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Title: Studying in a Virtual Mobility Context : An International Pilot in the Domain of Educational Science

Year: 2019

Version: Published version

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Please cite the original version:

Vogel, C., Diegel, N., Firssova, O., Kananen, P., Stracke, C. M., & Brouns, F. (2019). Studying in a Virtual Mobility Context : An International Pilot in the Domain of Educational Science. In G. Ubachs (Ed.), *The Envisioning Report for Empowering Universities : 3rd edition* (pp. 20-22). European Association of Distance Teaching Universities (EADTU).
https://empower.eadtu.eu/images/report/The_Envisioning_Report_for_Empowering_Universities_3rd_edition_2019.pdf

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Innovative impact

This project was innovative for the three partners in more than one way. Staff members of three different universities, operating within different national and institutional traditions as well as scientific cultures and academic age, contributed to a joint course development that resulted in a successful implementation in regular curricula.

A mixed level target group of students from different universities in different countries learned together by designing an educational product using an innovative mobile gaming platform. Students demonstrated a high level of self-organisation and self-regulation, project management and virtual mobility skills, in order to deliver designed artefacts within the eight weeks course. Within this group work, they had to bridge time constraints, distance and cultural differences as well as possible differences in background domain knowledge and skills or affinity with mobile technology.

Both the joint course production by teachers across Europe and cross-border collaborative work by students designing a joint educational product brings innovation to the curricula. It not only allows co-production, it also allows co-creation by students.

Studying in a Virtual Mobility Context: An International Pilot in the Domain of Educational Science

Introduction

Virtual mobility aims at enriching Higher Education through facilitating exchanges and collaboration among students across institutional and country borders (Erasmus+ programme guide, 2018). Generally speaking, virtual mobility programmes are designed and offered by universities specifically for the purpose of organizing online learning experiences for those students who do not use physical mobility opportunities. By means of virtual mobility students can enrich their curricula with courses and other learning activities in higher education in other countries. They can do it online, using digital tools and online systems and yet in intensive interaction with learners from different universities, different cultures and contexts. By participating in virtual mobility programmes students get a chance to develop skills and competences that are not normally included in educational programmes, such as intercultural or networking skills.

This article reflects on a joint development and implementation of an international online course in educational design by teams from University of Jyväskylä, Finland, Open University of the Netherlands and FernUniversität in Hagen, Germany. In this project, students of three different study programmes in Educational Science collaboratively developed a mobile learning scenario based on theories and models of educational design and realized this design in a mobile learning application. In small international groups of maximum five students, an initial idea on an educational media product was conceived and afterwards, the theoretical foundation, design, implementation and evaluation were developed in iterative cycles. The course ended with a final online presentation, evaluating the results.

International cooperation project: Instructional design – Creating an educational media product

The quality and learning design of Higher Education is in need of further improvements to future challenges in work and life (Stracke, 2017; 2019). In order to enable such improvements and to promote international collaborative work in teaching and learning three European universities developed a joint online course 'Instructional Design - Creating an educational media product', and implemented it as a pilot in winter semester 2018/2019 for the first time. The course

Comparable examples

Digital Competent Teachers: international cooperative Short Learning Programme project (Erasmus+ KA3), targeted to support teachers in gaining digital competencies. University of Jyväskylä (coordinator), FernUniversität in Hagen, Universidade Aberta and Anadolu University (2018-2020).

LEChE: The Lived Experience of Climate Change developed innovative teaching methods in the field of distance learning on sustainable development and global climate change with FernUniversität in Hagen, Open University of the Netherlands and others (2009 – 2012).

OpenVM: Open Virtual Mobility Erasmus+ project has developed and validated a virtual mobility competence framework as a step towards designing a Learning Hub for developing these competences (Buchem et. al., 2017).

MOOQ: the European Alliance for the design and quality of Massive Open Online Courses developed quality guidelines for online learning design in close collaboration with more than 10,000 MOOC learners, designers and providers (Stracke et al., 2018).

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European Commission (2017): Digital Competence Framework for Educators. Retrieved from <https://ec.europa.eu/jrc/en/digcompedu>.

combined development of professional skills at university level with international project management and international collaboration competences.

