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Academic Mobility of Students in the Conditions of Digitalisation of Higher Education

Summary

The article considers the issue of virtual international academic mobility as one of the priority areas of international activities of higher education institutions. It is substantiated that the intensive development of information and communication technologies (knowledge mobility) and informatisation of public life led to the spread and use of virtual educational environments and e-learning in higher education, which became the basis for the development of virtual academic mobility of students. The purpose of the study is to study the existing approaches and practices of academic mobility, including virtual, to determine the main benefits and opportunities for disseminating this experience at all levels of higher education in Ukraine. The research methodology consists of general theoretical and empirical research methods. A review of modern scientific literature, periodicals, and scientific and methodological sources on the problem of academic mobility and the digitalisation of higher education is made. Their analysis, structuring, interpretation and construction of logical conclusions are highlighted.

The article considers the content of the main scientific approaches to the definition of "academic mobility". The characteristic of academic mobility in the conditions of digitalisation of higher education is given. Varieties of academic mobility in modern conditions of digitalisation of higher education (physical, virtual, mixed) are considered. The subjects of virtual academic mobility (virtual student, virtual teacher, virtual university, virtual campus) are outlined. The main advantages and disadvantages of such virtual academic mobility of students are identified. The main methodological recommendations of European funds and associations are analysed, based on which the project preparation plan for any virtual mobility type is developed. It is proposed to carry out additional measures that ensure the quantitative growth of academic (virtual) mobility and improve its quality. The necessity of searching for new forms of remote exchanges, analysis of the experience of foreign associations and their adaptation according to the realities of the system of higher education in Ukraine is substantiated: the active involvement of the student's audience in programmes of virtual cooperation; increasing the necessary competencies of the administrative and teaching staff of higher education institutions, which allow implementing such virtual projects using innovative information technology tools; preparation of the regulatory framework that enshrines the right to implement virtual academic mobility along with the full-time form and recognition of its results by recalculating educational loans.

Keywords: student exchange, virtual educational environment, international cooperation among higher education institutions, virtual mobility, project preparation

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1. Introduction

The active international activity of a higher education institution (HEI) is an identifier of its efficiency and competitiveness in the global education market. Necessary criteria for successful international activities of higher education institutions are the number of foreign students studying both in the main educational programmes and within academic mobility, implementation of cooperation agreements with foreign higher education institutions-partners, joint research and publications, double degree programmes and international research and cultural events, student exchange, administrative and teaching staff, etc. International academic mobility of students, as the transfer of students to another educational institution for a certain period, is, according to some experts, one of the most important tools for improving the quality of human capital (Mospan, 2021).

Convergence and harmonisation of higher education systems in Europe, including Ukraine, based on global humanitarian values is the most important factor in educating the new generation in our countries. Because of this, in modern conditions in Ukraine, there is a tendency for active cooperation between domestic and foreign higher education institutions. This process was largely facilitated by changes in Ukrainian legislation, including the adoption of the Law of Ukraine "On Higher Education" (2014) and the Resolution of the Cabinet of Ministers "On Approval of the Regulation on the Procedure for Exercising the Right to Academic Mobility" (2015). Among the areas of international cooperation of higher education institutions, the outlined legal documents outline the need to create joint educational and research programmes with foreign higher education institutions, research institutions and organisations.

At the same time, in modern conditions, the importance of digital technologies in education is growing. The educational process is no longer possible without modern information and communication technologies, mobile applications, open educational resources and other technological developments. Evidently, the traditional model of education, aimed only at acquiring knowledge, is outdated (Buinytska et al., 2020). It is necessary to transform the existing education model and review existing approaches and models of learning to acquire the skills necessary for effective life and professional development in the digital environment (Areshonkov, 2020).

With this in mind, in today's digitalisation of education, it is appropriate to talk about distance (or virtual) academic mobility, which involves the development of internship programmes through online courses on information platforms on the Internet. The LLL (Life Long Learning) programme treats virtual mobility as an additional or independent type of mobility based on the potential of online learning and network communications (Pichyk et al., 2020).

In general, academic mobility in the context of digitalisation transforms the ecosystem of higher education, accelerates its internationalisation (Dias et al., 2021) and contributes to the diversification of educational institutions (Dakowska, 2017). That provides students with additional benefits: it opens up new opportunities for academic development; improves a variety of skills (communication skills, language skills and digital communication skills) (Aguaded Gómez & Pozo Vicente, 2011); promotes student employment (European Commission, 2019). The programme's richness combines academic experience and the socio-cultural experience of living abroad.

Virtual as well as mixed mobility programmes have many advantages. Such programmes are less well-known than physical mobility programmes, but experiments on virtual and mixed mobility in Europe have long been conducted. The urgency of this issue has increased enormously in today's pandemic when closed borders make physical movement impossible. Virtual mobility, in these circumstances, may be a viable alternative.

