

Virtual Erasmus - A new chance not only for Europe

Abramuszkinova Pavlikova, Eva

Mendel University, Faculty of Business and Economics

2010

Online at https://mpra.ub.uni-muenchen.de/30672/MPRA Paper No. 30672, posted 04 May 2011 15:10 UTC

Virtual Erasmus – A New Chance Not Only for Europe

Eva Abramuszkinova Pavlikova Research Centre Faculty of Business and Economics Mendel University in Brno, Czech Republic

Abstract

Virtual Mobility among two or more educational institutions offers students a virtual trip abroad. There is an opportunity to acquire a number of ECTS-points at one of the foreign partner institutions or through a joint activity which are counted to the student's degree at his/her home university.

This paper is based on the research conducted among ERASMUS coordinators within the EU. The research was part of the MoreVM project which aims at facilitating the virtual mobility, encouraging participation and enhancing efficiency of virtual mobility in higher education. The central focus was on the position of the virtual mobility coordinator, if such exists. There will be an overview of the main research findings reflecting the present situation in managing the virtual mobility.

We hope that sharing good experience including the MoreVM project results will increase the development of the virtual mobility which will get similar attention and success as Erasmus physical mobility. Virtual mobility could be a valuable example also for countries outside of European Union.

Keywords virtual mobility, management, e-learning, Erasmus mobility

Introduction

There are different types of international mobility and a physical mobility is not any more the only way which is opening possibilities for work, studies or communication. A virtual space can be a platform providing wide possibilities for virtual mobility. The aim of this paper is to introduce the concept of virtual mobility, various types of virtual mobility activities and the results of own research conducted within the MoreVM project. The new types of mobility, resp. virtual mobility are explored in EU context interpreting the research results and stressing case studies as examples of good practice.

Literature review

Various Definitions of Virtual Mobility

Virtual mobility in Higher Education is a rapidly developing area offering many opportunities for students. There are several definitions of virtual mobility used in this context.

According to the definition by elearningeurope portal virtual mobility means:

'The use of information and communication technologies (ICT) to obtain the same benefits as one would have with physical mobility but without the need to travel' (Elearningeurope, 2010). ICT supported environments include, for example, collaborative workspaces, computer mediated conferencing, live streaming and videoconferencing.

According to the definition by the *Being Mobile team*: 'Virtual mobility is a form of learning which consists of virtual components through an ICT supported learning environment that includes cross-border collaboration with people from different backgrounds and cultures working and studying together, having, as its main purpose, the enhancement of intercultural understanding and the exchange of knowledge' (Being Mobile, 2010).

According to the definition by *EADTU* and *E-move project*: 'Virtual Mobility is defined as an activity based on a co-operation of at least two Higher Education institutions: two or more institutions agree to offer their students the opportunity to acquire a number of ECTS-points at one of the foreign partner universities or through a joint activity of the partners. The ECTS-points of this international experience will then be counted to the student's degree at his/her home university' (EADTU, 2010).¹

Types of Virtual Mobility

Virtual mobility in the higher education sector can be subdivided into several categories. The typology of the Being Mobile team is based on the circumstances in which the virtual mobility takes place. These types include:

- 1. A virtual course (as part of a programme) or seminar (series) at a Higher Education Institution
- 2. A whole programme at a Higher Educational Institution
- 3. Virtual student placements
- 4. Virtual support activities to physical exchange

According to EADTU the virtual mobility can be present in three models. The first model is 'Virtual Erasmus' - the Virtual Stay Abroad. It offers non-mobile students an international study experience similar to the Erasmus stay abroad. The focus is on the international exchange of distance teaching course modules in the framework of a study-programme. Students study a module at different university in EU which is counted towards their degree at home.

The second model, the European Virtual Seminar, is a joint course that promotes an international, multidisciplinary dialogue between students on authentic and current issues with the use of modern ICT and the internet to overcome the constraints of place and time. Students participate in heterogeneous groups in terms of nationality, discipline, institution and gender.

The third model is the Virtual Campus where students from the partnering institutions are involved to round-off a specific course in their curriculum with a virtual international experience. They complete assignments in a virtual workspace, through collaborating in an international community of students (Being Mobile, 2010).

¹ The European Association of Distance Teaching Universities (EADTU) is the representative organization of both the European open and distance learning universities and of the national consortia of higher education institutions active in the field of distance education and elearning. EADTU states that virtual mobility creates a new potential for the organization to offer an international experience for students. It contributes to the Bologna process and enhances the quality of courses and curricula.

