EFFECTS OF NEW MODES OF MOBILITY ON COOPERATION IN HIGHER EDUCATIONAL INSTITUTIONS

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Abstract

In the last years the importance of digital learning was ever rising. Virtual elements like eLearning on digital platforms of universities have been used for years – but mostly only as an addendum to regular lectures and on-site teaching. CoVid-19 showed that it is essential for up-to-date higher educational institutions to offer also blended learning as well as digitally connected teaching in cooperation with international partner institutions: The New Modes of Mobility. This article deals with the chances and challenges that come with virtual education in an international scenario. In addition, the effects related to the virtualisation of learning and teaching mobility on the transnational cooperation process of higher education institutions will be examined.

Keywords: *Virtual Mobility, Virtual Exchange Digital Transformation, Digital Learning, New Modes of Mobility*

1. INTRODUCTION

"University life consists of sense of belonging relations among university students, academicians, physical campus and the identity value of the university. [...] COVID-19 pandemic has changed the sense of belonging relations to the universities deeply" (Yıldırım et al., 2021).

Like one can already estimate by reading this quote, mobility of students and also all other members of higher educational institutions is essential. While the effects of digitalisation are clearly visible in major companies on the free market, educational systems and also higher educational institutions seem to be a little slower in adapting to the current situations.

Especially in Germany universities and higher educational institutions in general are proud of providing face-to-face teaching to the students. This is even more relevant to universities of applied sciences, since the students are usually working together in smaller groups than at research universities and therefore also have a stronger relationship towards the other members of the course.

The challenge is to unite the benefits of digitalisation and therefore also blended and hybrid mobility of students and personell on the one side, while also guaranteeing a continued strong relationship between classmates and teachers on the other side. In 2019 a consortium of six universities in six European countries established the project "New Modes of Mobility" that deals with the effects of digitalisation and 21st century skills on the educational sector. Target of the three-year project is to add an European value to higher education by enrichen it through virtual, blended and hybrid mobility.

At the time where the project started, no one could expect that less than one year after the start in September 2019 there will be a global pandemic. This development showed the more how important it is for higher educational institutions to be able to react flexible on external changes – like a pandemic. New Modes of Mobility wants to address all students and teaching personell, especially the use of digital components should lower barriers for people with disabilities to be able to participate in the regular university-life.

In the following this article will show the idea of New Modes of Mobility including its methodology and research approach. Especially the chances and challenges should be central part of this paper. The approach to enable everyone – no matter of which background – in university life was the core of the idea to start the project New Modes of Mobility. The CoVid-19 pandemic showed how important it is to have a "plan B"!

2. STATUS QUO, METHODOLOGY, DEVELOPMENT

2.1. Status Quo

In the Rome Declaration, of 25 March 2017, EU leaders' called for 'a Union where citizens have new opportunities for cultural and social development and economic growth' and pledged to work towards 'a Union where young people receive the best education and training and can study and find jobs across the continent'.

Therefore, in higher education great emphasis has already been placed on internationalisation in order to develop the transversal skills of students. In contrast, currently widespread methods of mobility reach only a very limited number of students. Especially considering the many social and physically disadvantaged students in Europe, this is an intolerable situation. Moreover, a modern workforce simply requires employees who possess interpersonal skills to act as real European citizens. In addition to the international aspects, employers in a globalised world seek graduates with skills related to digitalisation and interdisciplinary competencies.

This is where "New Modes of Mobility" addresses students, teachers and higher educational institutions. By creating modules and courses with aspects of virtual and hybrid mobility, barriers to gaining experience in internationalisation and digitalisation will be lowered.

With this inclusive approach, socioeconomic, financial and health issues can be overcome, and a substantially higher number of students are able to benefit from a state-of-the-art educational system.

All the partners – University of Applied Sciences Würzburg-Schweinfurt (FHWS) in Germany, Seinäjoki University of Applied Sciences (SeAMK) in Finland, Stichting Fontys in the Netherlands, University of Zielona Góra (UZ) in Poland, Lucian Blaga University of Sibiu (ULBS) in Romania and University of Debrecen in Hungary – test the developed modules and courses.

These will increase

• amount of students involved in international teaching and learning concepts – at least by 100%

• awareness of internationalisation and transversal skills among students

• knowhow of teachers as well as curriculum designers

• joint course and curriculum design and implementation

• number of students applying for learning mobility.

