

Lifelong Learning Programme
Erasmus Multilateral Projects
UbiCamp: Integrated Solution to Virtual Mobility Barriers

Virtual mobility for Universities

Information seminar for lectures

Consortium

1. Oviedo University (Spain)
2. Universidad Autonoma de Madrid (Spain)
3. University of Southampton (UK)
4. Yasar University (Turkey)
5. Kaunas University of Technology (Lithuania)
6. Vytautas Magnus University (Lithuania)
7. Universita telematica Pegaso (Italy)

What is it? VM?

According to the *elearningeuropa* portal,

“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**”.

EC suggests a broader definition of VM

“Virtual mobility for study offers students, as part of their curriculum, access to courses and study schemes from another HEI in a foreign country in order to learn, communicate and participate in collaborative work in an international environment with teachers and fellow students abroad via the new information technologies. **VM can be combined with physical mobility period** of an appropriate duration”

VM takes the student to different university in another country without need of travel.

Why Virtual mobility?

- **The use of ICT, social media and virtual networking** are now routine parts of every student's life.
- VM enables European wide exchanges for all **those not able to benefit from existing physical international exchange programmes**, due to social, economical, organizational or other reasons and can therefore offer the advantages and benefits of real mobility to a wider community.
- **The perfect scenario for HEIs modernization**, as it will provide opportunities for knowledge exchange, capacity-building, transfer of know-how, transversal competences and skills acquisition, etc. for the whole academic community. That all lead to **competitive educational establishment** in European education market.
- VM obviously provides **enrichment to the regular educational environment of higher education institutions**. Teachers and students benefit linguistically, culturally and educationally from the experience of other European countries and of their (academic) fields of study.

Reasons for the project

Organisational difficulties

- VM initiatives require a **high level of organisation**.
- The need for a **legal framework** – comparable with the real ERASMUS.
- Unlike physical mobility supported by the ERASMUS programme, there are no clear regulations foreseen for Virtual Mobility. Therefore **it is not clear which agreements are necessary and how credit transfer will be arranged**. As such, Virtual Mobility has not yet been officially recognised.

Pedagogical challenges

- **A coherent e-learning pedagogy** does not yet exist.
- The structure of the course, the content and the assignments given in traditional courses and programmes need to be adjusted in order to ensure they are **suitable for Virtual Mobility course activities**.

Technological challenges

- Virtual Mobility will only succeed if teachers, students and technical staff **are trained beforehand**.
- **The training and support** encompasses different aspects of technology, ranging from technical support of the technology, over pure control and usability of the technology to appropriate application of the right technology in the right circumstances and in the correct way.



Aim

- The UbiCamp project emerged as an attempt to respond to the usual obstacles to carry out Virtual Mobility experiences in higher education institutions inside the European Union.
- UbiCamp is an acronym from "**Ubiquitous Campus**", and tries to become a VM model that allows an easy integration of new institutions, through encouraging a decentralized model in which each institution will only have to meet the quality requirements raised, and where the technology integration could become as a simple process.

Target groups/benefits

- Widening choice of modules and curriculum
- Possibility to study in different environments
- Enrich curriculum
- Cost-effective for the student
- Possibility to gain new skills
- Possibility to gain skills in up-to-the minute information/communication technology
- Timetable flexibility
- Find new possibilities for learning
- Making new friends and contacts
- Experiencing the life and culture of a university abroad without having to travel
- Finding out about other options for virtual study in the future
-

Students:

- Widening your choice of modules
- Experiencing the life and culture of a university abroad without having to travel
- Enriching your curriculum
- Cost-effectiveness: there are no special fees or costs
- Gaining professional and intercultural skills
- Gaining skills in up-to-the minute information/communication technology
- Timetable flexibility
- Being able to take part wherever you are
- Making new friends and contacts
- Finding out about other options for virtual study in the future

Teachers:

Greater number of students
Learning environments
Personalized learning with a variety
New professional and
More adaptable in European
n.
Enter the qualification and will
Competitive and attractive
nts
acts
Other options for virtual
are

Activities

1. Virtual Mobility Practical Framework” development: quality criteria and standards for different elements which are necessary for implementation of virtual mobility in HEIs:

Organizational elements (recognition of the teaching/learning experience, institutional agreements, virtual mobility session organization requirements, etc);

Technological elements (minimum technological standards of learning resources in order to make them re-usable, accessible, etc.);

Pedagogic/ didactical elements (requirements for didactical preparation of study curriculum for virtual mobility and assessment methodologies for virtual mobility);

Cultural elements (learning resources to enhance intercultural exchanges during virtual mobility processes).

2. Creation of open educational resources based on the standards defined and linked to several subjects identified by partners. The aim is to achieve maximum reuse of the contents at European level.

3. Developing training materials and implementing training sessions in Universities in Europe, involving students, teachers, Erasmus officers and administrators. Raise awareness of virtual mobility among HEIs. Some workshops and presentation seminars will be organized in order to disseminate the advantages that virtual mobility presents. Also, these events will be used to encourage institutions to participate in virtual mobility activities.