The purpose of the study is to study the existing approaches and practices of academic mobility, including virtual, to determine the main benefits and opportunities for disseminating this experience at all levels of higher education in Ukraine. To achieve this goal, the following tasks are outlined: to define the essence of the concept of "academic mobility" and consider its main types (physical, virtual, mixed); outline the benefits of student participation in virtual and mixed mobility programmes; develop recommendations for the preparation of a draft programme of any type of virtual academic mobility.

2. Research Methodology

The study used theoretical methods: the method of analysis and synthesis, the theoretical analysis of scientific literature on the problem of academic mobility and the digitalisation of higher education. The study's theoretical basis is basic research in integration processes of higher education and research on the problem of digitalisation of higher education at the institutional level. The systematic approach allowed us to study different approaches to "academic mobility" and "digitalisation of higher education" and identify their characteristics.

3. Characteristics of Academic Mobility in the Context of Digitalisation of Higher Education

Academic mobility allows more applicants to gain meaningful intercultural experiences as part of their education. It promotes digital competence (the ability to communicate and collaborate effectively on the Internet), improves foreign language skills, communication skills, media literacy (Kovbatyuk & Shevchuk, 2020) and the ability to work in a diverse cultural context.

In modern conditions of digitalisation of higher education students are offered the following types of mobility:
- physical mobility – training students in free economic education outside their own country for a limited time (semester or year) to re-enrol in their home university. The unconditional advantage of physical mobility is direct immersion in another culture, educational environment, and acquisition of intercultural skills. Physical mobility can be achieved, for example, with the support of the Erasmus programme;
- Virtual mobility is a form of learning with integrated virtual elements implemented through a learning environment supported by information and communication technologies. Virtual mobility involves the joint learning and cooperation of people from different countries and cultures, one of the main tasks of which is to strengthen intercultural understanding and knowledge exchange (Pichyk et al., 2020). On the other hand, virtual mobility is a practice supported by previous analysis and research, which involves several repetitive, technologically supported and facilitated teachers learning components for geographically remote individuals or groups for their constructive communication and interaction. Virtual mobility combines awareness of the profound impact of intercultural dialogue and exchange with the vast potential of digital technologies (Evidence-Validated Online Learning, 2019). Various technologies are used to ensure and implement virtual mobility: video conferencing, learning management systems (such as Moodle), as well as more accessible sources such as forums, chats and e-mail;
- Mixed mobility is a combination of physical and virtual mobility. Mixed mobility usually complements physical or virtual mobility. Participants in mixed mobility can, for example, work on a joint project within virtual mobility (carrying out the analytical part of the project), which is preceded by a face-to-face stay of applicants at a foreign university (e.g., dating, methodology, data collection, etc.).

Currently, all three types of mobility are used in the practice of free mobility, but the article will focus on the study of virtual mobility, as it can reach a significant number of students and therefore requires special attention from all university structures (Shvydun, 2021). In the last decade, virtual exchange and virtual mobility have become important tools with great potential to promote the internationalisation of higher education institutions (European Commission, 2019; O'Dowd, 2017). Over the past few years, the expansion of virtual exchange projects has confirmed its popularity among university faculty and students, and this could be a potential complement to future physical mobility programmes (Helm & Beaven, 2020). Virtual mobility is also an opportunity to develop a curriculum at the national or international level related to the field of student learning using distance learning methodology. Operational virtual academic mobility of a student is participating in the educational process of another educational institution with the help of Internet technologies, i.e., participation in educational courses as a listener/student.

The subjects of virtual academic mobility are:
1) "virtual student" (from the Engl. virtual student or online learner) – a student who is a participant in virtual academic mobility;

2) "virtual teacher" (from the Engl. virtual professor) – a teacher of the course, which is offered virtually;
3) "virtual university" (from the Engl. virtual university) – a higher education institution that offers an online course;
4) "virtual campus" (from the Engl. virtual campus) – a virtual educational environment using Internet technologies (Simak, 2017).

In 2010, at the Erasmus conference in Brussels, devoted to virtual educational campuses, virtual mobility was considered in the context of integrating the various opportunities for online cooperation in the strategy of lifelong learning in freelance education (Ballatore & Ferede, 2013). Today, this phenomenon has received special development. The principle of work of European associations in this direction is to promote the development, management and implementation of virtual research and mobility in the current activities of universities; increase the level of competencies of administrative and teaching staff in virtual technologies; overcome the existing economic, social and other restrictions on the organisation of such educational activities. Moreover, recognising the results of virtual academic exchange and the possibility of recalculating educational units is acute (Kovbatyuk & Shevchuk, 2020). In the European education system, such a problem is minimised through a single system of ECTS credits, while recognising the results of even face-to-face exchanges in higher education institutions in Ukraine is still controversial. Such difficulties require consolidating students' virtual mobility and face-to-face exchanges at the level of university legal acts.