The results are presented at national and European level conferences and networks.

Open access to the material developed - new models of mobility, virtual guide to build the capacity of the teachers to implement internationalisation at home, framework on a curriculum level, and New-Modes eBook - are provided to other HEIs. The material will be made available on the project homepage (https://fwiwi.fhws.de/newm/), among other places.

National level education authorities are sensitised on the results in order to present internationalisation at home as a vital option for educational institutions at all levels.

Many approaches for the implementation of modern mobility concepts already exist. These usually only target at a very limited number of students who also already have a high intrinsically motivated interest in international issues. For this reason, the essential core of this project is the inclusion of those stakeholders who either do not become aware of the international teaching and learning models on their own or do not have the possibility to participate due to various access barriers.

Therefore, in this project completely new modes of virtual and hybrid mobility are designed by building up on the already established ideas about virtual and physical mobility as can be seen in figure 1. Those concepts have been implemented into existing curricula in such a way that the range of the mobility will be boosted substantially in the corresponding study programmes and in addition will increase interest in physical mobility. The idea is to place international teaching and learning concepts not only in advanced

and unfocused study sections or even optional subjects. Rather, a major focus is to locate grassroot-concepts already in the basic curriculum of various study programmes.

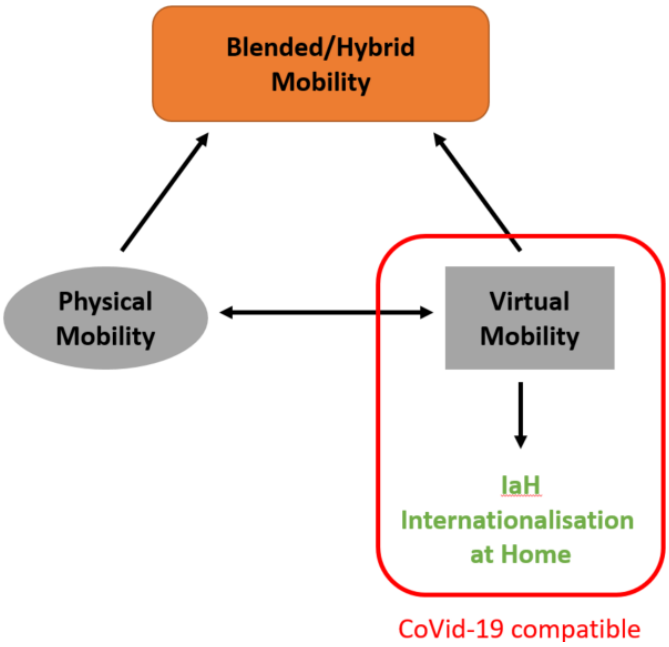


Fig. 1. Overview Physical, Virtual and Blended Mobility (Winkler, 2018)

In order to promote and push the idea afterwards as well as make it possible to transfer the results to universities outside the consortium, corresponding concepts should not only be identified, implemented and revised, but also presented in such a way that they will be adopted and evolved later on.

Internationalisation at home should become a norm rather than an exception!

2.2. Methodology

The main intellectual output of this project consists of best practice examples for new mobility concepts. Both the development of those individual mobility components as well as the overall course of the project are strongly inspired by the design-based research approach of Mc Kenney & Reeves, as can be seen in the figure, this leads to a iterative process of developing, testing and evolving.

