

NEW TECHNOLOGIES AND PEDAGOGICAL PROFESSION: ANALYSIS OF BEST PRACTICES (ON THE EXAMPLE OF A GROUP OF UNIVERSITIES)

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INTRODUCTION

Education as one of the phenomena of human life is in constant adaptation to the rapid changes of civilization, transmits the skills and experience of past generations, analyzes the problems of today and reveals the prospects of preparing humanity for future challenges is and will always be the subject of research. The most important element of education, of course, is the teacher, who using all the elements of the teaching profession ensures the growth of the human personality in the professional, spiritual and cultural aspects. Therefore, in the context of rapid development of new technologies and their adaptation to the education system, an important point is to preserve the educational component of the teaching profession during the implementation of such new educational technologies as online learning. In educational practice, online learning is not the only group of new technologies, but the rapid development of computer technology, the Internet and the manifestation of force majeure related to the COVID-19 pandemic raises the issue of online learning as a catalyst for change in pedagogical approaches to student learning in higher education institutions.

LITERATURE REVIEW

Many scientists from different countries of the world have studied the problems of introduction of new technologies in university education and

their influence on the development of the pedagogical profession. However, we consider it necessary to dwell on those works that analyze the latest educational technologies that meet current trends in the development of educational space. Thus, the work of Boettcher J.V. (2021) is noteworthy; it describes the principles of effective teaching on the Internet, emphasizing the mandatory use of discussions, feedback, and individual approach to students to maintain contact between teacher and students, and thus ensure the implementation of educational components of the teaching profession.

Vuorikari R., Punie Y., Marcelino C. (2020) have dedicated their work to developing scenarios for the development of new educational technologies that relate to ethical considerations (e.g., balance between human autonomy and machines, data choice, education, pedagogical models) and requirements for the competence of teachers. In addition, emphasis is placed on the need to increase the digital competence of teachers and the implementation of a pragmatic approach to the selection and application of a new technology in the educational process.

Meyer K.A. (2010) and Anderson T., McGreal R. (2012) note in their works that the general economic model of distance education is based on three processes: 1) replacement of labor by capital; 2) replacement of labor by labor; 3) replacement of capital by capital. The first two processes are aimed at reducing labor costs in education. Firstly, there is a replacement of living labor with capital through the transition from face-to-face lectures and practical classes

to the creation of digitized materials (texts, video lectures) and distance learning systems. Secondly, there is a replacement of more skilled work (professor) with less skilled, but cheaper (assistants, technicians) in connection with the division of the educational process into components and their formalization. The third process involves the replacement of one form of capital (buildings, structures, paper educational resources) to another (comp. user equipment, information systems and networks, digital educational resources). We partially agree with the opinion of scientists about the possible reduction of teachers' skills, but with the use of simultaneous lectures and discussions, such arguments can be refuted.

Esteves M., Pereira A., Veiga N., Vasco R., Veiga A. (2018), investigated the use of educational technologies based on the games EDPuzzle, Kahoot and Socrative and found their positive impact on improving the quality of students' knowledge and is a promising tool adaptation of students to future challenges. However, according to scientists, such smart games should be used in the physical classroom, as it allows for a higher level of discipline and concentration of students.

Bigman M., Mitchell J.C. (2020) devoted their work to the study of experiments and successful examples of online learning in the context of the COVID-19 pandemic, developing a series of recommendations for online courses that should be based on maximum student-teacher interaction. That is, the authors recommend not focusing on asynchronous learning and using the opportunities of chats and social media to maintain communicative and business communication between teacher and students, which will bring the necessary level of knowledge to the student and check his success.

Yanxiang L. (2016) and Supermane S. (2019), explore the transformation of approaches to higher education management in the context of the introduction of mass online courses. They draw positive conclusions about the expansion of educational opportunities, ignoring the geographical and property principles.

Silver RE, Kogut G., Huynh Thi Canh D. (2019), focused on the role of innovation in the professional development of teachers, concluding that innovation expands the opportunities for teachers in the field of student learning, but one of the problems is excessive workload and complexity in the preparation of educational content.