Methods and Resources

Project MoreVM

The project Ready for Virtual Mobility? (MoreVM) is part of the Lifelong Learning Programme 2007 – 2013 and ERASMUS Virtual Campuses. The general objective of the MoreVM project is to facilitate virtual mobility (VM), encourage participation and enhance efficiency of VM in higher education. Specific objectives of the project are: preparing students for VM and raising awareness of the importance of VM, providing support for colleges/universities in organizing VM, strengthening the co-operations between them and thus encouraging the development of joint programs (Project MoreVM, 2007-2009).

The research on virtual mobility was directed by author of this text at NEWTON College, Brno in the Czech Republic in cooperation with College of Business Doba Maribor, Slovenia and School of Management, Open University of the Netherlands and the Oulu University of Applied Sciences, Raahe School of Engineering and Business in Finland. After a pilot study of five interviews conducted with people involved in virtual mobility activities, we have developed a research questionnaire which was sent by email to 3,142 Erasmus coordinators in February and March 2008. The current list of Erasmus coordinators (year 2007) was provided by the National Agency. We have received and analysed 198 answers, followed by in-depth interviews with institutions dealing with virtual mobility. Within this qualitative part of the research we addressed six universities: Technical University of Ostrava, Palacky University Olomouc, University of Economics, Praha, University of West Bohemia in Pilsen, University of Hradec Kralove, Tomas Bata University in Zlin.

The aim of the research was to define the VM coordinator profile and to design the VM supervision scheme. VM Coordinator profile describes the required qualities and competences of the staff involved in VM for providing efficient support to VM students during the previrtual mobility phase including information, guidance and counseling and during VM to enhance their performance. VM supervision scheme describes the roles, functions and responsibilities of VM coordinators. The designed scheme includes a presentation and description of goals, content, channel, tools and phases of required interactions between coordinators with the consumer and the provider college/university.

Research findings

The answers of respondents show that there is a need for the position of a Virtual Mobility Coordinator to assure successful participation in virtual mobility. An institutional background of the VMC is preferred with ERASMUS office in cooperation with study department. Direct relations with ERASMUS is strongly recommended. From the sample of 198 respondents, 9% of institutions are already involved in virtual mobility. There are 16 institutions from this sample where the position of VMC exists.

The Ideal Profile of the Virtual Mobility Coordinator

- 1. The ideal VM Coordinator has good organizational skills
- 2. The ideal VM Coordinator has good communication skills.
- 3. The ideal VM Coordinator has good social skills, and is a team oriented person.
- 4. The ideal VM Coordinator has good IT competences.

- The ideal VM Coordinator has good management and marketing skills, incl. timemanagement.
- 6. The ideal VM Coordinator is well educated, with a minimum of a Bachelor's degree, willing to learn more, and is an open-minded person.
- 7. The ideal VM Coordinator has an acceptable level of foreign languages.
- 8. The ideal VM Coordinator has intercultural experience.
- 9. The ideal VM Coordinator is acquainted with the virtual learning environment that supports a VM course.
- 10. The ideal VM Coordinator is informed about the content of a VM course.
- 11. The ideal VM Coordinator has personal experience of being an online learner and of distance education.
- 12. The ideal VM Coordinator believes in VM.

The competencies and responsibilities of the ideal Virtual Mobility Coordinator should include:

- Communication with provider institution (organizing the VM course) about the students' participation and performance
- The presentation of VM courses to potential students
- Monitoring visits to partners' schools
- Looking for new partner organizations
- Providing students with clear grading criteria, reminding students about upcoming
 assignments, contacting students who have not completed assignments even after the
 assignment due date, and reminding them about their non-submission of assignment
- A confirmation of students' study plans
- The administration of students' formal documents before, during and after mobility
- Counseling students, psychological support, assisting students who are having problems (by e-mail, etc.) in completing the assignment
- Guiding and informing students, providing examples of required writing/assignments, providing resource ideas for completing assignments,
- Contacting and recruiting students

The Supervision Scheme

The Supervision scheme is based on the Virtual Mobility Coordinator research results. It reflects the research findings, especially relating to the roles, functions and responsibilities of virtual mobility coordinators which will enable them to provide efficient support to virtual mobility students.

The research results have shown that there are basically two roles of a virtual mobility coordinator: a core role and a course specific role. The core role is related to basic activities of a virtual mobility coordinator, such as:

- being a virtual mobility ambassador towards students and the rest of the organization;
- informing students about the European virtual mobility courses;
- presenting virtual mobility courses to students and directing them to MoreVM portal.

