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E-LEARNING IN NORWAY AND ICELAND. DEVELOPMENT TRENDS

Abstract

The article describes the practice of implementing e-learning in Norway and Iceland using Oslo Metropolitan University, Reykjavik University and the University of Iceland as examples. The interest in this problem came from the fact that the Nordic countries are leaders in online learning and I had the opportunity to teach at the universities analyzed. Having close contact with the way of teaching in Norway and Iceland, I asked whether some elements of teaching from the analyzed Nordic countries could be implemented in Poland. Thus, the aim of the article is to introduce the basics of the specifics of teaching at the selected universities and to consider whether the proven methods can be implemented in Poland. The basis of the article was therefore participatory observation, and the results of work with Norwegian and Icelandic students prove that Nordic methods of work can be – at least to some extend – transferred to the Polish educational market (not only in higher education, but also, for example, in corporate e-learning).

Keywords: Iceland, Norway, e-learning

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Introduction

Norway and Iceland are leaders in innovative higher education. For years they have focused on practice, invested in appropriate online equipment for lecturers and students and have focused on creative thinking. The aim of the article is to present case studies of e-learning from Iceland (Reykjavik University, University of Iceland) and Norway (Oslo Metropolitan University) and show how the Nordic countries are investing in higher education, with a special focus on online learning. The article uses the participant observation method. The article is therefore based on the own experiences and a small number of sources from selected Nordic universities.

In Iceland and Norway, the topic of e-learning is not new, it has been many years of experience, but for the Polish universities it is still a challenge. Good foreign practices seem to be valuable for the e-learning practice and may become an inspiration for Polish educators and e-learning researchers. The article examines whether the Nordic countries can be a good example for Poland in the implementation of online learning. The research was conducted in Iceland before the pandemic (I have been teaching there since 2010 as part of various grants) and in Norway since 2016, as well as during the pandemic and just after the lifting of the restrictions.

1. E-learning – Theoretical issues

E-learning makes it possible to individualise the learning process more, but also to transfer knowledge regardless of where the learner and lecturer are at the moment. Very often distance learning and e-learning are considered to be synonymous. However, this concept has not been adopted by all researchers. Distance learning does not require constant contact with the lecturer, whereas in e-learning it is necessary (sometimes in synchronous form). Distance learning also always takes place outside the university or school building, in the case of e-learning it can be partly used on campus (Pleśniarska, 2016, pp. 75–78).

During the coronavirus pandemic, it is very common to encounter circulating misconceptions that e-learning is based on using basic synchronous features of e-learning platforms (especially Big Blue Button in the case of the Moodle platform) and video conferencing software (Zoom), as well as cloud-based web services containing a set of tools and services for team collaboration (Teams) (Bolander Laksov, 2021; Brown, 2019).

However, it is important to emphasise that e-learning encompasses a variety of learning methods and their common feature is the use of information technology. E-learning also means learning at any time and without direct supervision. On the other hand, synchronous learning (through e-learning platforms or video conferencing software) means only online learning, i.e. the transfer of the lecturer's knowledge to the students/viewers via the web. And blended learning means learning by combined methods, i.e. traditional learning methods (direct contact with the lecturer) together with activities conducted remotely (Clarke, 2007, pp. 9–14).

E-learning means supporting the learning process with the help of new technologies (e.g. computers, smartphones, Internet, modern applications dedicated to educational purposes). It is assumed that e-learning is online learning. It involves learning at all levels, both formal and informal, using an information network (public or restricted to specific audiences) – Internet, intranet (LAN) or extranet (WAN). In e-learning, teacher and students are separated in time and space, with constant communication between all participants in the learning process. This way of learning (often completely bypassing the need for meetings at the university)

is the basis of the information society, especially where there are problems with free time (Demetriadis, Liotsios, Pombortsis, 2006, p. 638). Students in e-learning or blended learning are more engaged when collaboration, creative thinking and the use of practical applications are involved. The effectiveness of online learning increases when specific learning objectives are set, different teaching methods are used and knowledge is reviewed from time to time (also in a game learning formula) (Beetham, Sharpe, 2020, pp. 42–49).

