

S.A.NASKOVA

A.S. CHACHOTKIN

Belarusian state agricultural academy, Gorki, Belarus

OPPORTUNITIES AND CHALLENGES OF ONLINE EDUCATION IN THE BELARUSIAN STATE AGRICULTURAL ACADEMY

The concept of traditional education has changed radically within the last few years. Being physically present in a classroom isn't the only learning option anymore with the rise of the internet and new technologies. Nowadays, online education is available for people for free whenever and wherever they want, as long as they have access to a computer. Accelerating scientific and technological progress and rapid changes in all aspects of life require constant training, retraining or skills upgrading. The use of innovative technologies and models of learning has become the solution to this challenge. Online learning is viewed as an effective tool to continuous professional development and lifelong learning that helps people design and implements their own educational goals; assess achievements, use various sources of information. According to the National Center for Education Statistics, in the US, around 25% of all college and university students are now enrolled in distance education courses.

Taking into account the needs of modern society, as well as the need to develop this form of education EE "Belarusian State Agricultural Academy" became a participant of the EU project "Enhancement of Lifelong Learning in Belarus". In the first year of the project, internships in EU universities ensured the transfer of knowledge to the Belarus project participants. With the advice and support of EU partner universities, five open free online courses have been developed, including one in English, which assumes that any person can become a student by registering for the course. Since any course must be based on existing knowledge, a prerequisite for enrollment to the English course, for example, was English level A1.

The experience of the Open University in the UK has become the basis for the design and development of online-courses using a student-centered concept in the course design, techniques for creating and developing a website, the methodology of designing a learning trajectory etc. The concept of the Open University pays special attention to the assessment of the student's knowledge learning remotely. According to the concept of the Open University, the main task is to show the student his or her progress in the acquired knowledge, rather than to evaluate his or her knowledge (Marr, 2018).

The process of course development starts with the identification of learners' needs, which means that learning objectives are set according to learners needs. This approach allows students to be active participants in the learning process and enables them to achieve better learning outcomes through clearly defined interactive strategies where teachers serve as facilitators and educational coaches, designing challenging activities and providing effective guidance and quality feedback.

The important indicator that characterises the quality and demand for an online course is the number of students who have successfully completed the course. Despite online courses popularity, many learners fail to complete their courses. And this is a big problem. Studies have varying statistics: 25 – 50%, 40 – 80%, with numbers as high as 78% in the Open University in the UK, and as low as 15 – 40% in China. Numerous findings indicate that the primary prerequisite to students' retention is the quality of modules. However, there are a number of other aspects to be taken into consideration. Many students don't realize that online learning requires a lot of independence, internal motivation, responsibility, and a certain degree of readiness to acquire knowledge.

There is a lot of debate about the effectiveness of traditional classroom education and online learning. It is not surprising that classroom courses are, on average, more effective. Being in person with teachers and other students creates social environment and benefits that can help motivate students to engage. In reality, online courses require just as much, if not more, time and energy as traditional classroom courses. To be successful, an online student must want to succeed.

Another possibility to reduce the number of drop outs is more knowledge about the student, which is obtained from his profile: practical need, motivation, previous training, life situation, what he likes in learning, strengths and weaknesses in learning, what he doesn't like in learning. To better understand the profile of the student who decides to enroll on a course of this type, Wilkowski, Deutsch & Russell (2014), have proposed a system of classification falling into four categories: no-shows, observers, casual learners and completers. In our case the majority of dropouts were "no shows", that is, students who enrolled but never logged in. This classification can help teachers know the reasons why a student enrolled and develop measures to lower dropout rates.

Why is this information important? When there is no direct contact with a student, it is important to know what kind of a student he is. It is necessary to consider his/her social status, age, previous study experience, satisfaction, attendance, time spent on assignments. In addition, the teacher should know their intellectual level, what they represent as individuals, what can be done to improve their knowledge. Using this information, the connection between course materials and students' interests and needs can be made easily by the teacher.

As a rule students are surveyed to measure the degree of satisfaction with the course, its usefulness, completeness and accessibility of teaching materials which serves the prerequisite for the course improvement. The Rienties & Toetenel study of 2016 points to the importance of linking learning outcomes, student satisfaction, student retention and modular learning.

Feedback from students in the online learning process usually shows where the weaknesses are and what aspects need improvement. Analysis of students' feedback in the English language course allowed to highlight problem areas: some lessons are boring; technical aspects are not clear; there is no time for online learning; tasks are too complicated, students want to talk more, not to do grammar exercises. Students note that because there is no teacher, they lack direct contact,

may never meet with other group members and therefore cannot build relationships in the group (with teachers, classmates), or speak to the audience. This testifies that online courses have not only advantages, but also limitations.

Although study is a voluntary process, distance learning requires students to exercise strong self-discipline. Lack of personal presence and motivation is one of the reasons for the failure of an online course when students barely start and suddenly give up studying. It's clear that not every student is able to maintain his or her motivation to work independently. In addition, the lack of such an effective motivator of learning activity as constant supervision by the teacher is also affected. That's why it's important to find ways to motivate students. Lack of motivation can be evaluated by such criteria as irregular performance of tasks, selective performance of tasks, a large time period in the performance of tasks, weak activity in the forum, in chats. These are signs of possible dropout. Analysis of students' participation in forums and chats shows that, most students simply ignore this type of activities. The students in particular preferred to work following more traditional learning schemes.

