SUCCESS FACTORS FOR VIRTUAL MOBILITY EXCHANGE ON "OPEN EDUCATIONAL RESOURCES"

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Introduction

The universities should keep abreast with the rapidly changing demands of the world of work and modern life in providing highly-advanced high-quality education and research of the highest international level of excellence and enable their students to acquire cutting-edge competences essential for the efficient work and life in the 21st century. "More traditional universities open their borders, collaborate supra/intra-institutionally and often (inter)nationally, and/or involve non-traditional students in their traditional learning environment. In this way every campus becomes a Virtual Campus, and all mobility has now some form of Virtual Mobility included" (Van Petegem, 2009, p.1) De Kraker and Corvers also claim that "in higher education, virtual mobility networks can provide effective learning environments for the development of the competences needed to participate effectively in such a process" (De Kraker & Cörvers, 2009, p.1).

Thus with the importance and need for HE institution modernisation and focus on student-centred-learning approach, as well as rapid technological developments, virtual mobility has become a way for international and intercultural collaboration of institutions, teachers and students, when the development of key competences and transversal skills are at focus. However, are the institutions aware of the successful ways of virtual mobility implementation?

The aim of this research is to identify success factors for virtual mobility implementation.

Context

10 international teachers and experts from 6 European countries (4 universities and 1 international association) designed curriculum for international student virtual mobility exchange. Curriculum was designed for a 3 ECTS course "Open Educational Resources" on the basis of the follow competences:

Having successfully completed the course, the participants will be able to:

- define OER, list their categories and compare types and models of OER,
- characterize the quality and explain the purpose of use of selected OER,
- analyse the issues of OER development and use in education,
- design use or reuse of OER and construct next steps in OER development.

The course was targeted at mixed target groups due to the topic of the course, and invitation was distributed for a closed group of people representing e-learning staff members, teachers and trainers at participating institutions, as well as students at different levels of study programs. The pilot of the course "Open Educational Resources" was implemented in the framework of Lifelong learning Erasmus program project "VMCOLAB – European Co-Laboratory for the Integration of Virtual Mobility in Higher Education Innovation and Modernisation Strategies" (project No. 527770-LLP-1-2012-1-BE-ERASMUS-ESMO). 18 students from 7 home universities participated in the pilot. Vytautas Magnus University coordinated virtual mobility course design and virtual mobility implementation. Other universities participated in curriculum design and were responsible for the topic learning organization (lecturing, student assignments and feedback), namely, University of Granada (Spain), European Foundation for Quality in eLearning, University of Pavia, and University of Jyvaskyla.

The course curriculum was designed using existing infrastructure for virtual mobility at partner institutions. Moodle virtual learning environment and Adobe Connect software were used for curriculum design and virtual mobility exchange organization. The curriculum was designed and agreed to be open under creative commons licence at virtual mobility platform at http://www.teacamp.eu/moodle2. The virtual mobility pilot lasted for 5 weeks, from November 6th until December 4th, 2013. There were 5 synchronous virtual meetings organized during the pilot. All teachers agreed to have the same time for synchronous meetings, i.e. Wednesday (each week) at 10:00 – 12:00 CET.

Each synchronous meeting was supposed to be composed of two parts, topic presentation and assignment presentation, as well as international student group home work presentation. All in all, international learner groups had to perform 3 assignments/ tasks working in international groups. All course participants were divided into international groups before the course started in order to ensure that each group is multi-cultural, multi-institutional, representing at least three different countries, in order to set equal challenges for each participant and group.

The pilot setting was multicultural indeed, counting on 10 teachers from 6 countries and 18 learners for 5 countries, representing different levels of study programs:

Table 3: Multicultural settings of participants in OER course.