Students can benefit from shared experiences of former MoreVM students as it is showed on the video produced by students (Video MoreVM, 2010).

We anticipate that the core role of a virtual mobility coordinator will be more present in bigger universities or colleges. Course specific role is more suitable for smaller colleges since the activities of Erasmus Coordinator, International Officer or Student Councilor are usually performed by one person.

The course specific role is related to activities supporting students in a pre virtual mobility phase, during their virtual stay and after the termination of a virtual mobility course. Course related coordinator's activities were classified into 3 categories:

- before (providing information about the course, recruiting students, collecting registration forms, etc)
- during (contacting and motivating students, counseling and providing psychological support, exchanging information with the course tutor, etc)
- after (giving feedback on their own satisfaction with the course implementation, writing a report, etc)

The main objective of the supervision scheme is to serve as an overview of the tasks and activities of a virtual mobility coordinator and help coordinators to efficiently communicate with students as well as the provider college in order to increase student performance and prevent drop-outs.

The Research Continued

The results of the survey conducted within the MoreVM project showed that it would be beneficial for further research to contact personally Erasmus coordinators and conduct qualitative interviews with coordinators who actually deal with the coordination of virtual mobility. For this purpose we visited seminars for national Erasmus coordinators in the Czech Republic and approached coordinators with the results of MoreVM project. The idea was to introduce them the project results, esp. the profile of the virtual mobility coordinator and ask them about their interest in the development of virtual mobility at their institutions.

By asking recent Erasmus coordinators on their experience with virtual mobility we have got very up-to date results and monitored possible interests in developing the school curriculum in this direction. A short survey was introduced reflecting the definition of the ideal coordinator of virtual mobility asking respondents to rank the chosen competences from the most important to the least important. We also asked for potential interest in the development of virtual mobility at their institutions and conducted several interviews with participants in order to get detailed information about their involvement in virtual mobility projects.

The qualitative part of the research showed that among the most important competencies of the virtual mobility coordinator belong: acceptable level of foreign languages together with good organizational, communication and social skills with ability to work in a team. Both coordinators from private and state institutions agreed also on the fact, that the coordinator should be acquainted with the virtual learning environment that supports a VM course.

The results of the qualitative part reflect the situation in the Czech Republic, where virtual mobility is very new issue and there is a need for the position of a Virtual Mobility Coordinator to assure successful participation in virtual mobility. An institutional background of the VMC is preferred with Erasmus office in cooperation with study department. Direct relations with Erasmus was strongly recommended (Project MoreVM, 2007-2009).

Case studies

Institutions which are aiming at development of virtual mobility can benefit from the experience of former projects. The links to specific projects could be an inspiration to settle their own virtual mobility project. The coordinators profile developed by MoreVM project could be used as a tool for the selection of the right person for the position of the virtual mobility coordinator. The supervision scheme can be helpful for the institutional placement of the coordinator. The Erasmus framework is a good platform to develop virtual mobility.

The following case studies are examples of good practice. The first group contains cases of short time courses whereas the second group is focused on the whole virtual study programmes.

1. A virtual course (as part of a programme) or seminar (series) at a Higher Education Institution

In this type of virtual mobility the virtual course or a seminar are parts of a whole study programme. Students engage in Virtual Mobility for a single course or seminar and the rest of their learning activities takes place in the traditional way.

Case study: Cinema and Literature Course

This is an initiative of the teacher at the Catholic University of Leuven (Belgium) and the teacher at the University of Granada (Spain). The course is taught in Leuven and Granada by these two teachers to two groups of students. As a virtual course, students follow the same syllabi made by the teacher in Leuven. For the students, the course is essentially self study of the online material in combination with local contact hours. Online discussion forum can be used. The students are assessed on the cooperation during the local contact hours, the online discussions and mainly a group assignment and an oral exam at the end of the year. Each group consists of 3 to 4 persons, chooses a topic for the paper and works on the paper collaboratively on a virtual platform. This course is a good example of a semi virtual course based on a collaborative arrangement. Parts of the course are organized by the partner university but the assessment and credits stays at the local university. It is very important to have good contacts among teachers, the course is built on the personal contacts. It is important to use a mix of working methods: virtual teaching methods and traditional teaching methods. In this sense it is a virtualized course where virtual moments are accompanied by contact moments (Cinema and Literature Course, 2010).