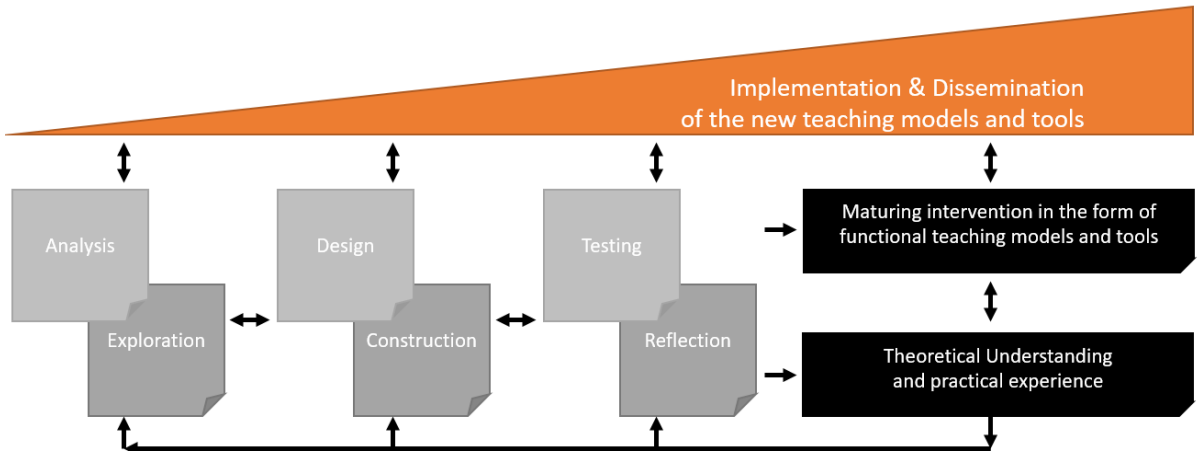


Fig. 2. Model for the design-based research in NewM (according to McKenney & Reeves, 2012)

In order to internationalise this project, to add especially European Value to it and to overcome borders (physical and in the minds) every partner conducts its mobility concept with other European partners. The original idea was to develop six virtual and hybrid teaching units with at least two partners. According to the figure below, the responsible teachers would develop and monitor a learning scenario in which the students have to work together and exchange information.

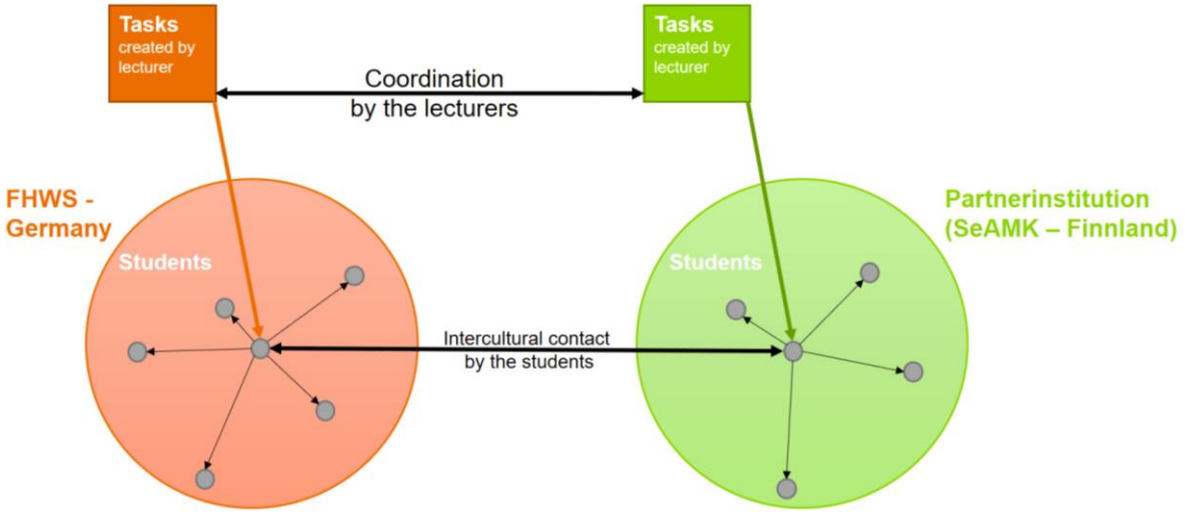


Fig. 3. The bicycle project (Winkler, 2018)

2.3 Development

As already mentioned, the original plan was to deliver several projects that would have been conducted by at least two partners of the consortium per module. Due to CoVid-19 this scheme had to be remodelled. The original 6 teaching units, designed as learning modules to connect students, teachers as well as other involved university staff, were now taught simultaneously and open to all students from all involved institutions in the so called "Abroad@home"- programme, which became a coherent virtual semester abroad experience.

