Virtual mobility of students is gaining in importance in higher education because it enables mobility to students who are unable to engage in traditional mobility programmes. In the proposed article authors discuss the benefits and challenges of virtual mobility that have been noted by DOBA Faculty students who were engaged in virtual mobility programmes. DOBA Faculty started developing virtual mobility ten years ago and since then satisfaction with virtual mobility programmes is measured with the questionnaire every year. The study proves that the main competencies that students expect from international virtual mobility are the improvement of intercultural competencies and an improved knowledge of English. While within challenges the most exposed is the challenge in the form of specific knowledge and skills that students should have in order to be able to take a course in the virtual environment.

Introduction

Interest in virtual mobility as an alternative to physical mobility has been increasing in the recent years. At the same time the number of studies on this topic is increasing rapidly. Most of them are focusing on the definition of virtual mobility. Thulin (2005:1) defines the virtual mobility as a physical transportation and face-to-face contacts are replaced, complemented or generated by virtual ones. Pursuea et al. (2005) see virtual mobility as a tool that fosters the use of e-learning. For Schreurs et al. (2006:4) virtual mobility allows collaboration between foreign students and teachers that are no longer location dependent. Poulová (2007:87-92) states that virtual mobility is the opportunity for collaboration of people from different backgrounds and cultures, who are working and studying together and are not placed in the same country. According to Elearningeurope.info (2009) virtual mobility is the use of information and communication technologies with an aim to obtain the same benefits as
with physical mobility but without the need to travel. In the opinion of Vriens et al. (2010:1) virtual mobility is different from physical mobility, but it can be used as an alternative for it. They defined virtual mobility as the set of ICT-supported activities that realize cross-border, collaborative experiences in a context of teaching and/or learning.

If summarizing all definitions, the virtual mobility can be addressed in two possible ways. On the one hand, virtual mobility is a valuable alternative for physical mobility. It enables students to take part in courses at other universities without having to leave their home university (Op de Beeck et al., 2007). On the other hand, virtual mobility can be used to prepare, support and follow-up physical mobility (Op de Beeck et al., 2007). The same as with physical mobility also with virtual mobility students can gain linguistic, cultural and educational experiences (Bijnens and de Beeck, 2006) that increase their value in the labour market.

The recent years have been very rich in publications referring also to the effects of virtual mobility. In their study, Beel and Keegen (2010) analysed two European projects where information technologies were used to help in physical mobility and enable other students to try virtual mobility. Harryba (2013) analysed the experiences with virtual mobility at an Australian university. Woyenski (2014) analysed factors that influenced students’ intercultural development and experiences in joining educational mobility. In his study of international learning and diversity, Otten (2003) emphasised that international experiences, which individuals acquire through mobility during their study years, benefit an individual’s personal development and employability. Hammer and Bennett (2003) have shown that together with intercultural competencies, which students acquire with virtual mobility, they mostly acquire the ability to understand and respond to cultural differences. According to Bijnens and de Beeck (2006) virtual mobility is also important for institutions as it encourages them to adapt and further develop their pedagogical models. Furthermore, virtual mobility can also enhance the quality of courses and curricula (EADTU network, 2007) and can contribute to the overall quality of the academic education (Brey and e-move project partners, 2007).

This article analyses the effects of virtual mobility with the help of the data obtained by the students who were involved in virtual mobility at DOBA Faculty in the last ten years. Section 2 provides a summary of advantages and challenges of virtual mobility as stated in different literature. After presenting the methodology and sample, Section 3 discusses the results of an empirical analysis of factors that motivated students to join virtual mobility, advantages, and challenges of virtual mobility at DOBA Faculty. Section 4 draws conclusions.
Advantages vs. challenges of virtual mobility

Among the authors who have researched the advantages of virtual mobility, Bijnens (2005) emphasised that virtual mobility can reduce obstacles and help persons with disabilities to gain equivalent international experience as they would with physical mobility. Virtual mobility reduces the socio-economic barriers, therefore it ensures social inclusion in some part (Bijnens & de Beeck, 2006). The advantages of information technologies make remote regions and individuals more easily accessible (Van Petegem et al., 2004). This enables equal opportunities and possibilities for all and inclusion of all. With virtual mobility, students gain access to experts from other institutions and access to courses, learning materials and resources that are physically located far away from their home country.

Virtual mobility encourages students to use the Internet, while all this includes the learning of important skills that are required by the labour market. Flexibility of virtual mobility allows students and teachers to be involved in learning and teaching in a flexible manner. Virtual mobility allows flexible schedules, while at the same time it shortens the distance between institutions.

On the other hand, virtual mobility can also be important to prepare students for physical mobility. In this case the elements of physical and virtual mobility are combined in order to enhance the advantages of both approaches to the mobility of students and teachers (de Beeck et al., 2007).

An important advantage of virtual mobility is also the international cooperation and establishing partnerships among individuals and institutions. These lead to a higher quality of implemented study programmes of each partner institution and enable the higher education institutions to become stronger and more competitive (EuroPACE, 2010). Besides advantages the virtual mobility also brings a number of challenges to its providers. These are especially related to the requirements and conditions that have to be met for its implementation, and can be classified into:

- the challenges that virtual mobility brings to the teachers,
- challenges for the students, and
- technical challenges.

The courses that are included in the virtual implementation have to be supported by appropriate information technologies. Teachers have to gain specific knowledge in order to be able to prepare the courses that are implemented virtually. The preparation of such courses requires completely different techniques and tools. The courses have to be flexible, as it is important that they can be simply upgraded and changed.

