has outstripped that of almost all European universities, and ICT is systematically used by them as an integral part of studying (and socialising) irrespective of the use made of it by their university. Recent studies show that there is substantial commonality in uptake of, and attitudes to, ICT by higher education students in developed countries [2,5,6]. We can summarise the young adult student in Europe in 2007 as a user of:

- Laptop/PC/internet frequently & from a variety of locations;
- Lots of sources of digital information, possibly in preference to physical sources;
- Chat, email, sms, blog, social network software (eg friendster, myspace, youtube);
- Mobile phone, usually internet-capable – less commonly ‘smart phone’ or PDA.
Care must be taken not to generalise this profile too far. It is clear that older students (who make up an increasing fraction of the university population) are less technology-confident or exploratory, and some young adults are relatively technophobic or technologically conservative. Despite this caveat, we know that students are online for substantial periods and would also like universities to provide high quality information online. They value reliability and predictability in this respect, and would like their interactions with universities to be fast and seamless, that is without the need to interact with several different agencies and departments to achieve a solution to their ‘request’. In practice, as most of us are aware from our experiences in dealing with our own and other universities, higher education has some way to go to achieve these goals. In the light of the importance being placed on virtual mobility for European students, and the need to understand the experiences of current students in their use of ICT in their studies, we and others have taken the opportunity of EC funding to explore some aspects of this area.

**The VICTORIOUS Project – physical mobility as a proxy for virtual mobility**

As noted above, at present there is very limited opportunity for experiencing education at another university through virtual mobility within European traditional universities. This is especially true at first degree level where most student exchange takes place. In addition, the special case nature of the online courses offered so far tend to be the result of special efforts by the faculty or department, and by the university.

The greatly increased reliance on digital technologies by universities and students affects all on-campus, traditional study
students. The library, learning and teaching, communications with teachers and administrator have increasingly digital components, and in universities which have progressed furthest along this ‘digital path’ electronic methods may have surpassed traditional methods in some areas of work. Many students now rely on a digital identity to enable them to access materials and services, make heavy use of IT facilities on campus and from home or residence, use email for communication with the university etc. This use of ICT is not uniform across higher education, with some universities having made greater progress than others, and the introduction of services and facilities is strongly influenced by local finances, culture and needs. Thus whilst at one university students may never have used a portal or a web interface to access their own record on the student system, select courses for the next semester or access reading lists and lecture notes, at another all of this may be done electronically and taken for granted. As a consequence, students transferring between universities may find marked differences in expectations of them, and for the universities it raises challenges for some to give visiting students fast and automatic digital rights/routes/support. Handcrafted solutions will work for small numbers of visitors but break down for larger numbers, and suffer from some severe drawbacks if they are too slow. In the past a student could physically go to lectures and tutorials without having completed registration or gained an ID, but she cannot do this in the digital realm due to authentication barriers. If we do not (or cannot) automate and simplify our services to traditional visiting students, virtual mobility on anything other than a very small scale will be difficult to implement.

In the VICTORIOUS Project we explored the experiences of students and universities in their use of digital services and facilities
before, during and after a physical exchange visit to see how well they both were prepared for the demands that substantial virtual mobility would bring. We did this by interviews, surveys, investigations via the internet and explorations of the provision and intentions at our own universities.

**Enhancing student mobility in a digital world**

It is easy to offer up an unbalanced view of the experiences of students in their visits to other universities by reporting an excess of problems over the successes, and so although there clearly were for many students technology-related problems of various kinds, a balanced summary is appropriate at the outset. Most universities were substantial users and providers of good ICT facilities and support, having made great progress over the past few years in moving from complete reliance on traditional methods involving paper forms, face-to-face interactions, physical visits during opening hours etc to provision of electronic methods of business and academic processes. Students valued these efforts and, although for some moving from lo-tech to hi-tech education was a kind of ‘culture shock’, generally wished to see them become widespread alongside high quality personal interactions. They did not see these as mutually exclusive. The great majority of students enjoyed their visit to another university in a different country, learned self-reliance, made local friends etc, even when some aspects could have been managed better.

**The student perspective**

Some key messages emerged from the surveys and interviews that we carried out with students who were currently making or had been on study visits. These were that in general information in host
universities for visiting students was generally not well organised or presented, and was often only in the local language and so rather inaccessible to those who had not yet been able to take language courses (often these courses were just before or in the early phase of a visit). Technical information about IT facilities and services were problematic, especially for those with lower IT skills and knowledge. There was too little focus on visiting students to enable them to find information of most relevance to them. Course choice was often hard to navigate. Home universities were also often less than effective in preparing students for study in another country, and especially the ICT aspects of this, for even though many students had travelled and used the internet this is different to studying away and for a prolonged period. The variation in level of ICT facilities and delays in getting access to them due to slow processing of IDs was a common negative comment. Students in their home university tend to have a network of peers for support, but may lose this when on a visit to another university, and are therefore less well supported than local students overall.

