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THE USE OF ONLINE PLATFORMS AND MOBILE APPLICATIONS IN THE PROCESS OF DISTANCE LEARNING

Verba Y.A., Kabdenova A.B.

evgeniya_94.2011@mail.ru, kabdenova_aika@mail.ru

teachers at Theory and practice of foreign languages Department,
L.N. Gumilyov Eurasian National University, Nur-Sultan, Kazakhstan

With the advancement of technology and its penetration into all spheres of life it has become inevitable that modern education relies heavily on technological tools and applications. The use of educational technology is especially relevant in terms of distance learning when the whole process inextricably linked with the use of online platforms and applications. In these conditions both teachers and students are required to possess the skills of applying technologies in a reasonable and productive way. What is more, a clever methodological approach to the use of educational platforms and applications in the course of distance learning has gained a pivotal character.

The objective of the study is to examine a number of online platforms and mobile applications, estimate their benefits as well as drawbacks, and suggest recommendations for effective application of the presented tools in the process of distance learning.

According to Michael Piotrowski, “**online learning platform** is an integrated set of interactive online services that provide trainers, learners, and others involved in education with

information, tools and resources to support and enhance education delivery and management” [1, p.20].

One of the most popular platforms that are actively used in educational purposes worldwide is **Google Classroom**. It is a free service created by Google for educational organizations in order to facilitate creating, spreading and assessing students’ assignments. The main purpose of Google Classroom is to simplify the process of file exchange between teachers and students [2].

Google Classroom combines Google Drive for creating and distributing assignments, a set of Google services for creating documents, presentations and electronic tables, Gmail for communication and Google calendar for planning. Learners can be invited to join the course by means of a special code or imported automatically from the school domain. In designing a course, a separate folder is created on a special user’s drive where the student can submit the assignment for checking. Mobile applications, which are available for iOS and Android devices, allow users to take photos and attach them to their assignments, exchange files from other applications and get an access to information offline. Teachers can monitor each learner’s performance and return the assignment with feedback, which is a key element of the incremental process of ongoing learning and assessment.

Another online educational platform, which we consider to be one of the best, is **Edmodo**. This is a secure educational network for teachers and students that is becoming more popular worldwide and allows a teacher to organize a distant interaction with students. Each teacher registered in Edmodo has the opportunity to create groups with students and invite other teachers to work with them as well. The members of a group can share common files, download and store them in a library. A teacher can create tests, quizzes and questionnaires with various question types, set deadlines for assignments, put grades and monitor learners’ activity and progress [3, p.25].

One of the most effectual online platforms for education is **Padlet**. It is a virtual whiteboard, or online whiteboard, a service that allows each student to post their work on the board, and the teacher - to comment and rate each. It is also possible to use the board by the teacher for placing educational, methodological, control and other materials. Thus, any material in electronic form can be placed on the board [4].

Perhaps, one of the most wide-spread educational platforms is **Moodle** (stands for Modular Object-Oriented Dynamic Learning Environment), which is a free e-learning system. It is an open web application, on the basis of which you can create a specialized platform for the development of students or employees.

Through the Moodle e-learning system, you can teach and test learners from all over the world from a distance. The key function of the platform is performed by plugins - modules that help to change the design and expand the functionality of the system [5].

The platforms and networks presented above can be easily accessed from any devices, including mobile phones. Besides, a considerable number of specialized mobile applications have been developed for educational purposes.

A mobile application is a developed software designed to operate on smartphones, tablets and other mobile devices [6, p.17]. Among various mobile applications the ones for educational purposes take a special place. Educational applications are services that help users of all ages and backgrounds to study certain academic disciplines.

The evident leader among them is **Duolingo**. It was based as an educational platform for learning foreign languages and later on developed as the most popular educational application.

Duolingo is designed to feel like a game and scientifically proven to be effective. In addition to its core platform, the company has also developed the Duolingo English Test, an affordable and easy-to-use English proficiency test that is accepted by over 2,000 universities worldwide [7].

Considering online educational tools it is worth noting **Coursera**, which is a project in the field of massive online education. Within this project a number of educational materials are published on the internet as a set of online courses. The project cooperates with universities that publish and conduct courses in various fields of knowledge. Subscribers take courses, contact groupmates, take tests right on Coursera website. What is more, an official mobile application is available for iPhone and Android.