4. Testing the “virtual mobility practical framework” through the implementation of Virtual Erasmus Exchanges among those Universities that have been trained and wish to participate. The courses of the exchanges will be recognized by students’ participating universities.

5. Dissemination of project results widely at national and European level and anticipating exploitation activities for multiplying project impact.

VM framework

Framework →	Academic	Cultural	Technological	Training	Management
Aspects ↓					
Technological	N/A	Videos and web pages based on a free access through the web. YouTube or Wikis could be the minimal implementation	Web Portal with a distributed design. Some specific (centralized) services (i.e VW) could be provided by UbiCamp	LEM (Moodle, Blackboard) Installation & user guides	Institutional Participation Agreements Template design & definition (Oct. 2014).
Teaching & pedagogical criteria	Learning Standards (OER) OCW subject/courses publication Curriculum design templates.	N/A	OERs Technology Standards (SCORM & OCW) Videoconferencing Systems (Skype, Microsoft lync..)	OERs (SCORM & OCW)	Courses (offer). Fix a schedule and the process to offer courses. Teachers participants Agreements. Not ensured. TAT and TRT Templates
Cultural / linguistic issues	Through standard Social Networks (Twitter) & Virtual Worlds	Cultural content definition. Web sites and Videos (YouTube) Linguistic content definition Web sites and Videos 3D technologies (Virtual Worlds)	3D Immersion technologies. Based on Virtual Worlds Video technologies. Audio (MP3, WAV), Video (MP4, MPEG-4, MOV). Language learning Technologies. Based on Web and Video contents, VW will be explored.	N/A	N/A



VM framework

Framework →	Academic	Cultural	Technological	Training	Management
Aspects ↓					
Network virtual environments	Social Networks (Twitter)	Facebook and Twitter will be used to provide local information (i.e. news). Other virtual environments (i.e. Virtual Worlds) could be used as a SN to allow the interaction between students and teachers.	Social network technologies. Based on Facebook and Twitter. Context-based filtering systems. Based on a crawler robot (UniOvi). Virtual environments. Based on Virtual Worlds. A robot will be provided to automatically generate local information.	N/A	N/A
Evaluation methods	Carried out by Curricular Design Template implementation Recognition of ECTS credits in the mobility agreement	Cultural content evaluation, through “cultural and linguistic” tests (based on Moodle facilities) The results from the evaluation will not be considered in the final evaluation of the subjects	N/A	Training content evaluation. Academic (numerical and included in the Curr. Design.), Cultural (not considered)	N/A
Management	Credit recognition for curricula merits to both; <u>students</u> (through ECTS recognition) and <u>teachers/tutors</u> (through formal participation in the VM) Use the Int. Relations Office as “bridge” to coordinate HEI-Host and HEI-Origin institutions	Curricular recognition of virtual mobility vs traditional (international) eLearning through IRO (Int. Relations Office)	N/A	N/A	Roles and responsibilities for each participating institution. Described in section 3.4 Bilateral agreements (BAVM templates, before oct. 2013)



Subjects offered in Ubicamp pilot

Kaunas university of technology (LT)	Project Management
	Management
University of Southampton (UK)	Web Science: How the web is changing the world
	Learning in a connected world
Universidad Autonoma de Madrid (ES)	Introduction to Programming in C and Linux Operating System
	Introduction to Videogames programming
	Multimedia Educations Resources
University of Oviedo (ES)	Corporate Social Responsibility
	Introduction to Economics
	Innovation and Project in primary education
	Software Architecture
Vytautas Magnus University (LT)	Digital graphics programming
	Information Technologies in Education
	Open Educational Resources
Yasar University (TK)	Collaborative learning
	EU Education Programmes and Project Management
Yasar University (TK)	EU-Turkey Relations
	EU-Turkey Relations
Pegaso Università Telematica (IT)	International Business Communication

Sociocultural Aspects in the UbiCamp Virtual Mobility Project

- Sociocultural aspects **are very important in general for every mobility experiences**, and more specifically for virtual mobility experiences.
- In analysed VM projects sociocultural aspects **depend on the initiative of the students**. Reality is that the students are more concerned about academic results and **they forget about the sociocultural experience**.
- In such circumstances, students avoid spending much time in interpersonal and intercultural relations and the final result is that the experience **is very poor in general on these aspects**.
- **Virtual mobility by UbiCamp** has to offer students the possibility of acquiring a sociocultural experience in order to such experience can be compared to physical mobility.
 - Student will provide **two different evaluations, academic and cultural**. The academic evaluation will be detailed in the Curricular Design Template and will be used in the recognition of the curricular achievement.
 - Students will have, at the end of the experience, **a minimum of sociocultural knowledge of the foreign institution and its environment**.
 - This itinerary will be structured in order to ease the students' learning process **and it will require an effort equivalent to 2 ECTS**. This way, students will know at the beginning of the experience how much time and effort these sociocultural aspects will take demand.
 - At the end of the experience, the sociocultural aspects will have to be evaluated. This is necessary in order to properly distinguish between a virtual mobility and a simple international e-learning process. **The evaluation will not have a numeric mark but rather a simple "suitable" or "unsuitable" assessment**.