On the other hand, virtual mobility also brings numerous challenges to the students. They have to be familiar with the techniques of online learning, while greater attention is paid to individuals, which is
characteristic for virtual mobility. This can cause a slight discomfort for some students. Students can also have a negative experience due to fewer opportunities for socialising. At the same time, virtual mobility can also represent higher risks of drop-out or premature withdrawal of students before they finish their course. Opdebeeck’s (2005) study emphasises the importance of knowing a foreign language as a challenge of virtual mobility, which can be a challenge both for the teachers and even more so for the students. Vrijens and van Petegem (2012) emphasise the main challenge of how to make a student feel like a part of the institution where they are taking the course, as they can be actually taking a course from the other side of the globe.

Regarding the technical challenges of virtual mobility, these predominantly include challenges relating to stable information technologies, system and platform compatibility and consideration of standards. Another important technical challenge for students is to have a stable Internet connection. In the following chapter the main advantages and challenges are presented from the perspective of students enrolled in virtual mobility courses at DOBA Faculty.

**Virtual mobility at DOBA**

DOBA Faculty started to develop virtual mobility ten years ago. All courses are carried out in the Blackboard virtual learning environment. So far, over 2200 students from 36 different countries have participated. Virtual mobility is implemented in three forms: within the framework of the virtual summer school, within the framework of the international week and within the framework of joint implementation of courses with the international higher education institutions.

Course activities are supported by collaborative technologies (other than forums, chats, wiki, OneDrive and Blackboard Collaborate were also used) to encourage participation, collaboration and to maintain motivation.

Throughout the years of implementing the virtual mobility, a survey was conducted among the participating students regarding their satisfaction with the implementation of the courses. In this article we are presenting individual key competencies and opportunities resulting from virtual mobility, followed by the main challenges of the implemented virtual mobility. The sample comprises 249 students who took one of the courses offered within the framework of virtual mobility in the last 10 years.
As evident from the Figure 1, the main competencies that students expect from the virtual mobility are the improvement of intercultural competencies and an improved knowledge of English. This is followed by the opportunities arising from participation in an international team and improved knowledge of online learning. Expected competencies are closely connected with factors that motivated students to join virtual mobility, as it can be seen from the Figure 2. Detailed results on motivation factors are presented in the Figure below.
As evident from the Figure 2, students decided to become part of the virtual mobility due to a new challenge that virtual mobility brings, for reasons of communicating with students from other countries and because they found the topic of the course interesting. The students pointed out that they joined the virtual mobility course in order to develop the following competencies: personal development, development of linguistic skills, development in the field of culture, academic development and others.

As DOBA Faculty primarily focuses on the online learning, the implementation of virtual mobility brought fewer challenges. Higher education institutions that provide only the traditional study mode often face great challenges regarding virtual mobility or online learning. Teachers at DOBA Faculty are already skilled in preparing courses for online learning and as the school already has sufficient information support for the provided online learning mode, the challenges faced by DOBA Faculty predominantly related to the students who were included in the virtual mobility courses. In the following Figure we are presenting the most frequent challenges stated by students who were involved in virtual mobility at DOBA Faculty.

As it can be seen from Figure 3 students are aware that they have to have specific knowledge and skills in order to be able to take a course in the virtual environment. This predominantly relates to:

- Online learning, where the ability of time and information management and self-discipline are important.
- The knowledge of English.
- The knowledge of information technologies, especially browsing the Internet and testing different technologies (forums, blogs, chat, etc.).
• Communication skills, which include the ability to agree, disagree and summarise as well as intercultural acceptance and awareness of cultural differences and ethics.
• Motivation for ending the course.

Especially students from Africa stated that specific challenge is also the stable internet connection that is needed in order to be involved in virtual mobility.

DOBA Faculty uses different ways to overcome all mentioned challenges. Students are provided with strong support in order to gain the knowledge and skills that are required for the online learning. Experience have shown that students, who have previously been engaged only in the traditional study mode, need four times more technical support than students, who are experienced in online learning.

Managing international groups also requires detailed planning, especially as a number of students are less active, while the groups of students are also very diverse in terms of their cultural background. In virtual mobility, the task of online tutors, whose role is to monitor students’ progress and help them with substantive and technical issues, is thus predominantly focused on motivating students.

Our ten years of experience with implementing the virtual mobility have also shown that during the implementation of a course, individual activities are often adapted to the motivational needs of students. As some students prefer to gain knowledge by observing instead of cooperating, team activities often had to be transformed into individual activities.

Our experience also shows that dropping out of courses taken in the virtual environment is rather frequent. Considering the average of all years that virtual mobility has been implemented, 20% of students prematurely withdraw from taking the course.

Opinion polling among students also shows that the majority of students who had not had any previous experience with online learning have gained faith in such study mode. The students easily overcame the challenges brought by participating in an international environment. The majority of the students find only the initial days of the course to be difficult.

According to DOBA’s experience, students with little or no experience in online learning needed more support. Students need the tutorial as well as the technical support 4 times more than experienced online learners. More time is also needed to become familiar with the environment and online learning principles. In case of any technical difficulties, the students can contact the technical support via e-mail, Skype, phone or a special forum in Blackboard learning environment.
**Conclusion**

Despite numerous challenges that a higher education institution has to overcome when introducing virtual mobility, the advantages brought by virtual mobility are such that an increasing number of institutions are deciding on implementing it.

At DOBA Faculty, virtual mobility was first implemented in the 2005/2006 academic year. So far, over 2200 students from 36 different countries have participated. Satisfaction with virtual mobility programmes is measured every year with a survey conducted among students and the obtained results allow us to additionally increase the quality of implementation and thus increase the school’s competitiveness. The results of the survey presented in this article show that the most frequent advantages of virtual mobility for students are the improvement of their intercultural competencies, improvement of English and positive effects of participation in the international teams. The main exposed challenges in the view of students are the need for strong knowledge on online learning and information technologies.

**References**