The problem of the lack of competencies of students necessary for mastering the distance learning programme should be singled out. Therefore, there is a need to develop a methodology by which students can navigate in a virtual digital educational environment to interact competently with the teacher remotely (Shvydun, 2021).

Among the weak aspects of virtual mobility is also the problem of the quality of teaching and, mainly, control over it (its regulatory framework is not fully developed); distrust of diplomas received from employers and traditional universities, most of which recognise virtual education only as a foundation for traditional education and a means of self-education;

low level of foreign language skills, which allows most students to use the educational platforms of leading international higher education institutions.

4. Key Stages of Project Preparation for Any Type of Virtual Mobility

Having studied the methodological recommendations of European foundations and associations and adapting them to the specifics of Ukrainian higher education, we formulate the key stages of project preparation for any type of virtual mobility, which should be coordinated by the administrative group of the educational institution:

1) formation of technological competencies of all participants of virtual exchange programmes;
2) preparation of an academic proposal for different target groups and sending it to all universities participating in the project (indicating teachers and disciplines, description of the university);
3) preparation of platforms for the implementation of distance learning;
4) concluding an additional agreement or an annex to the cooperation agreement between the partner universities;
5) promotion of programmes at the "home" university;
6) management of the process of enrolment of students by local regulations of the university;
7) involvement of virtual mobility in external quality control;
8) promoting the recognition of courses and periods of study in the virtual environment based on quality assurance, transparency and mutual trust.

Within the project implementation, it is also necessary to form a set of measures that ensure the growth of academic mobility and improve its quality:
– increasing the participation of exchange programmes in various forms of mobility;
– the unification of requirements and rules of admission for all participants of virtual exchanges;
– coordination and promotion of the training calendar of distance programmes based on the received information on the projects of free economic partners and their synchronisation with the curriculum.

There is also a programme of remote exchange of necessary employees of organisational and creative work with students. On the one hand, the issues of students' quality of mastering virtual programmes, socio-cultural knowledge and competencies acquired by them remain insufficiently studied; on the other hand, direct mobility needs to offer competent recommendations for improving this other form of distance work. That is why regular interaction of university coordinators with students is necessary.

Modern research does not present a single classification of forms of virtual academic mobility. Within the digitalisation of higher education, ideas for the development of such forms of exchange organisation are increasingly offered – long and short-distance courses (Totska, 2020), private lessons (Popowska, 2016), online conferences, virtual excursions, language training (Dias et al., 2021), etc.

5. Results of Participation in the Virtual and Mixed Mobility Programme

Outcomes are obvious academic achievements. Participation in the virtual mobility programme gives students the opportunity to:
- improve knowledge of a foreign language;
- improve computer skills with a special voice for online learning; direct acquaintance with modern online platforms and tools for learning; use of the Internet for information gathering and training;
- communicate and collaborate with colleagues from other universities and countries;
- independently choose the content and organisation of their own and joint work – students independently choose topics for their projects, organise their time and schedule;
- learn from real examples from practice, using problem-oriented learning;
- even before entering the labour market to practice in real-life situations, acquired skills that are increasingly needed and highly valued by employers;
- gain global competence.

Participants in virtual mobility programmes, which can significantly outnumber physical ones, can form an extensive network of contacts during their studies, which will help launch further joint projects, such as research, or increase employment opportunities.

6. Conclusions

Against the background of world events and the active introduction of information technology to the international activities of universities, it is advisable to summarise the timeliness and relevance of virtual academic mobility, the need to find new forms of distance exchange, analysis of foreign associations and their adaptation. Requires special attention:
- active involvement of student audience in the programme of virtual cooperation;
- to increase the necessary competencies of administrative and pedagogical staff of educational institutions, which will allow implementing such virtual projects using an innovative tool of information technology;
- preparation of the legal framework that enshrines the right to implement virtual academic mobility along with the full-time form and recognition of its results by recalculating educational credits.

The advantages of virtual academic mobility to students are mass and unlimited. Economic benefits include no necessity to physically cross borders by students; opportunities to study in the free economic zones of other countries to get exposure to different cultures; gaining international experience for the development of professional competencies; development of language and intercultural communication skills; experience of self-education, etc. At the same time, the virtual academic mobility of students is not without its drawbacks, including the involvement of only certain students in the virtual educational process; technical difficulties with the use of information and communication technologies; language barrier among participants in virtual mobility; insufficient development of pedagogical technologies and methodological base within e-learning; difficulties in recognising diplomas and credits obtained through virtual mobility, etc.

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