The target group consisted of students in master programmes. They were recruited from different programmes: pre-master and a Master of Science programme in Educational Science for educational practitioners (Open University of the Netherlands), a Master of Arts programme E-education (FernUniversität in Hagen, Germany) and a Master programme in Educational Sciences of the Faculty of Education and Psychology (University of Jyväskylä, Finland). The idea was to offer a rich international learning experience for adult students, who may be less mobile due to their life situation, e.g. who combine studies and work and family duties (Vogel et al., 2018). Thus, a high degree of heterogeneity was given, even though an obvious commonality was the educational background of the study programmes.

In order to motivate students and enable them to have an experience close to their future profession, students received an authentic task to develop an educational media product (Herrington, Reeves, & Oliver, 2010). Having a solid foundation of the product in mind, students were expected to find an adequate solution to a real life educational problem in a chosen domain by combining instructional design, technology use and a reliable grounding in educational theories.

The task was to plan, implement and evaluate an educational media project, based on mobile learning design. For this purpose, an open source software application for mobile learning design, called ARLearn, was provided by the Open University of the Netherlands. Students were expected to work collaboratively in mixed groups in an online learning environment (Moodle) that was accessible for all participants, provided by FernUniversität in Hagen. Course learning objectives included both domain specific and generic skills and competences, such as project management and online international collaboration.

In the course, a variety of learning resources and support, like introductory videos, online meetings, wikis, as well as handouts and H5P presentations were provided. Displaying the content from beginning on and providing communication tools allowed students to work in own time and tempo on their media designs. To scaffold students' self-organized learning, support was provided through embedded instruction and supervision by tutors. The principle of streamlining the learning process through Salmon's 'e-tivities' (2013) was used to help students in structuring their group work as well as to make expectations, ways of feedback and deliverables transparent.

At the end of the eight week course, seven of the initial nine groups completed the course by presenting their designs and demonstrating their mobile applications to the teachers and each other. In their presentations, students demonstrated the developed artefacts, provided theoretical underpinnings, elaborated on the embedding of the designed mobile apps in the relevant instructional settings and showed the results of their evaluation. Furthermore, all students reflected on the design process and collaboration with students from other countries. So far, the feedback from students showed, that the

Herrington, J., Reeves, T. C., & Oliver, R. (2010). *A Guide to Authentic e-Learning*. New York & London: Routledge.

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joint task demanded a high level of self-organisation and focus, task division and clear communication. According to students, provided communication facilities were not sufficient for effective collaboration and students turned to social media and dedicated tools of their own choice to communicate and work together. This information and the results of two surveys (formative and summative), which were made available to students during the course, should in future help to ensure an improved continuation of the course. All in all, evaluation results of the first pilot were very positive despite some technical and organisational challenges caused by different working routines and cultural traditions.

Further information:

- Teaser: <https://www.youtube.com/watch?v=j6Z-X1Vd5uU>
- Welcome video: <https://www.youtube.com/watch?v=fbORTXxPbwA>
- ARLearn: <https://streetlearn.appspot.com>

Conclusion

The project offered an innovative opportunity for both the course designers/lecturers as well as the students. The lecturers could explore new approaches for introducing online collaboration in the existing study programmes and benefit from the experiences of the other universities as the Digital Competence Framework for Educators suggests (European Commission, 2017). The three universities with their different backgrounds and expertise gained insights on how to enrich and improve future course design. The students were highlighting in their feedback and evaluation the unique chance for them to get in contact with students from foreign universities and to collaboratively work together on a specific task.

This international pilot course, implemented by University of Jyväskylä, FernUniversität in Hagen and Open University of the Netherlands fits very well into a relatively new strand of virtual mobility. It is suitable in the category of transnational online distance education as categorized at the EADTU Mobility Matrix (Ubachs & Henderikx, 2018). Partners developed a joint curriculum with embedded virtual mobility at the course level. To proceed towards official virtual exchange mobility partner universities need to agree and sign institutional agreements and learning agreements between engaged universities. It can be summarized that the pilot is a good starting point for both improvements at course design level and the continuation of such cooperation in the future opens the door to a regular and increased institutional collaboration and virtual mobility for the three universities and their lecturers and students.