RESEARCH METHODS

The following methods were used in the research:

- analysis of synthesis - in the study of scientific literature and determining the directions of influence of innovative educational technologies on the teaching profession.
- statistical analysis and comparison - in the study of the dynamics of growth of search queries for online courses;
- method of sociological survey - in the study of teachers' opinions on the impact of innovative educational technologies on the teaching profession;
- generalization - for the formation of scientific-theoretical and practical recommendations for the development of algorithms for implementing best practices for the introduction of new technologies in the educational process in the context of their impact on the development of the teaching profession.

RESULTS

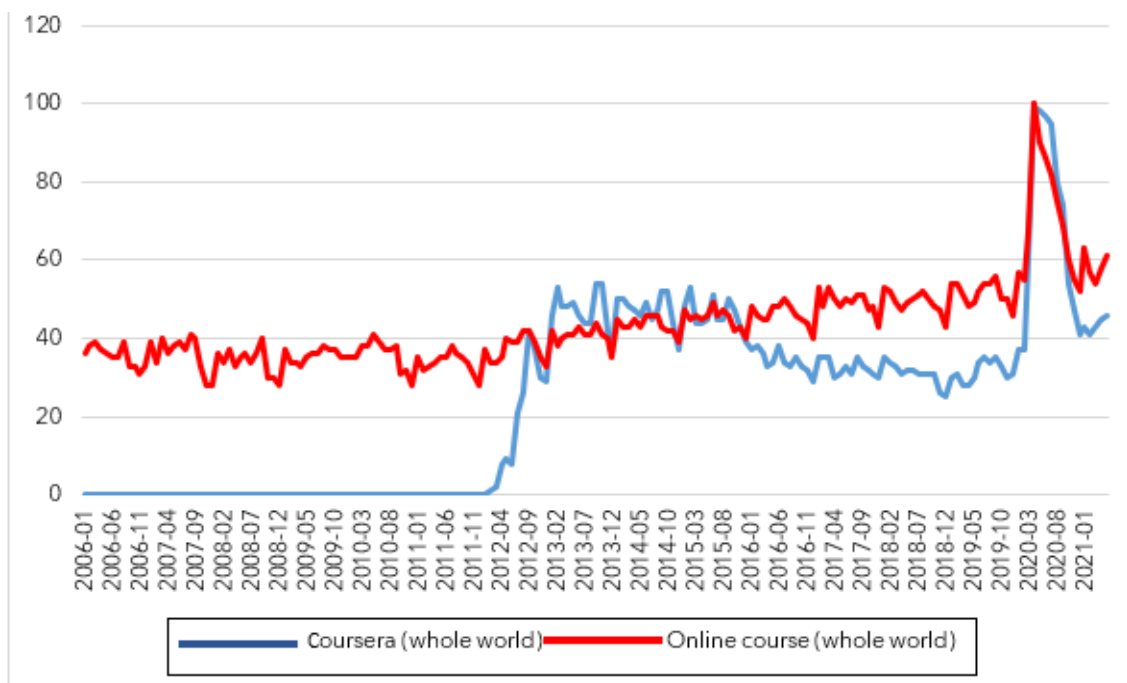
The introduction of new technologies in the educational process of universities around the world began long ago, in the early 1980s. One of the pioneers in the development of educational innovative technologies were higher education institutions of the United States of America, where distance-learning technologies were actively introduced. It was in the 1980s and 1990s that private nonprofit universities were established in the United States to provide distance education, including The New School (1985), Jones International University (1994), and Western Governors University (1997). Western Governors University was established on the principle of an online university and was the first of its kind to receive regional accreditation, which is the highest level of accreditation of universities in the United States.

With the development of the Internet and computer technology, the latest technologies related to online learning began to be introduced in the vast majority of universities around the world, but the level of such technologies, of course, was higher in American and European universities.

On the other hand, the development of the Internet has led to the emergence of special platforms for mass online training courses, such as Coursera, EdX, Udacity, which, in our opinion, began to form a culture of online learning. Analyzing the online courses posted on the Coursera platform in terms of best practices for the introduction of new technologies in the educational process, we can draw some conclusions about the effectiveness of such courses. Therefore, firstly, as a rule, one lecture on the Coursera platform does not exceed one hour in duration, and the video itself is divided into 5-10 parts. In our opinion, this approach is aimed at holding the listener's attention, because the format of the lecture itself is asynchronous. A smaller block of information is better perceived and better assimilated. Secondly, the format of lectures is mainly formed in such a way that during listening the student is forced to solve certain tasks, which allows keeping the listener's attention. Such approaches to the formation of video lectures should be used during the formation of training courses in traditional university programs, because it removes the student's overload from the monotonous monologue of the lecturer, in the case of asynchronous learning. However, online courses on the Coursera platform, in our opinion, are mostly introductory, because the test form of control or form of control, which provides a written solution of problems does not allow to effectively assess the student's knowledge of the course, because the lecturer cannot check independence tasks.