Coursera offers courses on physics, engineering, humanities and art, medicine, biology, mathematics, IT science, economics and business. The duration of courses varies from 6 to 10 weeks, including up to 2 hours long video lectures once a week. The courses comprise tasks, weekly exercises and in some cases – final project or test [8].

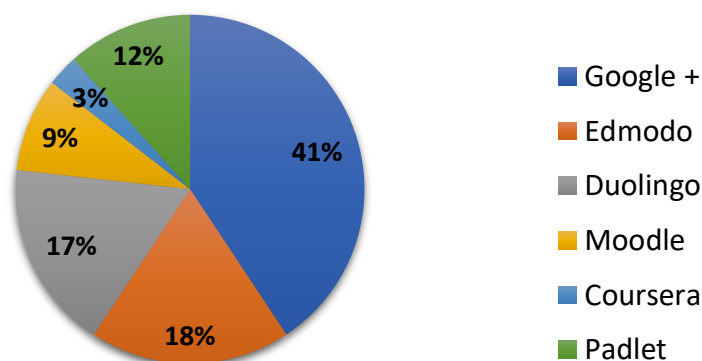
In order to estimate the effectiveness of the above discussed online educational tools we have conducted a survey. There were sixty and forty representatives of teachers and students of L.N. Gumilyov Eurasian National University (ENU), respectively, who have been questioned about their experience of using the platforms and applications in the framework of distance learning. The survey was conducted in the form of anonymous online questionnaire. Having analyzed the results of the questionnaire, the following conclusions are to be drawn.

It is obvious that the majority of contemporary teachers and students actively use modern technologies in education, and our university is not an exception. Just under 70% of the respondents claimed that they use online platforms and mobile applications in their daily teaching and learning activities. About 18% of the respondents use online tools partly, and only a mere 2% do not use them at all. Thus, it is evident that the vast majority of teachers and students base their learning process on online technology.

It is worth noting that 90% of teachers encourage their students to use information technology in their learning activity, which means that utilization of educational technology is not the desire of students only, but of educators too.

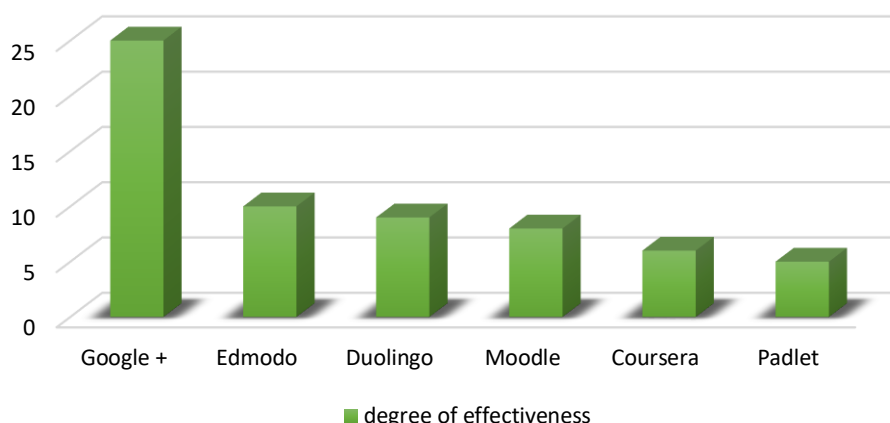
The most popular platforms and applications among ENU teachers and students are Google plus, including Google classroom, Google forms and Google drive, Edmodo and Duolingo. On the contrary, the least popular are Moodle, Padlet and Coursera. The popularity rating of the technological tools is presented in Diagram 1.

Diagram 1. The popularity of online platforms and mobile applications among ENU teachers and students



The respondents were suggested to estimate the effectiveness of the presented tools in the framework of distance learning. Google plus was marked as extremely effective, while the rest of online tools are believed to be effective only to a certain degree. The respondents' opinion on the degree of effectiveness of the given online tools is depicted in Diagram 2.

Diagram 2. The degree of effectiveness of the online tools in educational process



The reason why the majority is so in favour of using Google plus is, probably, because it offers a variety of handy and easy-to-use services. ENU teachers post assignments on Google classroom, store and exchange files with students by means of Google drive, conduct tests and questionnaires by means of Google forms and many more.

