Virtual mobility: the new challenge for higher and continuing education institutions

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VIRTUAL MOBILITY AND LIFELONG LEARNING: THE NEW CHALLENGE FOR HIGHER AND CONTINUING EDUCATION INSTITUTIONS

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Introduction

European universities are faced with important issues, in particular an ageing population, a decrease in the number of learners per institution, globalization and competition. At the same time, physical mobility represents one of the most successful projects of the European Union. Since physical mobility is rather demanding in financial and organizational terms, only 4% of learners from European higher education institutions can benefit from the programme today. The objective of the European Commission is to reach 20% in 2020 (European Commission, 2011a), but even with an increase of 16%, a minority of learners will be concerned. In parallel, employers promote stays abroad during studies. Erasmus programmes are offered only to BA/MA/PhD students and not to Continuing Education learners, but in a lifelong learning (LLL) perspective, mobility should also be available to adult and senior learners. As a matter of fact, European higher education and continuing education institutions have to develop their offers, taking into account the paradigm of an ageing population and the need for professional reconversions or specialisations. The case of the University of Geneva's continuing education courses is discussed – with a majority offered in a face-to-face format – in terms of the age of the different audiences and the motivation of the seniors for following a continuing education course. Starting from there we move to the European context in terms of LLL and virtual mobility. In accordance with the literature, we define virtual mobility in reference to physical mobility. In the rest of the paper we discuss concrete frameworks that could support the development of virtual mobility. Scenarios, taken from the VIRQUAL - Virtual Mobility and European Qualification Framework – European project (VIRQUAL website, 2010), show how it could all work and fit together, across countries, across generations and across contexts. Finally we discuss the different European projects dealing with virtual mobility and the perspectives researched.

Local and European contexts

The University of Geneva offers face-to-face, blended and distant continuing education programmes to a wide international population in a lifelong learning perspective. In 2007, among the award-bearing courses (between 10 and 90 ECTS credits), 24% of participants were between 20 and 30 years old, 42% between 31 and 40, 26% between 41 and 50, 7% between 51 and 60 and 1% above 60 (de Franchi Mandscheff & Wyss Kubler, 2007-2008). The younger generation is predominant, but the fact that older people also engage in such demanding programmes is a sign of the increasing need for certified learning at all ages. For shorter and uncertified training, such as conference cycles on topics of general interest, the percentage of retired people is higher because they have registered out of personal interest. Crossing age and types of courses showed that elderly people tend to invest in programmes that are lighter in terms of the number of ECTS credits. No one over 60 attended the heaviest programmes leading to a Master of Advanced Studies (minimum of 60 ECTS credits).

Improvements in the health of 65-80 year-olds have enhanced their quality of life and opened up possibilities for learning as time becomes more available than it was during their professional lives. A study of seniors' participation in continuing education courses at the University of Geneva in 2008 (Morante, 2008) showed that the aim of learning for this population is more fundamental than the mere acquisition of knowledge. First, learning facilitates integration and insertion in a given context. It addresses the need to be "part of …". Second, learning is an important factor in constructing an identity and a sense of self-esteem. These two aspects of learning address a major issue for seniors who have reached this new stage of their lives. Learning allows then to "maintain

intellectual faculties and social contacts". Learning is not a constraint, but a real necessity. In addition, all courses using ICTs foster learners' integration in our increasingly digital society and provide further opportunities for intergenerational communication through Internet contact among relatives and friends. Hence the important role of universities in developing policies and specific offers intended for all generations.

These data from continuing education courses offered at the University of Geneva show that motivation for taking a course varies from just-in-time professional needs to more sustained professional development, personal interest and the need to be part of a learning community. Reasons for taking a continuing education course change according to the age of the audience. The issue of age leads us to consider the European context and the challenges confronting European institutions in terms of how they perceive lifelong learning and virtual mobility as potential solutions to these challenges.