At the same time, the emergence of mass online courses such as Coursera has increased the level of interest in online learning from both students and university professors from around the world, as evidenced by the positive dynamics of Google search queries for words: "online course" and "coursera" (Figure 1).

Fig. 1. Dynamics of Google search queries for the words "online course" and "coursera" in 2006-2021



Source: Built by the author according to: Google Trends

As shown in Figure 1, the number of search queries for the phrase "online course" began to grow in 2012, when the Internet appeared a platform for mass online training courses Coursera. However, after 2016, the dynamics of growth of search queries for the phrase "online course" continued to grow, while the dynamics of search queries for the word "coursera" took a downward trend. However, with the announcement of the COVID-19 pandemic, the search queries for the above descriptors increased, which are objective due to the quarantine restrictions.

Despite the fact that the introduction of new technologies in the educational process of universities around the world had a positive trend before the pandemic COVID-19, yet, in our opinion, the pandemic has identified positive and negative aspects of new technologies in online learning, as well as their impact to the teaching profession.

One of the highly effective methods of determining the directions of influence of the latest technologies of distance learning on the teaching profession, in our opinion, is the method of SWOT-analysis (Table 1).

Table 1. SWOT-analysis of the impact of new technologies in the educational process on the teaching profession

Strengths	Weaknesses
1. Expanding the scope of training. Expanding the scope of self-realization of the teacher. 2. The use of a wide range of methods of conveying information and tools for the formation of educational material. 3. The possibility of rational distribution of time in the process of pedagogical activity. 4. Using an individual approach to students when teaching material using small group tactics or personalized learning. 5. Maximum proximity to students with special needs (inclusive education).	1. Lack of face-to-face communication between students and teacher. 2. Difficulty in understanding the feelings and psychological state of the student, as well as difficulty in transmitting emotions. 3. The complexity of the educational process, which is an integral part of the teaching profession. 4. High complexity of developing distance-learning courses. 5. Distance programs are difficult to adapt to the study of applied disciplines.
Opportunities	Threats
1. Professional growth in the field of presentations. 2. Use of interactive teaching methods. 3. Quick feedback during training. Transparency of knowledge assessment. 4. Ability to review the correctness of movements, making blanks, performing exercises while teaching students of applied specialties.	1. Decreased professional level of the teacher and loss of sense of the audience. 2. Increasing the workload and computer time, which can be a factor in depression and burnout. 3. The need for additional teacher training on the use of technologies for preparing online lectures, computer programs, etc.

Source: Search data.

Analyzing Table 1, firstly, it is advisable to pay attention to the weaknesses and threats that characterize the negative impact of new technologies on the teaching profession. Thus, given that the teaching profession is, in fact, a unique profession, because it involves the involvement of the maximum number of professional skills, personal and psychological and emotional characteristics of the teacher's personality through which to influence the student to prepare him for future professional, cultural and spiritual life. That is, unlike other types of professions, the teaching profession requires the presence of elements of education. Education, in turn, occurs through the transfer of the teacher's cultural and spiritual values to students based on the experience of generations, their own experience and example, analysis of future prospects, as well as using motivational and emotional components. No wonder that the teacher (from Greek *ταδευον*) means an educator. Thus, the pedagogical profession is not only teaching students new skills in the field of their chosen future profession, but also education.

Thus, analyzing the weaknesses of the latest technologies in the educational process, especially in online learning, it is worth noting their most important shortcomings - the lack of face-to-face communication between students and teachers; difficulty in understanding the feelings and psychological state of the student, as well as difficulty in conveying emotions; the complexity of the educational process. During online learning, the teacher does not see the

student's behavior, cannot understand his psychological state, and therefore cannot draw conclusions about the adjustment of the educational process. In this context, the teaching profession suffers significant losses, because teachers do not actually use the educational component.