E-learning makes you work more innovatively, manage your time more wisely, you can apply in this type of teaching many projects and tasks that require solving specific problems. Thanks to e-learning, it is possible to constantly develop learners, exchange information, properly manage knowledge, educate even in very narrow specialties, with proper motivation of all participants in the learning process, students as well as lecturers (Clark, Mayer, 2016, pp. 22–23; Biggs, Tang, 2011, pp. 69–76).

Hands-on teaching that introduces online applications, blended learning/e-learning and social media not only enriches the didactic process. Thanks to modern methods, students can share knowledge, solve tasks, find solutions and achieve goals through learning activities. This remote teaching and building of digital skills fosters the search for partners for cooperation, multilateral support and knowledge sharing, leading to better results and correcting activities by consulting them in an international environment, for example. The role of the teacher is to build the best possible learning path, correct it on an ongoing basis, increase the productivity of activities, motivate the acquisition of knowledge (from theory to practice) and obtain professional social competence (Grodecka, Kieslinger, Wild, 2008, p. 14).

2. Methodology

The article is based on the participatory observations, obtained during teaching at Oslo Metropolitan University, Reykjavik University and the University of Iceland. Research on e-learning in Iceland and Norway is not frequent due to the fact that this method of education is considered natural, researchers and educators focus largely on cooperation with business (in terms of creating e-learning courses and carrying out joint projects). On the topic of education in Iceland and Norway (with a particular focus on the social sciences), I have written articles and part of books (Pokrzycka, 2014; Pokrzycka, 2016, pp. 92–101; Pokrzycka 2020, pp. 113–130). Overall, the article is a practical one, introducing the ways to transfer good practice from Iceland and Norway to the Polish context. Due to the vastness of the issue, the focus is on the basic problems associated with innovative teaching (through the prism of the positive, but also negative effects of online teaching). The article is a review, an introduction to further research. A comprehensive analysis of

European trends in online teaching is sorely needed, and is partly complemented by free access e-books edited and co-edited by me.

3. E-learning in Iceland

E-learning has a long tradition in Iceland. As early as in 2005, the country could boast numerous examples of implementing e-learning in business, owing to the fact that many IT companies have their headquarters in Reykjavik. Innovations are favoured in Iceland and the Icelandic government supports modern methods of work and education. Soon after the e-learning system was introduced, it turned out that it was a very effective training method, independent also of weather conditions, which is crucial in a country where transport is frequently very difficult, most roads are closed in winter, strong winds and blizzards prevent students from getting to classes, and volcanic eruptions occur. Moreover, a lot of Icelanders work already during their Master's studies, so the online study system seems a perfect solution. Furthermore, the state supports the lifelong learning idea which is made much easier with e-learning. MOOC courses have been run for many years, not only at the University of Iceland but also in smaller higher education institutions (including private Reykjavik University, University Centre of the Westfjords, University of Akureyri, Hólar University College, the Agricultural University of Iceland and Bifröst University). Online education techniques are used both in synchronous tasks as well as in asynchronous courses, that are usually aimed at older people with more professional experience, who are able to work on their own without direct help from a lecturer (*EDUCATION & TRAINING…*, 2010).

However, the University of Iceland and Reykjavik University are still the leading centres of all e-learning activities. The former has used TV studios adapted to recording online courses for over 15 years, as well as various applications which contribute to the modernization of teaching at Bachelor's and Master's courses in all disciplines, while private Reykjavik University has used blended learning for a dozen or so years, beginning from the launch of the e-learning platform in 2000, which for a long time has been based on Moodle.

More classes at Reykjavik University were conducted online than in lecture rooms as early as in 2010. Special platforms enabling direct communication between students and lecturers have become a standard in the Icelandic education.