As mentioned in the introduction, Europe is facing significant challenges including, among others, an ageing population, a decrease in the number of learners per institution, globalization and competition. Institutions are working to comply with the Bologna 2020 communiqué (Conference of European Ministers Responsible for Higher Education, 2009), which insists that European higher education can only succeed if it "maximises the talents and capacities of all its citizens and fully engages in lifelong learning as well as in widening participation in higher education" (p. 1), points that are particularly relevant to virtual mobility and lifelong learning. In addressing these concerns, universities should consider all generations in their course offerings, especially those in the continuing education sector. Virtual mobility is one way of reaching certain specific audiences, such as foreigners, professionals at their workplace and otherwise less mobile audiences. In addition to reaching a diversity of audiences, virtual mobility targets the need for "just-in-time" training. "Student-centred learning and mobility will help students develop the competences they need in a changing labour market and will empower them to become active and responsible citizens" (p.1). Thus, addressing professional needs and preparing learners to remain active and competitive on the market are also included as important educational goals. Finally, "the Bologna Process is leading to greater compatibility and comparability of the systems of higher education and is making it easier for learners to be mobile and for institutions to attract students and scholars from other continents" (p.2). Transparency, readability and transferability of offerings are prerequisites to virtual mobility. With this in mind, we turn to a definition of virtual mobility and then consider which frameworks could be used to develop it sustainably.

What is virtual mobility?

Virtual mobility is defined in comparison to physical mobility in order to refer to known concepts and practices. The European Commission defines it as follows: "A complement; or as a substitute to physical mobility (Erasmus or similar) in addition to a type of independent mobility which builds on the specific potentials of on-line learning and network communication. It may prepare and extend physical mobility, and/or offer new opportunities for students/academic staff who are unwilling or unable to take advantage of physical mobility. It involves the development of virtual mobility for academic staff. It means that full academic recognition is given to the students for studies and courses based on agreements for the evaluation, validation and recognition of acquired competences via virtual mobility. In this context, cooperation agreements are key to ensuring sustainable mobility schemes." (European Commission, 2008).

It has already been documented that physical mobility is rewarding in many aspects besides knowledge acquisition. Physical mobility fosters the development of transversal skills, such as other languages, intercultural skills, autonomy, and self-awareness. All these skills are essential to the education of European citizens who really understand what it means to be part of Europe. Furthermore, many employers value stays abroad: physical mobility thus increases a student's possibilities for future employment. (European Commission, 2012).

Like physical mobility, virtual mobility is certainly rewarding in many ways over and above pure knowledge acquisition. Of course there is the immediate benefit of digital literacy and the experience of learning with technology. The acquisition of this skill involves discovering digital learning environments and related pedagogical practices and can also promote familiarity with mobile learning through mobile devices like tablets or smartphones. More traditional skills related to human values are also developed within digital environments. Distributed communities of practice (Wenger et al., 2011), networked learning (Dirckinck-Holmfeld et al., 2009;

Goodyear et al., 2004), transcultural learning (Nisbett & Masuda, 2003) and collaborative learning (Dillenbourg & Fischer, 2007; Rienties et al., 2009) are the most well-known additional outcomes that can be fostered by virtual mobility. These are a source of high added value and can contribute to international citizenship in the same way that Erasmus programmes contribute to European citizenship. Technology is a determining factor in the shift from standardised to customised learning. Distance learning through technology has been around for more than 30 years. An important body of literature on educational technologies, networked learning and social media is now available and can be explored to find optimal scenarios, pedagogies and tools for many different educational settings and compatible with almost any virtual mobility learning pattern.

The VIRQUAL project: Virtual Mobility and the European Qualification Framework

This section outlines the VIRQUAL project and the framework it is based upon. The project "proposes to help educational and training institutions to achieve Virtual Mobility and to guarantee EQF implementation through e-learning, aiming at finding specific obstacles in institutions and proposing concrete and innovative solutions" (VIRQUAL, 2010).

The following instruments have been considered to constitute a framework to develop virtual mobility because they are common denominators of European universities and are recognised as a solid basis for exchanges:

1) The European Qualifications Framework (EQF) and the respective National Qualifications Frameworks (NQF). The EQF is a common European reference system that links different countries' national qualifications systems and frameworks together. In practice, it functions as a translation device, making qualifications more readable. It allows courses to be situated within a common reference table consisting of eight levels. This is intended to help learners and workers move between countries, change jobs or move between educational institutions at home. It will also help institutions position their training offers.