Asynchronous or synchronous lectures conducted through various Internet platforms or applications do not allow the teacher to feel the audience and control the attention of students, which certainly affects both the educational and training components of the teaching profession. This is confirmed by the results of our sociological survey on the impact of the latest learning technologies on the teaching profession among fifty-two teachers of such Ukrainian universities as: Western Ukrainian National University; Kyiv National Economic University named after Vadym Hetman; Ivan Franko National University of Lviv; Lviv Polytechnic National University; Precarpathian National University named after Vasyl Stefanyk; Ternopil National Pedagogical University named after Volodymyr Hnatyuk; Ternopil National Technical University named after Ivan Pulyuy; University of Banking; University of State Fiscal Service (State Tax University); Chernivtsi National University named after Ivan Fedkovych. The results of the survey are given in Annex 1.

Answering the question, "Do you manage to keep the audience's attention during the online lecture?" 64% of respondents said that students' attention is difficult to control, and 10% do not control students' attention at all. Such data indicate the problem of lack of contact between teacher and student. This confirms the complexity of the educational process, because the teacher cannot see the experiences of students, their reaction to a problem, as during face-to-face contact in the classroom.

This problem requires a change in the professional skills of the teacher in terms of choosing the forms of transmission of emotions, beliefs and education of the student. To this end, it is necessary to use the practice of discussions involving small groups of students from 5 to 10 people. In this case, the teacher will see all the students on the monitor screen and will be able to control their attentiveness and interest in the topic of discussion. The use of small group tactics allows, in our opinion, to apply the educational aspect of the teaching profession. However, according to the results of the poll (Annex 1), discussions in small groups are used by only 76% of respondents.

The high complexity of training to ensure the educational process during online learning and increase the workload, often leads to overload of the teacher and his professional burnout. No wonder 56% of respondents noted that the teaching load on the teacher has increased after the introduction of the latest online learning technologies. Moreover, 82% of respondents say that the introduction of new technologies requires additional training for teachers, and this, in fact, is also an additional burden. The increasing load on the teacher reduces his motivation to improve the level of pedagogical skills and self-improvement. In addition, it is worth agreeing with 6% of respondents that the introduction of new technologies in teaching has led to a decrease in the level of teacher qualification. This statement seems a bit strange against the background of the fact that 76% of respondents say that the introduction of new technologies leads to teacher training. Analyzing these answers and the process of online learning, we note that in terms of gaining skills in the formation of online presentations, video lectures and the use of various computer services, Internet platforms, and design tools really improved the skills of the teacher. However, in terms of the sense of the audience, public speaking, the educational process, the qualification of the teacher is reduced. Particularly degrading occurs in those teachers who use only recorded video lectures and a test form of control for online learning. This approach is one-time and does not contribute to the development of professional skills of the teacher, allowing demonstrating lecture material for several semesters in a row.

In addition to the negative aspects of the introduction of new technologies in the educational process, there are certainly positive aspects that affect the teaching profession (noted by 92% of respondents): increasing tools for visualization of educational material, interactivity, individual approach to students, feedback, involvement a wide range of students to study a particular discipline, etc.

Based on the SWOT-analysis of the strengths and weaknesses of the introduction of new technologies in the educational process and their impact on the teaching profession, we note that in order to overcome shortcomings and activate drivers to improve the effectiveness of online learning universities around the world must create appropriate strategies and develop best practices.

Analysis of the best practices of universities in the field of introduction of new technologies in the educational process (especially in the field of online learning, which is currently in trend) is quite a difficult task given the limited information on practical aspects of online learning. However, using the screening of the websites of the world's leading universities to analyze the practical aspects of the effective use of new technologies for the development of the teaching profession, we can draw some important conclusions (Table 2).

Table 2. Comparative characteristics of best practices for the introduction of new technologies in the educational process and the development of the teaching profession in a group of universities (Harvard University)