Iceland is one of the leaders of e-learning. The majority of courses in Icelandic higher education institutions are taught in the e-learning system, at least partially, due to the high costs of commuting (for example, it takes 8 hours to get from Akureyri town in the north of the country to Reykjavik, the capital city) and harsh geographical conditions. It should be mentioned here that over a half of the country's population lives in the south-western regions, near the capital city. The rest of the Icelanders live in small towns, villages and valleys, usually on the coast around

the island. The geographical centre of the country is uninhabited and completely inaccessible except during the summer season. Hence, travelling to and from Reykjavik is difficult, even at the time of dormant volcanos and low seismic activity.

In the e-learning system students are not only participants, but also publishers and authors. The first step to active study in the e-learning system is the motivation to work in the new technology environment and the acceptance of the one in which the said person will study. The second step is to send and receive messages regularly (it should become an almost automatic activity), get to know each other, make friends and build bridges between cultural, social and e-learning environments. Another stage is the exchange of information, which entails personalization of software, setting specific goals to achieve with the materials downloaded in e-learning, and teamwork with the elements of self-study. The fourth step is the construction of knowledge, that is monitoring progress in studying, accompanied by discussions in groups, e.g. on relevant forums or an e-learning platform. Another stage is development which consists of support but also critical thinking and possibly additional access to supplementary information.[1]

At the University of Iceland teachers upload their lectures to the e-learning platform at least a week before the date of intramural classes. Owing to this, students (all of them bring their laptops/tablets to the classes) can follow the lecture and add their own and the lecturer's comments as the lecture progresses. During the project implementation I was able to see that such a system works really well. No time is wasted on unproductive copying of definitions or other, more difficult problems. Students frequently modify and supplement slides, add their notes, ask the lecturer for details, and participate in discussions. As a result, a classic lecture becomes a seminar lecture which is much more effective in teaching theoretical journalistic issues. Lastly, two-way communication is possible, also in real time. The lecturers from Iceland with whom I cooperate emphasize that the proper organization of discussions on forums is a very significant element of e-learning. It should be remembered that discussion ought to be based on the materials supplied beforehand and evaluated as other forms of education. Notes should be made on e-learning platforms (by lecturers, but also by students), in order to motivate students to work and help them to understand the material. Furthermore, it is necessary to use websites to support students in their work and to monitor their progress on an ongoing basis.

E-learning classes at the University of Iceland are quite popular. At the beginning of each semester it is possible to choose between two types of teaching (traditional or remote). Some students combine their studies with work, or they have already started a family. On average, 60% of students in 2019 and at the beginning of 2020 choose the remote learning formula. This means that, thanks to the Panopto

[1] Handbook for Teachers at University of Iceland, Haskoli Islands, Centre for Teaching and Learning (university's internal materials).

program, they can get acquainted with lectures via live streaming or coverage at any time. In order to be admitted to the master's program, however, they must have very good grades, and this is easier to achieve by attending classes directly. Students usually have problems with systematic work. E-learning requires commitment, but some students believe that the remote system gives them opportunity to continue their education despite some inconveniences and additional requirements. For students, a big plus of e-learning is its flexibility. Lectures can be replayed in their entirety or over several hours. If the student gets a good job, the tax system makes it possible to complete the education. The primary program used for e-learning in the social sciences at the University of Iceland is Panopto, but it does not allow for face-to-face communication; lectures are recorded, and students can view them live or at any time. University of Iceland Faculty of Social Sciences also has access to the Moodle e-learning platform. Some courses are partially taught through this type of platform, but these are primarily subjects that supplement the core subject area (e.g., optional classes). A more popular e-learning platform used for teaching subjects directly related to journalism is Ugla.

A novelty during the classes conducted at the University of Iceland in 2018 and 2019 was recording of entire lectures for those who were absent. In order to facilitate the recording process, all computers available in the lecture rooms were equipped with relevant software for recording and processing of video and audio materials.