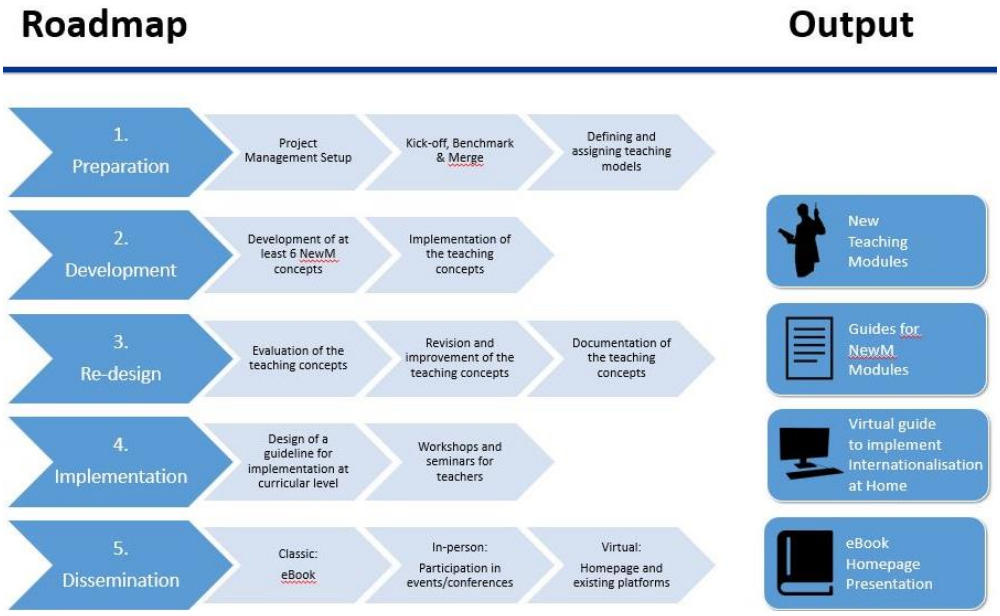


Fig. 4. Original project plan (Engert, 2019)

While the organisation of the modules was therefore changed, the core idea and goals are still the same as in the original concept. Currently, the first iteration of these modules has already been completed and the students have already received their transcript of records. Overall we are very pleased how the modules worked out and have been appreciated by the involved students. The "Abroad@home" programme was a great opportunity to introduce real "New Modes of Mobility": The experience and our learnings throughout this semester will be the basis for the next objectives in this project and even beyond it.

In the context of the virtual exchange program Aborad@home, the topics from the areas of management, marketing, business simulation and communication are taught through the use of virtual didactics. Through cross-border, collaborative work the students deepen their learning and acquire a variety of the so-called "21st Century Skills", which are essential in today's digital and international world (Rotherham et al., 2012). In this way, an experience abroad from home is offered, which is awarded with a certificate after successful completion of the six modules offered and the acquisition of the associated 30 ECTS (this corresponds to the average workload of a regular semester). An overview of the included six teaching units can be found in the following table 1.

MODULE 1: Speaking Europe (provided by Seinäjoki University of Applied Sciences, Finland & Debrecen University, Hungary)	
Online International Communication Skills in English. This module serves as a prep module for the rest since the skills gained here are needed throughout. Task-based project work during semester in student teams.	Topics covered: • Online negotiation skills • Professional writing online (different online platforms) • Relevant Intercultural Communication skills, e.g. Online Meetings and Online Negotiations
MODULE 2: Nailing it – design, develop and communicate your idea! (provided by: Wurzburg-Schweinfurt University of Applied Sciences, Germany & Seinäjoki University of Applied Sciences, Finland)	
The students will work in international teams and as a result introduce a new product online.	Topics covered: • developing your idea into a product • teamwork skills • preparation of an online presentation for an international webinar • feedback skills
MODULE 3: International Marketing (provided by: University of Applied Sciences Wurzburg-Schweinfurt)	
Student face the fundamentals of Marketing and experience basic models of cross-border marketing by solving tasks in a simulated scenario.	Topics covered: • Advertising fundamentals and marketing strategies • Preparation of international marketing plans

	• Collaborative working on marketing challenges in an cross-cultural context
MODULE 4: Management Gaming in virtual cooperation (provided by: Fontys University of Applied Sciences, the Netherlands)	
Students face the basics of management with all instruments that are needed to analyse and solve integrated marketing and supply-chain plans.	Topics covered: • Establishing well-founded marketing plans (promotion and pricing). • Defining operations management plans (sourcing and channels). • Evaluating financial performance of the organisation (report to shareholders).
MODULE 5: Marketing Research (provided by: Lucian Blaga University of Sibiu, Romania & Fontys UAS, the Netherlands)	
You will work in an international team to develop a marketing research project.	Topics covered: • Marketing research based on secondary and primary data • Questionnaire Design and Construction • Using marketing research data to guide business strategies
MODULE 6: Strategic Management (provided by: University of Zielona Góra, Poland)	
The main objective of the course is to provide knowledge on the methods and tools of strategic analysis and the importance of formulation and implementation the development strategy in a company.	Topics covered: • The analysis of a closer and further environment: Benchmarking, Balance Scorecard, PEST • Analysis of the company‘s potentials (product life cycle, SWOT analysis, strategic balance) • Development strategy for a new product