Case study: European Virtual Seminar on Sustainable Development

This course was run fully virtually between international students in groups of 4-6. They worked on a group report and a policy summary for 4 months, representing 120 study hours. Students communicated through a forum and chat on the Internet (European Virtual Seminar on Sustainable Development, 2010).

Case study: International Student Business Game

This game is giving students an opportunity to create virtual companies and compete with each other on an economic market. Students are dividend into groups of 4-8 students at the

local institutions and make up a virtual company. On a national level, teams compete in fictional markets in their own institutions and the winning teams move on to the second international part. The international competition is a videoconference session evaluated by an international jury consisting of instructors and local business representatives (International Student Business Game, 2010).

Case study: Venus seminars

It offers so called 'international-regional' virtual seminars on various relevant European topics which are open to all citizens. During each seminar, European and other universities are connected via videoconference. Each seminar consists of a short lecture given by an expert, by a local discussion chaired by a local expert and a central debate made via videoconference amongst all participating sites. The seminars are also delivered through live streaming to participants around the world with online interaction possible - WIKI, forum, chat (Venus seminars, 2007).

Case study: EHLEE pilot course

This course called The Identities in European History was held on an Internet-based learning platform WebCT and in local study groups as part of the Ehlee project (eHistory Learning Environment and Evaluation). Each student had one local and one international tutor. It was a blended learning activity based on local student groups and an online learning platform (EHLEE pilot course, 2006).

Case study: Open GI systems course

It develops theoretical and practical professional competencies in the field of Open Geographic Information Systems. The course is fully online without face-to-face elements except for the Erasmus students at the provider university. The tutor meets the students in virtual form using forums, chats and videoconference tools. These are open discussion sessions on a topic announced in advance. The course does not run at specific times during the year, but can be followed at the student's own convenience. It is very flexible and also location-independent (Open GI systems course, 2005).

Case study: SPACE E-Learning courses

The SPACE network has developed e-learning courses on European Studies and Intercultural Communication: oral and written communication, negotiation and values in each country. These online/blended learning uses SPACE Dokeos system as a technological platform with conference system facilities, mailing and forum function (SPACE E-Learning courses, 2009).

Case study: Searching for scientific information

The aim of this course is to introduce to students the most important scientific information sources within their field. The information specialists in library act as tutors for the course. The study material is completely online. Although a virtual learning environment has been tested for these purposes, the organisers consider as the most efficient communication tool emails. Students have a choice between a totally virtual or a blended learning activity (Searching for scientific information, 2010).

Case study: A Virtual Erasmus Student

This project was partially funded in the framework of the SOCRATES Programme – MINERVA Action, DG for Education and Culture of the European Commission. The training module 'A Virtual Erasmus Student' has been designed for university students willing to improve their knowledge on virtual mobility and virtual communities. This project is based on

the idea that virtual mobility constitutes a complementary component in the internationalisation strategies of higher education institutions. It cannot really replace physical mobility, but it can complement it with adding a dimension of continuous exchange of experiences, information and opinions with people living far away. The main aim of this module is to provide students with hints, suggestions, and tools to enrich their knowledge about students' mobility, with specific attention to virtual mobility. Moreover, students will enhance their skills as active members of a virtual community of learners with participants located at European universities and beyond.

The learning approach adopted is referring to active learning (or learning-by-doing) or to discovery learning. Learning is expected to occur informally, by using different learning resources, services and tools. Students will be possibly going through contextualisation of what is being learnt, socialisation of what they have been learning and personalisation of their own learning path. This training module 'A Virtual Erasmus Student' is combining many opportunities offered by internet technologies in terms of accessibility, versatility, expandability and magnitude of resources. The module has an average duration of 10 hours (A Virtual Erasmus Student, 2000-2010).

Case study: Training module Humanities

This training module was adopted within the framework of a project called HUMANITIES – Historic Universities MultimediA Network for InnovaTIon in Education Systems, which started in 1994. The HUMANITIES project aimed at introducing new technologies and at developing and testing Open and Distance Learning models in traditional university environments. It tried to overcome a reluctance to use new technologies and also to prove to teachers that virtual mobility could work effectively on an European scale with a usable hybrid model which is introducing a distance learning module into normal curricula. The HUMANITIES model was delivered jointly by a number of participating universities aiming at the enrichment of existing courses delivered in the involved universities. The main components were co-ordinated content, distance teaching (videotapes, videoconferences, satellite broadcast) and assessment of results. The HUMANITIES approach is representing the concept of virtual mobility which includes all forms that are communication intensive and run at international level. This project used the following elements: transnational lectures and/or learning material, cross-border recruitment of students, intensity of communication flows, international accreditation of achievements, multilingualism, complementarities between virtual mobility activities, traditional lectures and physical mobility and international recognition and accreditation of study achievements. This project has identified the following benefits for the university and the students: visibility (greater visibility on the European scene), capitalisation (lectures can be recorded and become reusable resource), increased exploitation of technical infrastructures, enlargement of the students base, import-export flow of expertise, learning effectiveness, time (higher flexibility), access and re-usability (Humanities, 1998).