Suggested student VM procedure

- **Courses are suggested for virtual exchange**
- **Institutions sign the Erasmus+ agreements**
(Erasmus+ agreements with indicated VM option)
- Organization of virtual **exchange** and **recognition of** the virtual courses is based on the signed **agreements**



Virtual exchange for ongoing students

- **Institution revises courses** suggested for virtual exchange (such as ubicamp.eu/courses),
- **Signs bilateral agreements** with institutions, which suggest courses
- Student **selection is organized** at home institution
- During semester **student is enrolled at host institution**
- Virtual **exchange recognition at home institution** is based on the signed agreements and student's results



Virtual exchange for ongoing students

- **Institution provides courses for virtual exchange,**
- **Signs bilateral agreements** with institutions which virtually send students
- Student selection is performed at home institutions – host **institution gets a list** of virtually studying students from home institution
- During semester student is **enrolled at host institution**
- For virtual exchange **recognition host institution** provides **student's results** for home institution



Creation of digital OER

- **Academic Digital Contents:** These are the elements that will support the learning process during the interchange experience.
- **Open Educational Resources (OER):** These are a minimum of a 33% of the previous contents formatted for being published in an open platform from each institution (OWC, MOOC, etc.). The URL for accessing them must be provided by the institution to UNIOVI in order to be published in the UBICamp Website.

Criteria for Academic Digital Contents

Curriculum element	Recommendation
1. Introductory video (up to 2 min)	Compulsory
2. The picture (photo/ picture/ other) of course	Recommended
3. Syllabus	Compulsory
4. Attractive short summary about the course	Recommended
5. Teacher(s) introduction	Recommended
6. Course guide (what, when, how to study, when/ how/ where synchronous meetings take place, how many assignments, schedule – etc.)	Compulsory
7. Technical and pedagogical help	Recommended
Curriculum part	
8. Learning outcomes listed	Recommended <i>It is recommend to design the structure of the topics of the course on the basis of LOs</i>
9. Topics of the course	Recommended <i>It is recommend to design the structure of the topics of the course on the basis of LOs</i>
a. Learning resources (articles, e-books, etc.)	Recommended if needed <i>It is important to respect the copyright. If teachers have no copyright only URL or other reference can be provided</i>
b. Video lectures/ record (Related to the online support)	Recommended
c. Self- assessment tests	Recommended <i>Depending on assessment criteria</i>
d. Top – questions – very much related with our everyday life – or emerging from everyday life	Recommended
e. Literature references	Compulsory
f. Support for online lectures and tutorials	Compulsory



Criteria for Academic Digital Contents

Curriculum element	OER (public availability with CC licence)	Recommendation
1. Introductory video (up to 2 min)	At UbiCamp website and institutional OER infrastructure	Compulsory
2. The picture (photo/ picture/ other) of course	Along with the description at UbiCamp website and institutional OER infrastructure	Recommended
3. Syllabus	At UbiCamp website and institutional OER infrastructure	Compulsory
4. Attractive short summary about the course	At UbiCamp website and institutional OER infrastructure	Recommended
5. Teacher(s) introduction	At UbiCamp website and institutional OER infrastructure	Recommended
Curriculum part		
6. Learning outcomes listed (we recommend to design the structure of the topics of the course on the basis of LOs)	33% openly linked to resources (which can be again, 1/3 of resources attributed to learning outcomes, for an example: http://www.open.edu/openlearn/education/educational-technology-and-practice/educational-practice/teaching-assistants-support-action/content-section-0)	Compulsory
7. Topics of the course. Under each topic, different formats of curriculum should be exemplified as OER, but others – provided under VLE (under the decision of the authors of the course):	33% At institutional OER infrastructure	Parts are compulsory and parts are Recommended. (See the rest of the table)
a. Learning resources (articles, e-books, - what is available in the course and in which format – an example of each)	At institutional OER infrastructure <i>It is important to respect the copyright. If teachers have no copyright only URL or other reference can be provided</i>	Recommended
b. OER included in theoretical learning resources	At institutional OER infrastructure	Compulsory
c. Video lectures/record	An example of different learning resources might be exemplified at UbiCamp website and institutional OER infrastructure	Recommended
d. Self -assessment assignments	An example of different learning resources might be exemplified at institutional OER infrastructure	Recommended
e. Self -assessment tests	Brief example might be provided as OER	Recommended
f. Top – questions – very much related with our everyday life – or emerging from everyday life	In order to bring intrigue for the learners – provided as OER (just as an example) Could be discussion under social networks or university community	Recommended
g. Literature references	At UbiCamp website and institutional OER infrastructure	Compulsory



Digitisation of OER

- It is planned to use subcontracting of digitisation of OER (text, pictures, tables, tests, videos, etc)
- Digitisation services will be available in Autumn, 2014.

www.ubicamp.eu

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