Working with Wikipedia seems to be an interesting method of online education. Students work in teams on developing Wikipedia entries, thus learning both how to cooperate and how to select materials. Wikipedia can be used to check the accuracy of thinking by groups of students as well as by teachers. Moreover, this type of work teaches critical thinking, control and analysis of the group's materials. Thanks to Wikipedia, students can share their opinions in a flexible way, and not in a static way, as is the case in the traditional school methods.

Quizzes, crosswords etc., also prepared on the internet, are frequently used in education in Iceland. The use of electronic quizzes usually gives immediate results and checks student's knowledge, both for the purposes of the teacher and the participant. According to teachers from Iceland, quizzes can be used in a variety of courses. Such tools help students understand many complex issues. Typically, exams that test purely theoretical knowledge are falling out of use in Iceland. Tests comprise discussion in groups about specific issues. Case studies are popular, too: students are given real problems to solve.

While conducting classes at full-time studies for Master's degree at the University of Iceland on a regular basis between 2013 and 2020, I noticed that students were much older than full-time students in Poland. Most of my Icelandic students were over 30 and had an extensive journalistic experience, frequently obtained abroad. Students were very active, but also – as they admitted themselves – they often used current resources of the university's e-learning platform due to absences

caused by professional duties. Hence, recorded lectures help them catch up quickly. After analysing the methods of education in Iceland, it can be said that such a system can be easily implemented in Poland. There is no need to be afraid of recording classes, students appreciate it very much, also attendance at every class should not be obligatory. Students should be given more freedom and trust, although such a work system should apply to older students. Those just starting their studies may find it difficult to work systematically and the commitment and independence they are just learning.

4. E-learning in Norway

In Norway e-learning has been consistently implemented and developed for a dozen or so years. Centres supporting remote education are established at universities. Norwegian lecturers realize that the future of academic e-learning lies in the cooperation between students of similar courses at various institutions. The focus is on open learning which offers the technologies that are more interesting to students, provides for contact hours and the same commitment of learners at other attractive teaching methods any time (Chute, Hancock, Thompson, 1999, pp. 35–40; Keegan, 1996, pp. 65–70; Paulsen, 2003, pp. 8–15).

Already during my first visit to the Oslo Metropolitan University (OsloMet) in 2016, it could be seen that blended learning is very often used in the practice of teaching social science subjects. The lecture materials were placed on an e-learning platform purchased by the university, and discussions, focusing on issues less understood by the students, dominated the classes. The learners were very active, some of the credit assignments were transferred to the e-learning platform, and discussions often extended beyond the scheduled class hours (which was not burdensome due to the grouping of subjects in specific modules, e.g. one subject was completed during one day). Moving discussions from lectures to the university cafeteria was also one of the natural elements of the classes. Working in a less formal format was very effective, which I was able to see for myself when I taught classes that lasted several hours, and were naturally moved to the cafeteria. The informal atmosphere also prevailed when working online. The lecturer was an advisor, mentor, but also took part in quizzes and games designed as part of the practical classes. The theoretical lectures also often ended with practical assignments uploaded to the platform. Students were expected to demonstrate their independence, creativity and ability to work in project groups, the composition of which was formed during café discussions. The lack of stress in class and during the exam session were hallmarks of OsloMet's education back in 2016.

In the classes at OsloMet during the 2021 pandemic, which I visited remotely, management classes were conducted in two blocks (each lasted one week) for an average of seven hours a day. Typically, there was a 15-minute break after an hour

(with an additional 1-hour lunch break at noon). The time schedule has been very strictly adhered to. The classes were conducted on Zoom platform.