The practice of using the latest technologies in the educational process	Author's comment
Harvard University	
<ol style="list-style-type: none"> 1. Availability of pre-developed recommendations (certain standards) for teaching on the Internet. 2. Mandatory forms of personal interaction between teacher and student during online learning through the use of chat; use of a short discussion of issues during the lecture; role-playing games and debates between several students during an online lecture; use of the technique of "warm" and "cold" calls in the form of messages for a particular student during the lecture, etc. 3. Using the tactics of small groups. This concept involves a discussion on a particular topic or issue raised in an asynchronous or synchronous lecture. 4. Individual video conferences between teacher and student according to the method of personalized learning. 5. Carrying out virtual laboratory work, if possible (implementation through the concept of smart games). 6. Using a survey to quickly get answers to a question. 7. The use of brainstorming methods. 8. The use of motivational tools for teaching students. 	<p>Analysis of the practice of using the latest technologies for online learning at Harvard University shows that pre-developed recommendations allow ensuring high quality education and disclosure of all components of the teaching profession. The obligation to use the tactics of small groups and individual video conferences encourages teachers to maximize the involvement of students in solving certain educational tasks. In our opinion, the focus on discussion in small groups and on individual conversations is aimed at using the educational component of the pedagogical profession. After all, the individualization of education allows establishing face-to-face contact between all students and the teacher as in a physical class. However, the benefits of such meetings, in our opinion, are higher than in the physical audience, because the teacher has the opportunity to conduct a conversation with each student separately. However, the individualization of online learning is a rather complex procedure given the time management of the educational process and pedagogical activities of the teacher, as it requires significant time.</p> <p>Virtual laboratories are a promising technology for organizing online learning and development of the teaching profession, as the teacher using video and watching video replays has the opportunity to check in detail the correctness of laboratory research. Note that virtual laboratories are quite expensive for most universities, but their creation in developing countries can solve the problem of shortage of reagents, supplies for disciplines such as biology, chemistry and physics.</p> <p>Smart games are also a promising technology for the formation of professional skills of students and improve the pedagogical skills of teachers, who can also participate in such games in the form of certain characters.</p>
University of Cambridge	
<ol style="list-style-type: none"> 1. Availability of pre-developed recommendations (certain standards) for teaching on the Internet. 2. Formation of an online learning procedure understandable for students. That is, an algorithm for online learning that allows you to organize the time of the student's teacher. 3. Use of written motivation letters and letters with a critical assessment of the student's work. 	<p>Online learning at the University of Cambridge is based on the practice of maximum teacher-student interaction. Written motivation letters and letters with a critical assessment of student work allow maintaining the required level of student motivation for online learning, as well as providing regular assessment of student work, which maintains the required level of student attention to the subjects studied.</p> <p>An important aspect of online learning at the University of Cambridge is the organization of project work through online platforms, which improves the quality of learning,</p>