The risk factor in the context of achieving learning efficiency is also a fundamentally different approach to the organization of control and evaluation of learning outcomes. It should be borne in mind that in developing the content of online courses, as well as in evaluating learning outcomes, traditional forms are excluded: oral response, writing, in the classroom or at the blackboard, etc., which requires different pedagogical approaches and methods. The delivery and assessment of student learning in online courses is specifically designed to overcome the challenges of learning remotely. The more often students are assessed, the better their progress can be tracked by the teacher, and intervention made when needed.

The main advantage and objective of the online course is to diversify the educational services provided and to relieve students of the boredom of classroom activities. Moodle possibilities enable interactive learning with video, game elements, making the learning process more dynamic, interactive and attractive. Technological innovations introduce innovations in teaching. When planning materials for an online course, a teacher should think strategically and flexibly how to integrate technology into teaching and learning. Technology should be the means by which educational processes are improved. Each device used in the design, development and implementation of materials should make it easier for users to grasp the full potential that online course offers.

However both educators and students participating in an e-learning process need to have ability to use technology. Learners use technology in all aspects of their lives, but still see little use of technology to extend their classroom learning. Even the most basic online course requires the development of new computer skills. The participation skills students learn with their online course translate to their future professional development including the use of the learning management system and other online tools. In the project it was the first online learning experience for 90 per cent of students, and they hardly knew how to work

with new technologies. In order to prepare students to learn online, it was decided to develop a Manual for users to explain specific computer skills and learning.

Experience in course development and implementation has shown a lack of experience, technical and organizational literacy on the part of educators. The implementation of new technologies requires trained professionals because they are the main agents involved in the transition from traditional classroom practices to those necessary in online environments. Teaching online has many of the same qualities as teaching face-to-face, however, there are some differences, because the contexts in which learners and teachers are working are different. One cannot just do the same as in the face-to-face environment and expect the same results in the online environment. Teachers need to re-design the teaching to fit the requirements of online learners. In order to maximize the effectiveness of the online instructional environment, teachers should be proficient in the selection and use of a variety of online instructional tools.

For most teachers it was the first experience of developing an online course. Participation of the academy staff in the project in developing and implementing online courses gave an impetus and stimulated this type of educational activity. A new set of knowledge and skills was acquired in order to take advantage of modern technologies. Successful implementation of this project laid the foundation for the project sustainability.

From the methodological point of view the importance of the project was in

- improving the professional competence and the skills teachers need to teach effectively online;
- acquiring the basics of pedagogical design, including methods for developing interest and motivation;
- expanding the range of opportunities and prospects for innovation in the teaching profession.

Contribution was made by the training seminars such as:

- "Using the MOODLE platform in distance learning organization."
- "Principles for developing online courses in foreign languages using the MOODLE platform".
- "Pedagogical principles of online learning" (experience of the Open University in the UK)
- "Content and teaching development modules using ICTs and e-learning with an enhanced practical component".

It is important that the training was delivered in the online medium, so that teachers experienced for themselves the medium and the methods they are expected to employ.

The main contribution of the project:

- Conditions have been created for mastering online learning technologies and developing professional competencies of teachers.
- Methodological and technical support for the development and implementation of online learning through the MOODLE platform has been provided.
- Experience was gained in working in a team of teachers from different universities in the development of educational materials.

All these activities help ensure future success in developing and providing online courses, thus creating a new trend in pedagogy.

To further continue developing effective online courses it is necessary to organize constant training in online teaching skills. Today all new teachers should be equipped to teach online. The standards of effective online course design and delivery as well as appropriate training of the online teacher must be used to online courses. Teachers should also have the technical support from the university prior to initiating online course (*Skills of Online Teachers*, 2003).

Online teachers are expected to demonstrate the following skills:

- be familiar with online tools and online infrastructure, including Learning Management Systems (LMS) and Content Management Systems (CMS), and understand the appropriate uses of each system to support online course design and delivery.

- be familiar with the full range of CMS elements, and be able to select the appropriate elements while designing and teaching online courses.

- be able to demonstrate the ability to use multimedia, as appropriate, in course materials.

- be able to incorporate website links into course documents instead of simply copying and pasting material from the website into a given course document. Moreover, they should know how to give appropriate copyright reference in online course documents.

- demonstrate the appropriate use of communications with students, fostering and guiding group discussions.

- have the facility to track student participation in the course, viewing course logs, student postings in the discussion area, and student assignments.

- be able to answer student questions on certain technical issues, including posting to discussions, submitting assignments, using the Internet, and viewing online grades.

References

1. The value and benefits of online learning to educators. [Blog post]. Retrieved from <https://digitalmarketinginstitute.com/blog/2020/08/05/the-value-and-importance-of-online-learning>

2. Marr, Liz (2018). The transformation of distance learning at Open University: the need for a new pedagogy for online learning? In Annika Zorn (Ed.) *Higher Education in the Digital Age. Moving Academia Online*. (pp. 23-35). Cheltenham, UK, Northampton, MA, USA. Edward Elgar Publishing.

3. Wilkowski, J., Deutsch, A., & Russell, D. (2014). Citation: Student Skill and Goal Achievement in the Mapping with Google MOOC. In: *Proceedings of the first ACM conference on Learning @ scale conference* (pp. 3–10) <https://doi.org/10.1145/2556325.2566240>

4. Rienties, B., Toetenel, L. (2016). Citation: The impact of learning design on student behaviour, satisfaction and performance: A cross-institutional comparison across 151 modules. *Computers in Human Behavior* 60, p.333-341. DOI: 10.1016/j.chb.2016.02.074.

5. Skills of Online Teachers. (2003). Citation: *Guide to teaching online courses*. U.S. Department of Education, National Center for Education Statistics. Retrieved from <https://www.cstu.org/files/onlineteachguide.pdf>. Access regime 05.08.2020