The analysed classes were aimed at the preparation of a final theoretical and practical project paper (ca 50 pages in total per a research team). The project was supposed to contain e.g. operation analyses of the selected Norwegian enterprises, interviews with well-known entrepreneurs, data concerning specific companies and ways to overcome crisis in selected corporations. The concepts of papers were devised together during classes. Turning on the cameras was not mandatory but recommended for better communication. After the end of the first cycle of classes (i.e., after one week) there was a break of several weeks for the preparation of the final semester paper. During the first module the participants were divided into four groups, all teams were assigned tasks, and leaders were selected – their task was to present the results of teams' work during the second module classes. Guests from all over Europe, with practical experience, participated in both parts of the course – they gave short lectures and offered practical advice to students. Every day, during the first part of the classes, the lecturer learned about students' expectations concerning the progress of the course and modified the content of the classes accordingly, if necessary. From time to time, students were assigned short exercises related to the final paper and were given about 30 minutes for self-study. Case studies from the market were also shown (often in the form of videos). Students expressed their opinions, as well, because many of them already worked in large corporations and had experience in management. In order to add some variety to the classes, e.g. a job interview survey "what skills do you have" was carried out. At the end of the first module the following issues were discussed: assignment of functions in project work, rules of project preparation, structure of project work, ways of conducting interviews and dealing with theoretical and practical issues, and presentation dates. All rules were written down and presented at the final meeting of the first module.

During the second module, the projects were presented: each team member had a role in demonstrating the results of the group project. Papers were evaluated by colleagues (other participants of the classes), but also by experts from various European countries who were invited to the classes as supervisors. In addition, the papers were evaluated by the lecturer, but all these were done in a very friendly atmosphere. Furthermore, excellent teamwork is worth noticing. The leader began presentation, discussed problems connected with project implementation, outlined the tasks and then gave the floor to individual team members. The participants frequently referred to their own experience and case studies from their professional careers (these were studies for Master's degree, and the Norwegians, as a rule, start working after Bachelor's studies and return to Master's studies a few years later, already having relevant experience on the labour market and combining education with work).

The presentations were also evaluated by external experts, which caused some stress; however students thanks to their professional experience, coped with this

challenge without much difficulty. After classes, together with the lecturer we have selected the best projects, and decided to publish very good project papers. It should be emphasized that the projects had a very clear graphic design and showed the development of particular companies in Norway, including how they deal with crisis situations.

The project presentations were carefully prepared and the participants presenting the final effects of team projects were ready to answer even the most difficult questions. However, in an anonymous questionnaire survey, carried out later, the participants pointed out that the classes were too monotonous, too long and – despite the lecturer's best intentions – it was difficult to concentrate on subsequent presentations after some time. It was emphasized that the cumulation of the semester classes in two weeks was very tiresome, even though it provided space for self-study.

The effects of the analysed classes were published in an e-book *Innovative Teaching Methods: Project Management* edited by Lidia Pokrzycka (UMCS) and Robert Wallace Vaagan from Oslo Metropolitan University.[2] The publication is focused on the problems connected with innovative teaching at the time of the pandemic, but also on management of international projects (including in the remote formula). An important element of the book is the presentation of remote education in Norway and the tangible effects of work of online course graduates. The publication presents practical teaching innovations and highlights the role of visual communication in an effective higher education. Furthermore, teamwork effectiveness in innovative teaching is examined, advantages and difficulties stemming from cooperation in groups are presented, and students' attitudes towards such a form of task performance is discussed. The specific character of management of international English-language research projects in an innovative manner is also mentioned. The publication discusses also the character of education in the e-learning formula in Norway, including the effectiveness of such a way of teaching from the perspective of people who visit classes (Pokrzycka, Wallace Vaagan, 2022).

After the pandemic, I visited OsloMet and analysed current trends in students education. Already in 2016, a number of apps were being used that were useful for brainstorming, mind maps, group work apps. During the pandemic, there were apps which turned into puzzle rooms or gave the opportunity to participate in activities conducted in virtual reality. To date, most of the applications are used by active lecturers interested in deepening their knowledge of innovative educational methods. During many of the classes conducted after the pandemic, I was able to see that blended learning classes work very well, using a range of applications useful for project work. Classes continue to be stress-free, with final grades based on

[2] A series of English-language e-books under the joint title: *Innovative Teaching Methods* edited by author in cooperation with, among others, experts from Norway and Belgium, received an honourable mention in the European Language Label contest in 2022.

projects, activities and demonstration of independent thinking and innovative approaches to research problems.