Nevertheless, there are not only benefits of using online technological tools in education, but also a number of its drawbacks. The main handicap is considered to be that using technologies can disconnect students from face-to-face communication, which is detrimental to students' mental and cognitive development. Another disadvantage of using online technologies in education is that it can make it easier for students to cheat. Since the access to information is almost unlimited, students

might use it to plagiarize or to copy answers during exams. What is more, distance learning based on online technologies could put some students at a disadvantage. For example, a student who has a poor internet connection or not so up-to-date device would be inferior to the student who possesses the latest electronic device and strong internet connection. In addition, permanent use of technologies could create medical issues for some students. It is a well-known fact that staring at a computer screen for a long time might cause eyesight damage, moreover, sedentary lifestyle due to distance learning might cause spine issues.

Despite the disadvantages of using online education technology the majority of ENU teachers and students consider it necessary for their personal and professional growth. It is stated that technological tools considerably affect teachers' motivation to improve professional skills, as it encourages self-knowledge, contributes to growth in self-education, as well as methodological and didactic support of the lesson is developed. Online learning opportunities and the use of educational resources can increase educational productivity by accelerating the rate of learning; reducing costs associated with instructional materials; and better utilizing teacher time. Used to support both teaching and learning, technology increases student engagement and motivation; and accelerates learning.

When assessing the effectiveness of a new educational technology or learning model, it is tempting to compare the learning outcomes of students using this technology with the learning outcomes of a traditional face-to-face learning model. However, such a comparative analysis, as a rule, does not provide valid statistically significant conclusions due to the fact that it requires: strict experimental design; content identical in content and different in format; the same control and measuring materials and conditions for the final certification; a sufficiently large sample, randomly generated for each training model (technology); elimination of the influence of external factors on the results of the experiment, which reduces the validity of the experiment. In addition, in distance learning, interactive communication is widely used, which involves a dialogue of any subjects with each other using the means and methods available to them. At the same time, it is assumed that both parties actively participate in the dialogue - exchange of questions and answers, managing the progress of the dialogue, monitoring the implementation of decisions, etc.

The participants of the survey expressed their opinion towards using technological tools in education. The opinions could be divided into three categories: those absolutely in favor of the idea of distance learning based on technological tools, those supporting the idea of distance learning only partly, or preferring blending learning, and those completely against distance learning, advocating traditional classes. Proponents of technology-based distance learning claim that online learning saves time and provides instant access to a wide range of information sources, develops skills of processing information, facilitates student's self-education and motivation as well as teachers' professional development, brings novelty to the educational process, makes it more interesting and entertaining. However, the opponents of online learning argue that there is a risk of getting dependent or even addicted to technologies, it can lead to the loss of natural knowledge acquisition and curiosity in students, deprive teachers and students of face-to-face communication, letting along causing both physical and mental health issues.

We, however, stick to the middle path, admitting all the benefits of online learning, but taking precautions. The successful use of online technology depends on well designed and planned courses, infrastructure and price considerations, capacity and training in the chosen technology, local design,

proper pre-testing and relative ease of access for the students. We join to the opinion that education should not be based entirely on online technologies but include also traditional methods of teaching proven to be effective throughout the years.

In order to maximize the effectiveness of the use of online platforms and mobile applications in the process of distance learning we would like to suggest a number of the following recommendations for ENU teachers.

1. Explore a number of online platforms and applications in order to find the ones most suitable for your course framework.
2. Consult guidelines and video instructions for working with a particular online tool if you are struggling to manage it.
3. Do not hesitate to take various courses and attend professional trainings on technological literacy for teachers.
4. When planning a lesson consider which technological tool would be suitable at a particular stage: introduction of a new topic, revision of the material, knowledge assessment and testing.
5. Make sure that during online learning students can develop not only receptive, but also productive skills.
6. Provide instructional scaffolding throughout the entire course.
7. Do not attempt to use all online tools at one lesson, include one only if it fits your lesson framework and helps achieving your learning goal in a more effective way.
8. Let your students create their own online materials and projects. You can gain new skills from your students as well.

Summing up the above mentioned, we live in the era of technology, which allows us to apply all technological inventions for achieving educational goals. Thanks to the existence of various online platforms and mobile applications distance learning has become possible and, if organized properly, can be quite effective. However, it has its handicaps that should be considered in curriculum planning, and the training practice should be methodologically sound.

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