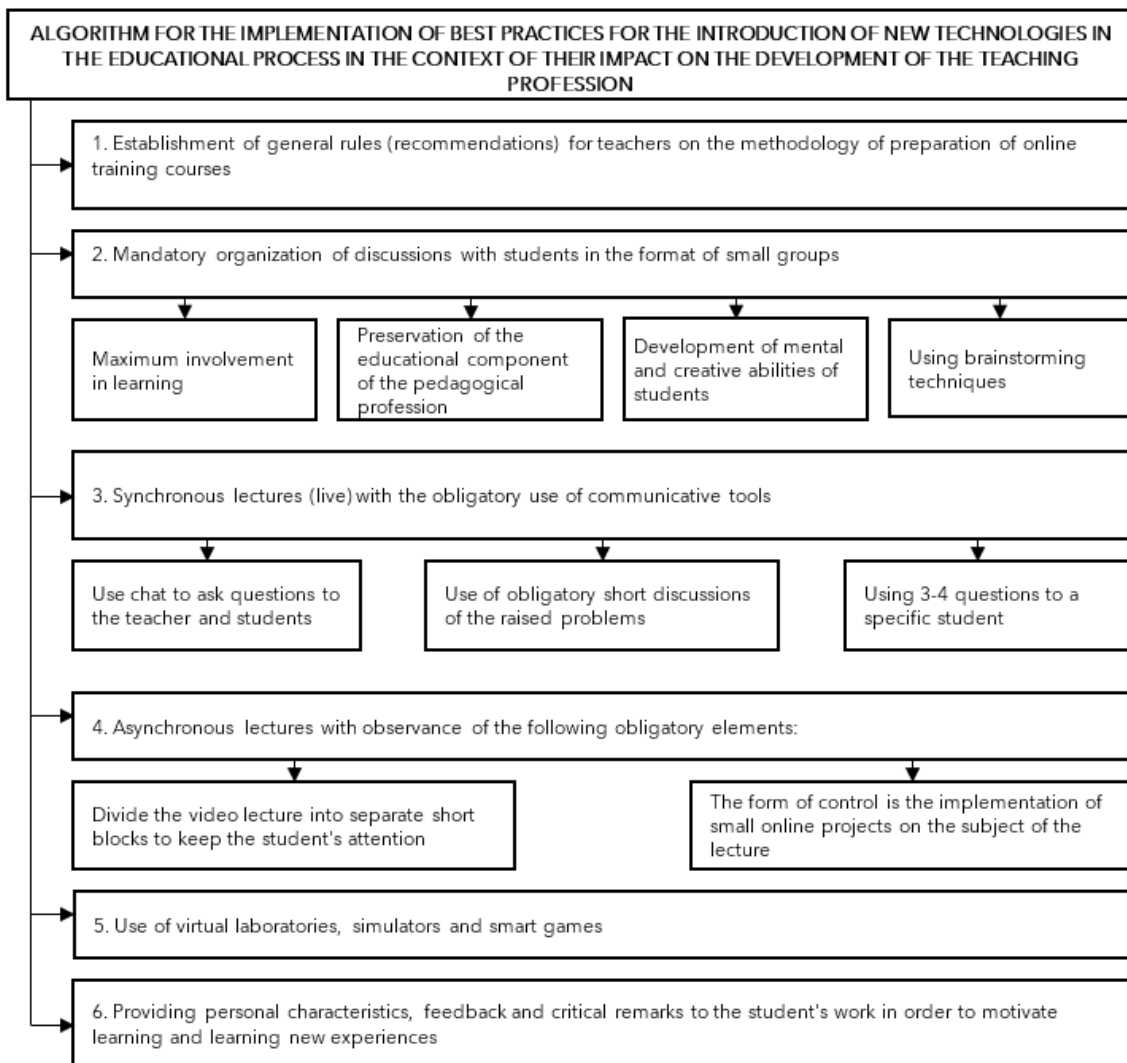
4. Implementation of project work of students through online learning tools (special Internet platforms, social media).	as students carry out creative work and develop skills of teamwork. That is, the test form of control, which is used in the vast majority of online courses, has been replaced by more time-consuming and effective student work - project-based learning.
Stanford University	
<ol style="list-style-type: none"> 1. Availability of pre-developed recommendations (certain standards) for teaching on the Internet. 2. Wide involvement of students in discussions on the Internet. Use of written discussions. 3. Use of virtual laboratories and conducting laboratory work online. 4. Use of asynchronous tools for student discussions (Canvas Discussions), during which students can participate in discussions on their own schedule. 	<p>Stanford University's online learning is based on the organization of student discussions, which is certainly one of the best practices of online learning, because the discussion on the one hand maintains the appropriate level of attention to the issues under consideration, and on the other - involves all students in person. Using the Canvas Discussions platform allows for written discussions on a student-friendly schedule that fully realizes the benefits of the online learning format.</p> <p>The organization and conduct of discussions allows to fully implementing the educational component of the teaching profession, because in fact the eye contact of the teacher with students in the format of small groups. In this case, the teacher can evaluate each student individually and conduct short individual discussions on a particular issue.</p> <p>An important element of Stanford University's online learning is to conduct some online labs, which also allows students to have a flexible study schedule while maintaining a high level of quality. However, the use of virtual laboratories does not allow to fully implement applied training programs, however, in our opinion, such technologies are quite promising given the development of innovations in the field of distance learning.</p>
Massachusetts Institute of Technology	
<ol style="list-style-type: none"> 1. Use of theoretical online courses. 2. Using the business simulator "The Fresh Connection" and virtual laboratories 	<p>Technological higher education institutions find it more difficult to organize online learning and fully apply the latest technologies in this field. However, the organization of hybrid training programs is a very promising idea. The Massachusetts Institute of Technology effectively combines online learning with learning in physical classrooms. Online training provides the opportunity to take more than 300 theoretical courses, and practical courses are held in physical classrooms. This approach allows to increase the time for practical work and, thus, to fully implement the educational component of the teaching profession.</p> <p>In our opinion, the use of the business simulator "The Fresh Connection" is effective, which allows students to perform tasks in conditions close to reality, to become a direct participant in business cases and other life situations.</p>

Source: Search data*.

*From Best Practices: Online Pedagogy (<https://teachremotely.harvard.edu/best-practices>); Top tips for online teaching and learning. (<https://blog.cambridgeinternational.org/six-top-tips-for-online-teaching-and-learning/>) and Best Practices (<https://teachanywhere.stanford.edu/best-practices>); Massachusetts Institute of Technology Courses. <https://www.classcentral.com/university/mit>.