2) Using learning outcomes to define curricula and courses. Instead of defining courses and curricula in a teacher-centred manner, this approach shifts to a learner-centred one. The aim is thus to describe the skills and knowledge learners will have developed by the end of the course or the curricula. "Learning outcomes are statements of what learners are expected to know, understand and/or be able to demonstrate after completion of a process of learning." (Kennedy et al., p. 5)

3) Evaluation of learning outcomes using the European Credit Transfer System (ECTS) or the European Credit System for Vocational Education and Training (ECVET). With the Bologna process, ECTS has been widely used across European countries. In practice though there is no consensus on the exact workload one ECTS credit represents and what it can contain (Wagenaar, 2003). Thus, even though in theory ECTS should have enhanced transparency between European institutions, in practice this is not yet the case. Yet this is the translation device that VIRQUAL has explored because, in theory, "ECTS makes teaching and learning in higher education more transparent across Europe and facilitates the recognition of all studies. The system allows for the transfer of learning experiences between different institutions, greater student mobility and more flexible routes to gain degrees. It also aids curriculum design and quality assurance." (European Commission, 2011b) Yet, at the end of the VIRQUAL project, the evaluation translation device from the vocational world seems to perform much better, because it is based on learning outcomes, and that is why this track has also been considered. "ECVET is a European system of accumulation (capitalisation) and transfer of credits designed for vocational education and training in Europe. It enables the attesting and recording of the learning achievement/learning outcomes of an individual engaged in a learning pathway leading to a qualification, a vocational diploma or certificate. It enables the documentation, validation and recognition of achieved learning outcomes acquired abroad, in both formal VET or in non-formal contexts. It is centred on the individual, based on the validation and the accumulation of his/her learning outcomes, defined in terms of the knowledge, skills and competences necessary for achieving a qualification." (European Commission, 2005)

To make the project's outcomes practical and real-life oriented, three profiles of potential users of virtual mobility have been identified: learners, teachers and institutions or stakeholders. For all three profiles, virtual mobility represents a challenge. As a matter of fact, in this globalised multicultural world where technology occupies an increasingly important place, teachers are challenged in terms of professional development. They have to

become familiar with the use of technology and have to learn how to design courses for on-line or blended contexts. Virtual mobility is also a challenge for teachers because it involves teaching to a potential multicultural audience (Parrish & Linder-VanBerschot, 2010; Young, 2008; Kimball, 2002). For learners, it is a challenge to take virtual courses and complete them. It has been attested that the dropout rate for on-line courses is as high as 70% and above for adult learners (Tyler-Smith, 2006). As this author argues, this is due to several factors, namely "that attrition among mature adult on-line learners is affected by sociological, psychological, technical and cognitive factors, critical features of which are the notions of cognitive load and locus of control." For higher education learners, this rate is slightly lower but still around 50% to 60% (Berge & Huang, 2004). It is also challenging to learn in a multicultural environment and collaborate with completely different learning cultures and intellectual traditions (Nisbett, 2003). For higher education or continuing education institutions, it has been a challenge from the beginning, since they were confronted with a new paradigm and had to find ways to institutionalize it and in the process deal with issues of quality and visibility. It has been attested that integration of on-line courses is normally implemented in three steps: "1) pre-initiation and initiation, in which activities are mainly bottom-up experiences; 2) implementation, in which a more strategic approach is developed; and 3) institutionalization, in which the change becomes institutionalized and becomes an integral part of the core processes in higher education institutions." (Boezerooij, 2006, p. 19)

Now that the framework has been explained and the different challenges highlighted, we will explore one concrete scenario, putting into perspective the three profiles and considering how their learning and teaching experiences could be enacted in a virtual mobility setting. We will start with the teacher's perspective, since s/he is the one responsible for designing the learning sequence.

Scenario

From the teacher's perspective: A teacher from a European Union (EU) higher education or continuing education institution in France wants to advertise his/her on-line course in order to attract new learners from any other EU country. Her/his course description comprises four main elements: 1) description of learning outcomes, 2) indication of course level in reference to the EQF, 3) description of evaluation/assessment methods, 4) precise description of the workload and characteristics of the course in accordance with ECTS or ECVET guidelines and the Diploma Supplement. The teacher offers an on-line course on project management, level 7 of the EQF. The course is worth 15 ECTS credits out of 180 ECTS credits for the entire curriculum. Learning outcomes are described in four domains, knowledge and understanding, cognitive skills, practical and/or professional skills and key skills. These refer to the 3 domains of the EQF, knowledge, skill and competence. Assessment methods are also described. (Adapted from VIRQUAL, 2011, pp. 4-6).