Table 1. Abroad@home module overview

Due to the CoVid-19 pandemic we had not only to change the original structure of the modules but also freeze the physical and blended mobility aspects of the project. Until now, we can only guess if a reintegration in the future is possible. Therefore, we felt it was necessary to designe the Modules in such a way that the three essential elements of a regular semester abroad could be simulated:

- Education (beyond cultural borders)
- Communication (beyond cultural borders)

- Collaboration (beyond cultural borders)

The following figure shows the structure of one Module as an example. While the education part was instrumentalised to deliver a basis as well as a learning framework to the students, the communication and collaboration aspects where used to enable the students to learn from each other and from the experience they have together.

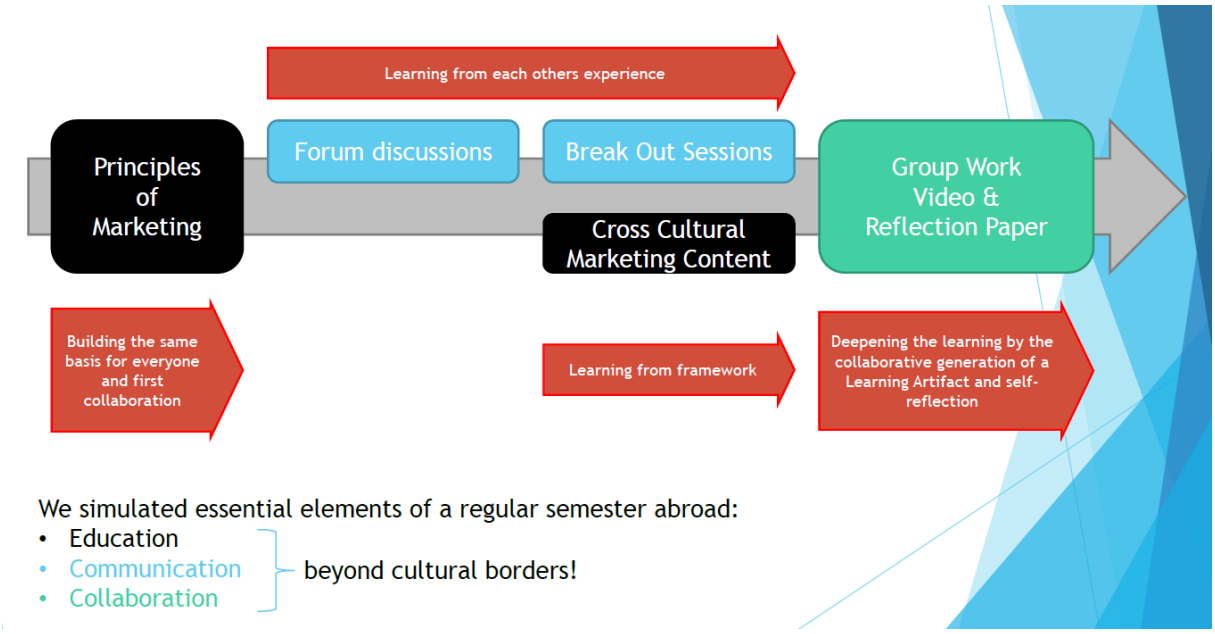


Fig. 5. Teaching Model (Winkler & Engert, 2020)

3. IMPACT

The major target groups of the project are the participants of the offered teaching units (participants) as well as the participating organisations with its teachers and staff. The following is an overview of the project's impact on these units up to today.

Participants

Through the implementation of several prototypes and the first implementation of the comprehensive Abroad@home programme, a large number of students from all partner universities could already benefit from our project. Between 50 and 100 students were involved in each of the prototypes. A total of almost 40 students from all six partner universities have enrolled in the Abroad@home programme. By involving students from the regular degree programmes, we were able to increase the numbers and to reach to up to 100 students.