E-learning at OsloMet has been implemented for many years and consistently developed. A university newsletter is published, which promotes good practices and outstanding work of particular lecturers, so that academic teachers are able to upgrade their qualifications in innovative teaching methods on an ongoing basis. Departments supporting remote education are in close contact with academic teachers and engage them in additional activities, the goal of which is an improvement in education quality and involvement in international projects dealing with the e-learning implementation (also outside higher education institutions). Furthermore, training courses are organized, presenting e.g. new functions of applications, and a network of connections between lecturers is built so they can share their knowledge. Moreover, regular meetings are organized on Zoom platform, devoted to good practices e.g. engagement of students in distance learning or effective management of educational projects online.

E-learning at OsloMet is conducted professionally, there are lecturers who are considered the leaders of innovative teaching, even though the majority of the university staff still prefer direct face-to-face teaching and they seldom participate in courses on e-learning or use various teaching apps. Synchronous connections are still considered the basis of distance learning, while apps, project tasks and implementation of teaching innovations in practice are regarded as the speciality of researchers dealing with such issues also as part of their scientific work, which is still a rare specialisation (Pokrzycka, 2020, pp. 9–22).

5. Discussion of results

Iceland can be a model for other countries. E-learning has been implemented here for many years, scientific research is conducted, new applications and technologies dedicated to universities and corporations investing in the development of their employees are designed. Similarly as other Nordic states, Iceland is distinguished by its stress-free teaching methods and the freedom given to students who are methodical and responsible in their work. Examinations are organized in the form of online projects, while lectures are optional and recording are available in the appropriate applications. In addition, the Icelandic government invests in research on modern applications and in modern equipment for all Icelandic universities, which contributes to the consistent development of online education. On the other hand, many years of investment in e-learning in Norway already produce tangible effects. Universities collaborate with international corporations on a regular basis and are invited to apply for grants together with external stakeholders. Educational innovations have been implemented at Norwegian universities for a long time, which is reflected also in the way lecturers and students think about them.

Innovators in Norway go far beyond the standard framework of modern online teaching. They frequently purchase access to newly created platforms and applications themselves, while at the same time promoting effects of remote teaching in international research projects and collaborating with corporations. What is important, during online classes students also meet practitioners who invite them later to their companies and give them an opportunity to put theory into practice. For instance, projects implemented with the design thinking methods during online classes are then translated into practice of e.g. corporate management, and students take an active part in these processes.

6. Conclusions and summary

E-learning is not only about teaching through multiple applications, online connections and offline work, but also a way for universities to collaborate with business, develop courses, and work on grants, very profitable for both parties. In the Nordic countries, there is a focus on practicing as a journalist or PR or management specialist, also in a remote format. Group projects are assessed by practitioners from outside the university, and often from outside Norway or Iceland, which adds to the motivation of the learners. For Poland, it is important to learn from the Nordic countries the method of teaching through discussions (also online and in the non-formal formula), to focus on the development of creative thinking, and to provide opportunities for flexible syllabuses (after consultations with external stakeholders and the students themselves). Collaboration with business, external training companies and cooperation in obtaining interuniversity and business grants is also essential. At the same time, students need to bear in mind that in online learning greater independence and dutifulness is necessary, which they need to learn during their first years of study in order to learn more independently afterwards. Also, recording classes is becoming a norm rather than an innovation, students often work and for them it is a considerable convenience to combine work and studies. Examinations and credits can be taken in a stress-free format. Stress is not conducive to learning, so it is worthwhile to check learning outcomes during the semester in the form of projects and creative assignments, for which longer time is set aside (free of other activities). Perhaps a system of teaching in modules (also timed) would be very useful.

In summary, Poland should take more confidence in students, de-formalise education, give students more freedom, do not stress learners, but support them on their way to new skills. Innovative education methods also provide opportunities for universities and lecturers themselves. Grants, international projects, cooperation with external companies are the future of online learning development.

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