From the learner's perspective: An engineer in Italy wants to learn about project management. He searches for the most highly-rated courses in that area throughout EU countries. The engineer in Italy finally chooses a virtual course in France. He has verified that the course provides learning outcomes with level 7 competences. He has also checked the assessment methods for this particular course and confirmed that the 15 ECTS credits can be validated in his home university curriculum. The engineer takes the course, completes it successfully and has the ECTS credits formally validated in his home curriculum. With the final certificate of completion, the engineer applies for a job in Finland that requires the competences of the course.

From the institution's perspective: A higher education or continuing education institution in France is well known for one of its curricula in project management. A higher or continuing education institution in another EU (Holland, for example) is also well known for its own curriculum in project management, but it is offered from a different perspective. Both institutions see an opportunity to collaborate on their curricula and develop leading expertise in the field of project management in Europe. They sign agreements to ensure virtual mobility between both programs based on course level correspondences in terms of EQF, ECTS credits, curricula, learning outcomes and assessment methods.

This scenario shows how productive, at the level of professional development, a virtual mobility experience could be. As a matter of fact, the engineer would encounter people with different professional profiles in his course. The presence of different age groups within a course is also a source of richness, since it allows for the transfer and exchange of knowledge, skills and transversal competences among generations. In addition to potentially

enhancing European and international citizenship, virtual mobility can be a vector for relaying information across generations. This could certainly benefit not only society but the entire global economy. It could indeed be an opportunity for people across different generations and disciplines to work together, reinvestigate the past, fully understand it and build new models with full awareness of the context.

Conclusion

To conclude, the virtual mobility framework we have discussed could be tested in the near future, since European higher education and continuing education institutions are formally expected to specify EQF levels on their diplomas as of 2012. This would mean that it would take an instant to evaluate whether a course is adequate for one's needs or whether it is too or not sufficiently advanced. As a matter of fact, the EQF, with a total of 8 levels, is relatively easy to use, levels 5 to 8 corresponding to university and 8 being the PhD level. At the same time, ECTS is already implemented and used by 50% of HE and CE institutions. ECVET is in use in pilot research projects (ECVET Pilot Projects website, n.d.) to see if it can be adopted by VET institutions sustainably. Defining a course in terms of learning outcomes rather than in terms of structure and content has also made headway. Institutions are changing their way of describing courses, labelling them in terms of skills, knowledge and attitudes learners should be able to demonstrate at the end of the training session. The situation is ripe for virtual mobility to thrive. And the diversity of European projects that address the question of virtual mobility confirms it. Here, we will only mention three that are directly concerned with virtual mobility. The *Move-IT "Seminars Promoting Virtual Support for Mobile Students"* project (Move-IT website, n.d.) wanted to maximise the impact of physical mobility – learners studying abroad physically - by raising awareness of the benefits of virtual and blended mobility. In other words, this project involved virtual preparation of the student by the host university prior to the exchange and then coaching by the home university during the actual exchange period. It is similar to a tandem situation where the tandem actually happens virtually in order to enhance the benefits of physical mobility. This is also addressed in the literature under the label of transitional education. The *Movinter - Enhancing Virtual Mobility to foster institutional cooperation and internationalisation of curricula* project (Movinter website, n.d.) aimed at increasing cooperation and structural links between higher education institutions in Europe and Latin America through an in-depth exploration of virtual mobility as a way to internationalise curricula and learning experiences. And finally the *Enterprise-University Virtual Placements* project (EU_VIP website, n.d.) is dedicated to virtual internships within corporate institutions during the course of studies. Virtual mobility within higher education and continuing education institutions is promising because of the constantly evolving labour market and ageing population in Europe and the consequent need for institutions to diversify in order to survive. It is promising because many audiences can benefit from it, in terms of professional development and/or as part of a community of practice. Research cycles in the field of educational technologies are very long cycles – 25 years (Burkhardt & Schoenfeld, 2003). This means that the impact of sustainable virtual mobility projects implemented today in a design-based research approach will be fully evaluated within the timespan of a single generation.

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