Institution (country code)	No. of teachers (country code)	No. of learners	Learners' country of origin
Vytautas Magnus University (LT)	3 LT	6	4 (LT), 2 (ES) Erasmus students
University of Granada (ES)	3 (ES)	3	3 (ES)
EFQUEL (BE)	2 (DE, MT)	-	-
University of Jyvaskyla (FI)	1 (FI)	-	-
University of Pavia (IT)	1 (IT)	3	3 (IT)
University of Florence (IT)	-	2	2 (IT)
University of Porto (PT)	-	3	3 (PT)
University of Trento (IT)	-	1	1 (CN) PhD student
Total	**10 teachers**		**18 learners**

Learning in the intercultural settings and in a distance way

First, not only intercultural settings should be highlighted as of overall settings of the virtual mobility exchange, but curriculum designing solutions are also very important in further discussion of virtual mobility success factors and learner feedback collected. Teaching and learning in VM setting is different from traditional learning and distance learning context; thus, designing VM curriculum requires from higher education teachers to take into account different parameters. According to Casa Nova et al. (2011), teachers have "to think differently when facing paradigms such as (i) the development of a new teaching presence, (ii) the design of new curricula, (iii) the design of learning materials adapted to different learning environments, (iv) the application of different learning strategies and (v) the development of new assessment approaches, models and tools" (Casa Nova, Costa, Leal, & Oliveira, 2011, p.35).

During VM pilot, all participants met online for the first time and were introduced to each other as group members (as curriculum was opened as OER itself after the pilot, the records of the online meetings are available and can be reviewed at http://www.teacamp.eu/moodle2). Moreover, each week international student groups were assigned with the tasks that they had 1 week to implement, communicating using suggested online communication and collaboration tools, but also in their unique individual ways, using any resources they saw relevant for their successful group outcomes.

Each week international student groups implemented assignments as groups, and the following week, during a synchronous online meeting with the teachers they presented their artefacts online as a group. Interesting feedback was collected from the learners about how they succeeded collaborate online, what additional skills and competences they developed and how they felt about this way of learning and collaboration.

The whole curriculum solution was designed the following way (which might be useful for further references and use – as well as the use of OER course curriculum released under the Creative Commons Attribution-Noncommercial-Share Alike 2.0 Belgium License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc-sa/2.0/be/).

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Table 2: "Open Educational Resources" curriculum design

Learning outcome	Responsible institution	Week	Synchronous activities and resources	Assignments and tasks
1. introduction to the pilot and first topic date – November 6, 2013 Time – 10:00 – 12:00 CET Tools – video conferencing Curriculum for week 1				
Define OER, list their categories and compare types and models of OER	University of Granada	Week 1	Presentation on OER, their types, categories and models	Assignment 1. Identify OER repositories and prepare a group presentation on classification of repositories. Share experience and insights on OER identification (linguistic, cultural, subject and other issues). Present group work results in synchronous video conference on week 2.
2. Second synchronous meeting. Assignment presentations and topic/ teaching institution change Date – November 13, 2013 Time – 9:30 – 11:30 CET Tools – video conferencing Curriculum for week 2				
Characterise the quality and explain the purpose of the use of selected OER	EFQUEL	Week 2	Presentation on the quality and purpose of use of	Assignment 2. Each group should use OER repositories identified in assignment 1, describe the initiatives supporting the repositories and add them to the OEP best practice database. Discuss the quality of OER by going through the road map for learners, prepare a group presentation summarising the OEP roadmap and present your results during synchronous video conference on week 3.
3-4. Third and fourth synchronous meeting. Assignment presentations and topic/ teaching institution change Date – November 20, 27, 2013 Time – 10:00 – 12:00 CET Tools – video conferencing Curriculum for week 3 - 4				
Analyse issues of OER development and use in Education and categorise issues and challenges of OER development and use	Vytautas Magnus University University of Pavia University of Jyvaskyla	Weeks 3-4	Presentation on challenges on the use and development of OER	Assignment 3. International group members should organize focus groups or interview people at their home institutions (in Lithuania, Spain, Italy and Portugal, as well as China) to provide answers to the questions. Then summary of quantitative survey should be implemented and presented during the final synchronous online meeting.
5. Fifth synchronous meeting. Assignment presentations, reflections and feedback from the participants. Date – December 4, 2013 Time – 10:00 – 12:00 CET Tools – video conferencing				
Wrapping up: what have we learnt and are we ready to use and develop OER?	University of Pavia Vytautas Magnus University	Week 5	Wrapping up the session and presentations of participants – group work results and discussion on virtual mobility experience	Certification. Assessment and feedback.

Learner feedback and lessons learnt

Besides constant online communication with the participants in the course, there were instruments ready made to collect learner feedback on virtual mobility. However, it was decided to use two types of questionnaires, pre-pilot and post-pilot one.