We were able to firmly convince the participants of the relevance of digital exchange programmes (not only in Corona times). From a content perspective, examination results as well as self-reflection and feedback prove that the students were able to acquire essential intercultural experiences during the teaching units, in addition to obtaining academic competences.

While the participating students consistently speak of a positive experience, it should be noted that due to the general online fatigue caused by the CoVid-19 situation, students are currently showing some reservations regarding online opportunities.

Participating organisations

The project leaders at all participating organisations were able to gather comprehensive competences in the area of university and cross-border coordination as well as organisation of study programmes. In

addition to the conception of the content, new knowledge was also gained in the area of administrative and chronological coordination. In particular, the technical implementation of such a programme has revealed a lot of potential for improvement and is therefore one of the top priorities for the further work on the project.

Due to the drastic effects of the Covid-19 pandemic, the consortium was also able to prove itself crisis-proof and was able to work out the necessary adjustments within an appropriate period.

The teachers involved are composed partly of those responsible for the project and partly of additional specialists. During the project, these teachers also developed a certain adaptability and were thus able to further develop their teaching concepts in such a way that they could be reimagined in a virtual exchange scenario. In addition to intercultural skills, this of course also includes essential technical skills. The comprehensive implementation of virtual exchange also meant that the teachers had to reflect and rethink their interaction with the students, in order to ensure that the physical as well as psychological barriers were overcome.

Altogether, it can be stated that participation in a collaborative, virtual teaching unit leads to the fact that teachers as well as involved staff members have to bring along a certain flexibility. With ongoing participation in corresponding teaching concepts, not only new competences are developed, but also new possibilities are identified to overcome various barriers and to build necessary bridges. This applies not only to teaching, but especially to administrative processing.

Other relevant stakeholders

In addition, dissemination opportunities were also taken at the organisations. This helped to raise awareness among non-involved lecturers and staff. With specific dissemination activities, the wider public was already involved at this early stage of the project in order to achieve a certain level of awareness.

4. DISCUSSION

The participating teachers have definitely perceived the already finished iteration of the programme as a success. Despite the additional effort for all involved, the students were successfully taught the essential competences of the module. As in any other virtual teaching scenario, the unconventional non-physical situation brings both advantages and disadvantages. However, with the right amount of awareness and preparation, this can be taken into account accordingly.

The particular international component of the teaching units was also perceived as an enrichment. The main problems such as underperforming team members or faltering attention can also be found in other teaching scenarios. The additional challenges that arose due to different cultures or time zones as well as the technical conditions were in retrospect identified less as a disruptive factor and more as part of the learning experience. The students were thus not only able to gain international and intercultural experience, but also exposed to the increasingly relevant virtual working environment.

As mentioned at the beginning, however, the effort required to realise such a module is considerable. Not only the additional measures that have to be taken in advance, but also the additional coordination effort over the entire duration of the module must be taken into account. Here, every lecturer must consider a cost-benefit analysis for himself and his students in order to determine in advance whether the effort is actually worth it. Overall, however, the lecturers were convinced of the success and benefit of the module in this constellation.

5. CONCLUSIONS

As previous experiments with virtual mobility have already shown, it has also emerged in this project that an essential success factor for cross-border virtual teaching is that people are at the centre. The project New Modes of Mobility is inspired by many other approaches that have been conducted in the past, where curriculum design and virtual mobility built the focus for research (Teresevičienė, 2011).

Using that already conducted research New Modes of Mobility focuses on the individuals of higher educational institutions and put the idea into a 21st century perspective. The content, the teaching method and the technology are to be seen more as a framework. In order to get the most out of these three components, it is essential that the interpersonal contacts are in the focus and that appropriate scenarios are simulated. This leads to an above-average plus in effort, which every interested person must weigh up.

Overall, however, it can be stated that the lecturers assume that the effort made contributes to the students involved being better prepared for the changing digital and international working world.

Digital learning will not be able to replace face-to-face teaching in total. But like also recent research showed, students that have been learning remotely before the crises have only be slightly more satisfied with the virtual or blended approach. The difference in the conducted suervey was less than ten percent, using a scale from one “unsatisfied” to fife “completely satisfied” (Zuccoli, p. 6400).

Additionally to all the stated aspects, it is important to say that besides an increase in employability of the participants, also students could be involved who might otherwise never have taken part in a semester abroad at all. This may be due to motivation or barriers. In any case, we see a promotion of global citizenship among the students.

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