Summarizing the results of the sociological survey of teachers of higher educational institutions of Ukraine on the impact of new technologies on the teaching profession and the results of comparative analysis of best practices for online learning in the world's leading universities, we formulate an algorithm for effective implementation of online learning technologies in the SWOT-analysis (see Table 1). Figure 2 represents the structure of the algorithm.

Fig. 2. Algorithm for implementing best practices for the introduction of new technologies in the educational process in the context of their impact on the development of the teaching profession



Source: Search data.

Having formed an algorithm for the implementation of best practices for the introduction of new technologies in the educational process in terms of the development of the teaching profession, we note that the main element of this algorithm is the mandatory presence of discussions. In our opinion, it is in the discussion that the teacher can implement all his pedagogical skills, understand the psychological state of the student, convey emotion and get the appropriate reaction from the students. The ability to organize written discussions using the Canvas Discussions platform expands the communication opportunities between teacher and student, but face-to-face discussions through video communication should be essential during online learning.

Synchronous lecture should also not turn into a monotonous monologue of the teacher, because the inability to control the attention of students through the monitor screen will reduce the effectiveness of such a lecture. Therefore, the use of chat to ask questions, go to short discussions and personal questions will allow the teacher to constantly keep students in suspense and manage the virtual audience.

Asynchronous lectures, in our opinion, should be used for easy theoretical and introductory lectures, as they exclude the interaction of teacher and student, as well as increase the cases of distraction of students from the educational material. Therefore, to increase the effectiveness of such lectures, it is necessary to divide the video lecture into several short video blocks lasting no more than 15 minutes. In addition, to test students' knowledge, it is advisable

to use project work, which significantly improves the quality of control of the studied material in contrast to the test form of control of students' knowledge.

In technological higher education institutions, it is advisable to use hybrid student training programs that combine theoretical online learning and physical education in the classroom in applied disciplines, using such new learning technologies as: design, inverted, personalized and adaptive learning. In technological universities, it is also important to use virtual laboratories, simulators and smart games, which will improve the quality of education and implement all components of the teaching profession.

DISCUSSION

The study of best practices in the introduction of new technologies in the educational process of universities in the context of their impact on the teaching profession can generally positively assess such impact, because the qualification of teachers in computer technology, art of presentations, teaching analytics is clearly growing.

At the same time, it is worth paying attention to the problems that reduce the effect of the implemented innovations on the implementation of the educational component, because the teacher loses face-to-face contact and the ability to control the audience during lectures. Which is also described in the works of Bigman M., Mitchell JC (2020), Yanxiang L. (2016), Supermane S. (2019) and others.

We do not completely agree with the views of Meyer K.A. (2010) and Anderson T., McGreal R. (2012) on the reduction of teaching staff during distance learning and online courses, because in the best universities in the world, both professors and assistants using this form of education as discussions, unequivocally, increase the level of their qualification, because such training is completely transparent. Transparency in learning is one of the main virtues of online learning, because a lecture, discussion or presentation can be viewed by anyone and assess the level of teaching.

We agree with the scientists Vuorikari R., Punie Y., Marcelino C. (2020) that applied education is not entirely suitable for online learning, but note that the use of the method of gamification of learning and technology of virtual laboratories (Esteves M., Pereira A., Veiga N., Vasco R., Veiga A., 2018) allows certain courses in applied learning to move to the online environment.

CONCLUSIONS

Summing up the study of best practices for the introduction of new educational technologies in the context of their impact on the teaching profession, we note that new technologies will certainly improve the skills of teachers, but provided that the university creates the necessary working conditions. Such conditions include free access to e-content tools, full technical support for teachers, increasing the number of teachers to implement small group tactics, implementing common rules, methods, and requirements for creating online courses, regulating the use of social media and other means of communication of students with the teacher within online courses in order to prevent excessive psychological stress on the teacher, etc.

Regarding the implementation of all aspects of the teaching profession in the context of new educational technologies, universities must create conditions to ensure mandatory face-to-face meetings of teachers and students online. For such meetings, in our opinion, discussions in small groups are most suitable, which allows to fully unleash the potential of the teacher and student, as well as to achieve the required quality of education. Synchronous and asynchronous lectures are also effective practices for the implementation of new technologies in education, but they should not be deprived of communicative elements of teacher and student, for this purpose, it is suggested to use chats, personal questions and transitions to discussions. This approach will solve the problem of control of student attention, which was determined because of our sociological survey of teachers.