The aim of pre-pilot questionnaire was to identify the main reasons for participation in the virtual mobility course and their initial expectations. Most students indicated that their main interest was in the OER topic, but also virtual learning and working in intercultural teams. The main challenges expected by participants were working in international groups and the English language. Among other difficulties that were listed by respondents, challenging technological solutions was one of them, and the time.

The main benefits of virtual mobility course that learners were expecting were the following: new knowledge, experience and improvement of digital competence. The skills they wanted to improve were related to understanding OER, (re)using and sharing OER, group work and the English language. Most of the learners (92%) agreed that virtual mobility can represent a considerable alternative or a complementary element to physical mobility. The main ideas how virtual mobility can be spread between students were mentioned as raising awareness, promoting such kind of courses, integrating them into regular programs, and recognizing this kind of experience.

The aim of the post-pilot (feedback) questionnaire was to indicate how the participants liked the pilot, what was important, useful, clear and what was not, what they learnt and what difficulties and challenges were encountered. As all learners were divided into 4 international groups, course activities were designed to be international group activities. The cooperation among group members was rather successful (8 indicated as good, 1 as very good) and none of the students were working alone. Respondents indicated that the English language (n=7), lack of virtual skills (n=9) and intercultural communication difficulties (n=10) have not influenced the success of group cooperation.

Participants of the course had different feelings during the pilot, but most often they felt concentrated, happy/ optimistic, and curious/inquisitive. Also 9 out of 10 never were bored, 8 stressed never being frightened, and 7 contributed never being lonely nor angry; however 9 of them indicated that they felt worried, disappointed, or confused.

All survey respondents (n=10) confirmed that there were enough tools for communication and collaboration while preparing assignments and for presentation of assignment results. Most of them agreed that email (n=10), video conferencing tools (n=9) and reviewing lecture records (n=9) were important tools for communication and collaboration during the exchange. Among the most popular methods of learning organization during the pilot, information presentation, individual and group work, exploration, search for and analysis of new resources and discussions were indicated as important. Oral feedback during the final synchronous meeting, as well as post – pilot questionnaire responses indicated that some

students wanted more feedback on their assignments. In general, the learning content was assessed as understandable, equally distributed during the course, and consistent.

Learners were also asked about their competence development in the survey. 7 out of 10 learners stated that the course learning outcomes were clearly stated and most of them (9 out of 10) improved competences related to learning outcomes strongly or adequately. Most of the indicated virtual mobility competences were also improved adequately:

- intercultural competence – minimally by 2, adequately by 8 and strongly by 1 learner;
- English language – minimally by 2, adequately by 6, and strongly by 2 learners;
- personal and social competences – minimally by 3, adequately by 5 and strongly by 2 learners;
- and digital was improved minimally by 1, adequately by 6, strongly by 2 learners and not improved by one.

Using the space in open question answers, respondents also indicated that they developed additional competences: OER related competences, personal and social competences, trust in other people and critical, reflection skills. After the course, most of the learners indicated that their attitude towards virtual mobility has changed and it is now positive (n=9). 1 learner stated that he/she sees more negative aspects of VM experience now. 9 out of 10 learners participating in the survey would like to participate in virtual mobility exchange in the future (see Figure 1 and 2):
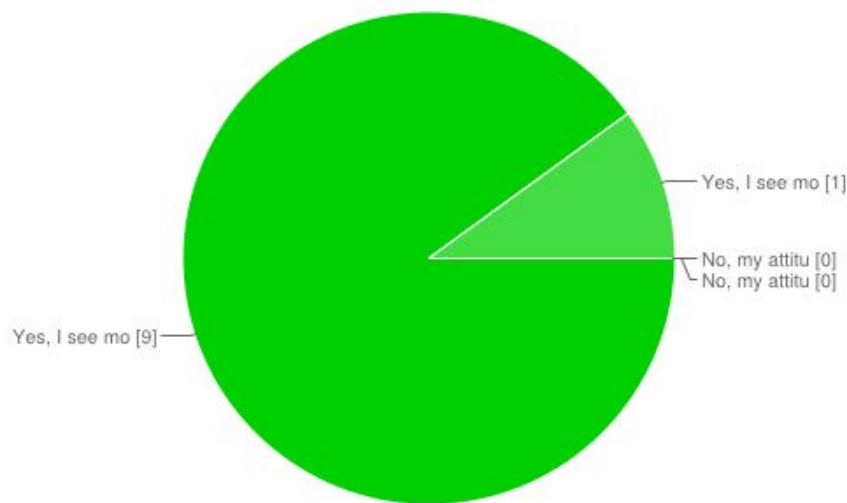