In general students showed great resourcefulness in overcoming barriers, using internet cafes etc to gain access to the internet if the university provision was poor or slow, and looking back to their home university online services (eg library) if the local provision was significantly less good than they were accustomed to. They would resort to such methods as sharing passwords etc to ensure that they could circumvent problems of unresponsiveness of university services.
The university perspective

It was clear that some universities provided very well for visiting students, making contact at a very early stage, giving them IDs, login/passwords, access to services well in advance. Interestingly international offices appeared to be rather unaware of the challenges of ICT for visiting students, leaving this area to the IT services, library etc., rather than taking the lead. The other services tended to have little awareness of visiting student issues, feeling that their provision of information and services was adequate for all students. An example of this is in the area of induction, which is often targeted at newly-arrived local students and may not be offered or considered for those who arrive during a degree programme or may run infrequently and be too late for short-term visitors. It would appear that libraries not uncommonly have their own ID and authentication management, and these are often based upon physical presence of students to register and may not be very responsive to need.

Incoming students were generally better served than outgoing students – there was a degree of ‘out of sight, out of mind’ in operation, particularly for the support services of the university such as library, IT and student records. Preparation of students prior to visits was generally not well-developed, with little information about study away from the university, and this despite the emergence of distance education on many campuses. However, awareness of the problem was clearly rising, many universities were beginning to experiment with online support to students before they arrived and after they left, and the issues of language support plus targeted information in more than one language were being addressed.
The sample of universities we surveyed had mostly either started some exploratory work in the area of virtual mobility or were planning for this, and these were also the universities with good online provision to students of all types already. We have very limited knowledge of the intentions of those universities that still had some way to go in making digital services routine and widespread.

**Some recommendations for action**

The VICTORIOUS Project developed a set of recommendations for the major stakeholders in the student exchange process. For universities these included providing good, structured, up-to-date info which is quite straightforward to carry out; making easier enrolment and registration, ideally pre-arrival; offering specific training and support for use of digital services and collaborating across internal bureaucratic ‘borders’ between services to ensure a joined-up approach and sharing of knowledge.

For students and their associations we recommended more thinking about the planning of visits or virtual participation, and collecting and sharing experiences and solutions locally and internationally and making local student associations more aware of the needs of visiting students.

For the European, national & regional agencies, it would be a great help to intending exchange students if there were a single search option for course/programme information; a single digital identity system for students (and staff) so that they could be more easily registered at their host university, coupled with easier Internet access across Europe (eg expansion of EduROAM), and finally help to the HE sector to remove current digital barriers.
Taking the next steps - the VM-BASE Project

We have been working to take forward some of the recommendations of the VICTORIOUS Project through another EC-funded project called VM-BASE which is focussed on online support for students before and after a visit, either physical or virtual. We are developing a set of materials and resources:

- Orientation guidelines for students;
- Codes of good practice in designing pre-selection tests for students;
- Blueprint for preliminary courses for students preparing for a physical Erasmus exchange;
- Guidelines on assessment and evaluation tools;
- A study on a Virtual Alumni Association for Erasmus students;
- A manual on ‘good-practices in e-coaching’;
- A manual with validated procedures and recommendations for blended mobility activities at institutional, network and European level.

These will be available towards the end of 2008.

Conclusions

As student physical and virtual mobility increases across Europe it will be essential that all the stakeholders in the process (students, student associations, universities, education agencies and governments) solve the outstanding and emerging problems that exist to a smooth and effective experience for all. During this SUMIT seminar we are exploring some of the context of student
mobility, with a particular emphasis on expanded Europe, and seeking to share and disseminate experience and good practice from some of the key players in the student mobility arena. With goodwill and well-focussed efforts I believe that we can make substantial progress in the coming years.

References

1. EURO STUDENT DATA, HTTP://WWW.EURO STUDENT. EU/ ABT 2/ AB21/ EURO STUDENT/ REPORT 2005/
2. SEUSISS REPORT (2001), HTTP://WWW.INTERMEDIA.UIB. NO/SEUSISS/ INDEX. HTML
3. OBSERVATORY ON BORDERLESS HIGHER EDUCATION, HTTP://WWW.OBHE.AC. UK/RESOURCES/SURVEYS. HTML
4. UCISA STATISTICS 2005, HTTP://WWW. UCISA. AC. UK/ACTIVITIES/ STATS/ STATS05.HTM
5. EDUC A USE SURVEY OF UNDERGRADUATE STUDENTS & ICT 2007, HTTP://CONNECT.EDUCAUSE.EDU/LIBRARY/ABSTRACT/THEEC ARSTUDYOFUNDERG/45075
6. SPOTPLUS REPORT 2003, HTTP://WWW.SPOTPLUS.ODL.ORG/

Acknowledgements

This chapter is based significantly on the findings and discussions that took place within two EC-funded projects, VICTORIOUS (www.victorious-project.org) and VM-BASE (http://www.europace.org/rdvmbase.php). I wish to acknowledge the contribution of the members of these projects to my thinking in the area of student mobility and digital/virtual mobility.