2. A whole programme at a Higher Educational Institution: Virtual Study Programme, The Virtual Stay Abroad – "Virtual Erasmus"

It is an entire virtual study programme giving students from different countries the chance to take this study programme without having to go abroad for a whole academic year.

Case study: International Course Exchange

The international Course Exchange is activity of European Association of Distance Teaching Universities and their description of objectives is the following: 'This website is a product of the Humanities Academic Network of EADTU for International Course Exchange on the Bachelor and Master level. We bring together offerings and demands in Humanities programmes between various Lifelong Open and Flexible (LOF) learning Universities in distance HE and national organisations including consortia for LOF learning. Our objective is to organise a pool of international courses to enable students to choose courses from different foreign institutions. This, as to further individualize and specialize their education. Special emphasis of this International Course Exchange pool is European Studies and Philosophy. Our aim is to include as many courses as possible from various universities in Europe and beyond' (International Course Exchange, 2005-2006).

Case study: EPICS for Virtual Erasmus (European Portal for International Courses and Services)

The EPICS project works towards mainstream provision of Virtual Mobility by offering international courses as integral part of the university study programmes. The main objective is to work from Virtual Mobility projects towards a Virtual Erasmus programme. To institutionalise mainstream provision of Virtual Mobility EPICS is developing the supporting infrastructure of a European Portal for International Courses and Services (EPICS for Virtual Erasmus, 2009).

Case study: Master programme in Development management

This four semester's study programme is launched under the Global Environment and Development Studies. It is online study programme using internet, social constructivist approach, group work, discussions and joint assignments. The study year begins with two weeks face-to-face sessions where students, professors and tutors meet. It is coordinated by the United Nations University/Global Virtual University (Master programme in Development management, 2010).

Case study: E-Urbs

E-Urbs is a European Master Course on Comparative Urban Studies. It is an extensive online course together with an intensive summer school in Urbino held by nine European universities specialised on urban studies. This 'virtual international campus' is using traditional ICT distance learning techniques complemented with new visual and heuristic approaches. E-Urbs work with integrated blended mode learning system which integrates virtual and physical mobility and the use of ICT. This blended approach complements online teaching with face-to-face teaching. A summer course in Urbino is followed by online courses (E-Urbs, 2007).

Case study: Experience with E-Urbs and virtual mobility coordinaton

I have contacted an experienced coordinator of virtual mobility, Giovanni Torrisi², from the University of Urbino in Italy which uses the Urbino Blended International Learning System and asked him for sharing his unique experience as a model of inspiration for other institutions. As he explained: 'I occupy this role since 1997 when the first experiences with virtual mobility began to be addressed by the University of Urbino as relevant. Urbino is a beautiful walled city, nice to live and to work in. But it is very difficult to reach. No Airport nearby, no highway, not even a train station to directly reach it. Just one hour of curvy roads from the nearest city on the Adriatic coast (Pesaro). This splendid isolation pushed Urbino

² Giovanni Torrisi is a social science researcher and a Virtual Mobility Coordinator at the University of Urbino, Italy.

university to look for solutions that would permit students that would not have the possibility to move in, to follow classes without the need to reside and live in Urbino. One of the solutions found was developing the Urbino International Blended Learning System. The decision of having a blended approach, instead of a purely virtual one, was due to both reasons of learning efficacy and local economic issues. The city of Urbino bases its economy on the University. Having a purely online course would scare away students from the territory, provoking an economic issue for the city. Since 1997, several virtual courses and activities have been developed...' ³

Conclusion and implications for future research

This research has shown that among European institutions co-operating within the ERASMUS programme there are only a few of them involved in virtual mobility. Within the group of institutions under study there is a need for recognition of the Virtual Mobility Coordinator position. We noticed that many institutions, resp. Erasmus coordinators do not have information about virtual mobility. They do not know what it is, even when they had some experience with international cooperation.