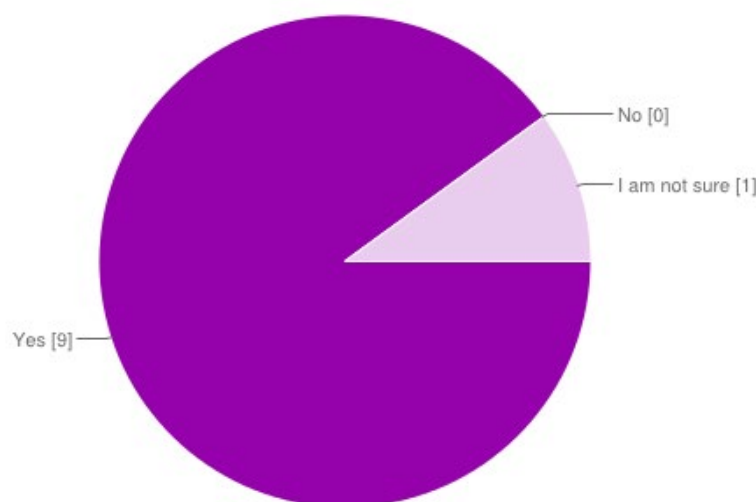Figure 1. Has your participation in the course changed your attitude towards virtual mobility?

Figure 2. Would you agree to participate in virtual mobility sessions in the future if there is a possibility?

Main outputs and success factors

The pilot was successfully completed by the same number of participants – 18. No drop – outs were identified.

However, it was identified and noticed that not all participants contributed equally to group assignments and presentations. Therefore, all groups were addressed by the pilot organizers in order to differentiate certification according to contribution of each individual. The common decision was accepted and approved by all teachers and learners to differentiate the certificate on the basis of learning outcomes achieved and participation. Three participants received certificates for "participation", and the rest participants received certificates with the learning outcomes listed as achieved.

The course is accessible as OER itself. Besides these outcomes, the following experience can be described in terms of success factors influencing virtual mobility implementation.

Table 3

Factors that had influence on the pilot	Possible solutions
There was interest provided by 10 teachers, however not all of them were really active during 5-week course, and learners felt their lack of time/attention dedicated for the course, as well as feedback to their group work results. This was one of the most critical remark from the learners.	Discuss clear roles of participating teachers and reach either oral or written agreement on these roles If experts are invited (without asking them to tutor students), divide teachers into 2 groups, clarify their roles and present clear information on these roles to participants.
The duration of the pilot was rather short (intense) and the engaged learners wanted more topics and more practical tasks Time was also indicated as one of the challenges and there were less active participants in the last task than in the first one	It can be presumed that if the course is of longer duration, there might be more dropouts/passive students at the end, but also more experience and time for getting participants to know each other, improve intercultural competence, and strengthen their connections is necessary
International learner groups were planned to be composed of 5 students. However, immediate solutions were found during the very first online synchronous meeting, which required changes in group composition. As 2 students did not show up, one group composition was different, having only 3 members in the group.	Recommendation can be drawn not to compose smaller groups than having 4-5 members in the group, in order to maintain internationalization and intercultural communication characteristics.

Conclusions and recommendations

Some of the success factors of virtual mobility implementation are summarized from the participants' comments, others are added by pilot organizers:

- There was a strong leadership and coordination that enabled the organization and successful finalization of the pilot (participants' point of view).
- Motivation of the participants: there were real challenges for student groups which had some passive students (*lurkers*), however groups managed to focus on the task, were highly motivated and dedicated (organizers' point of view).
- Thorough preparation, coordination and planning of the pilot, coherent information for the participants was prepared and distributed – all planned well in advance (from the teachers' point of view).
- Attractive topic was selected as most learners were interested in learning about OER (learners' point of view).
- Prior experience and dedicated collaborators who communicated, participated and supported the pilot from the very beginning till the end, our consortium partners and associated partners (organizers' point of view).

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