Institutions which are aiming at development of virtual mobility can benefit from the experience of former projects. The coordinators profile developed by MoreVM project can be used as a tool for the selection of the right person for the position of the virtual mobility coordinator. The supervision scheme could be helpful for the institutional placement of the coordinator.

For the future development of the virtual mobility we consider as important to collect the case studies of virtual mobility as a good practice and disseminate the information about already existing projects. It could be very effective way of motivation for schools with desire to develop virtual mobility for students or academics.

The Erasmus framework is a good platform to develop virtual mobility. We hope that sharing good experience including the MoreVM project results will increase the development of the virtual mobility which will get similar attention and success as Erasmus physical mobility.

Virtual mobility, inspired by Erasmus physical mobility, could be a valuable example for countries outside of European Union.

³ The information was provided by Giovanni Torrisi in an interview with author of this text at EDEN conference in Gdansk, Poland, 10.06.2009.

References

A Virtual Erasmus Student. Training Module 2. (c2000-2010) SCIENTER, Centro di Ricerche e Servizi Avanzati per la Formazione. SPOT PLUS team. Project 90310-CP-1-2001-1-MINERVA-M. Retrieved November 15, 2010 from http://www.spotplus.odl.org/downloads/Training_module_2.pdf

Being Mobile. European cooperation in education through Virtual Mobility. A best-practice manual. (c2005) EUROPACE team. Retrieved November 9, 2010 from http://www.being-mobile.net; http://www.europace.org

Cinema and Literature Course. Katholieke Universiteit Leuven. Retrieved September 28, 2010 from www.galatea.be; http://www.kuleuven.be/english/. Last modified 2010-12-14.

EADTU. Guide to Virtual Mobility (EADTU Annual Conference 2007, Lisbon, Portugal). (2007). European Association of Distance Teaching Universities. Retrieved September 3, 2010 from http://145.20.178.4/Portals/0/documents/The_Guide_to_Virtual_Mobility.pdf

EHLEE Pilot Course. (2006) The Department of History, University of Turku, Finland. Retrieved November 11, 2010 from http://ehlee.utu.fi/pilot.htm

Elearningeurope Portal. The European Commission. Retrieved November 10, 2010 from http://elearningeuropa.info

EPICS for Virtual Erasmus. (c2009) European Association of Distance Teaching Universities. Retrieved November 20, 2010 from http://www.eadtu.nl/epics/?cId=home

E-Urbs. (c2007) Università degli Studi di Urbino Carlo Bo. Retrieved October 13, 2010 from http://www.e-urbs.net/

European Virtual Seminar on Sustainable Development. (c2010) Open Universiteit. Retrieved October 10, 2010 from http://www.ou.nl/eCache/DEF/90/085.html

HUMANITIES. (1998) The Coimbra Group, Leiden University. Retrieved November 2, 2010 from http://www.dipoli.hut.fi/humanities/hum-pub.html

International Course Exchange. (c2005-2006) European Association of Distance Teaching Universities. Retrieved October 9, 2010 from http://www.eadtu.nl/academic-networks/humanities/offerings.htm

International Student Business Game. Retrieved November 5, 2010 from http://www.businessgames.org; Katholieke Hogescholl Kempen (c2010). Retrieved November 30, 2010 from http://www.khk.be. Last modified 2010-11-22.

Master programme in Development management. University of Agder, Norway. Retrieved November 6, 2010 from

http://www.uia.no/en/portals/about the university/economics and social sciences/study programmes/courses in english/master in development management. Last modified 2010-11-17.

Open GI systems course. (c2005) Faculty of Geoinformatics, University of West Hungary. Retrieved November 8, 2010 from http://www.geo.info.hu/en

Project MoreVM. (c2007-2009). Ready for Virtual Mobility (MoreVM). Retrieved October 5, 2010 from http://morevm.org/project

Searching for scientific information. Aalto University library, Otaniemi, Finland. Retrieved November 15, 2010 from https://noppa.tkk.fi/noppa/kurssi/eri-0.5014/etusivu. Last modified 2010-01-07.

SPACE E-LEARNING COURSES (c2009). Tiegen Business School, Odense. Retrieved November 5, 2010 from http://www.space-eu.info

Venus seminars. Virtual and E-mobility of Networking Universities in Society. (2007). EUROPACE. Retrieved October 12, 2010 from http://www.venus-project.net

Video MoreVM 2010. Retrieved October 3, 2010 from http://wiki.morevm.org/index.php/Main_Page and http://www.youtube.com/watch?v=9dPw74Bz0aQ