Due to the lack of information, the issues of teacher training in the process of implementing new educational technologies, analysis of the effectiveness of online learning and the problem

of adapting new technologies to applied disciplines, which we will leave for future research, remain unresolved.

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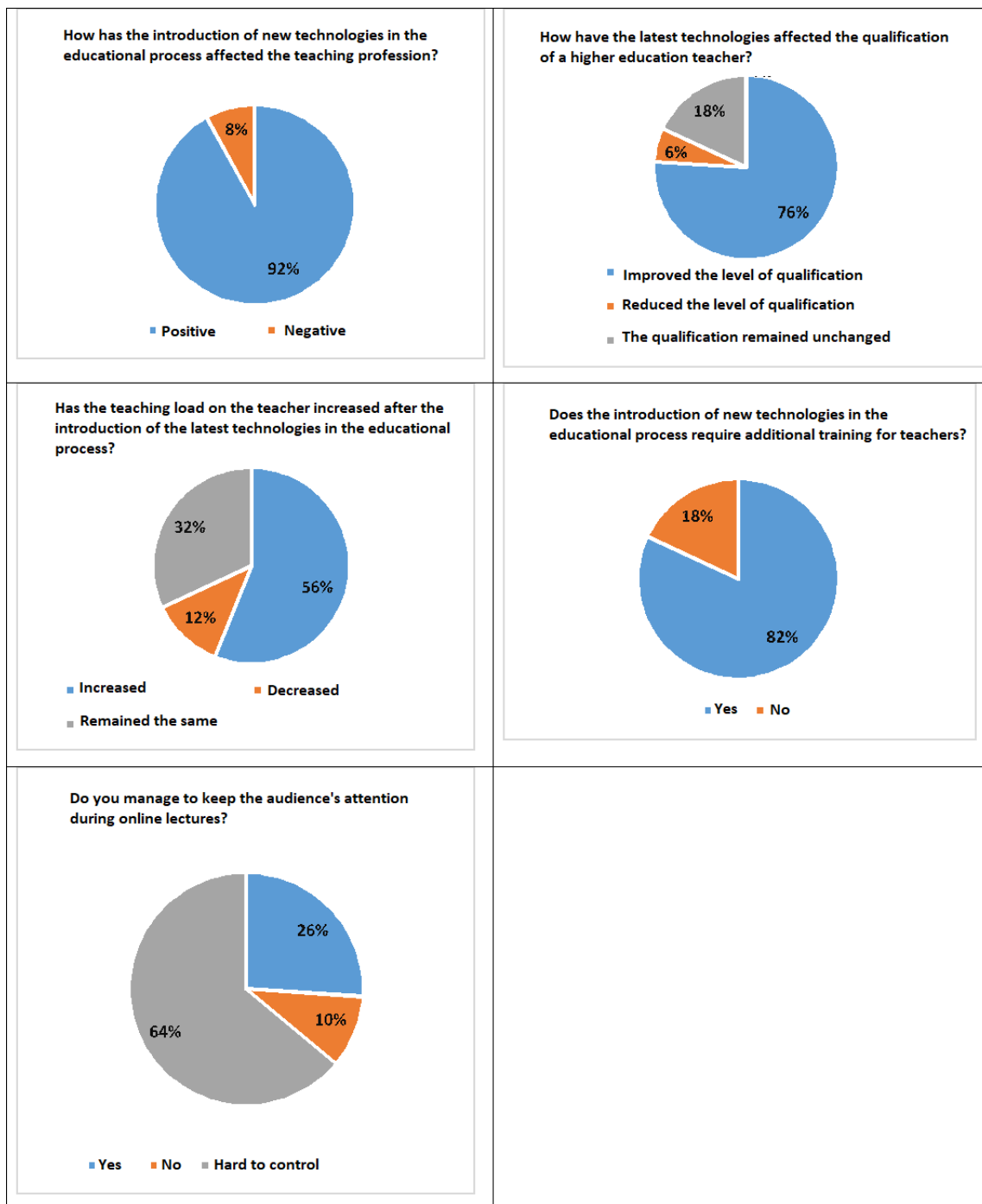
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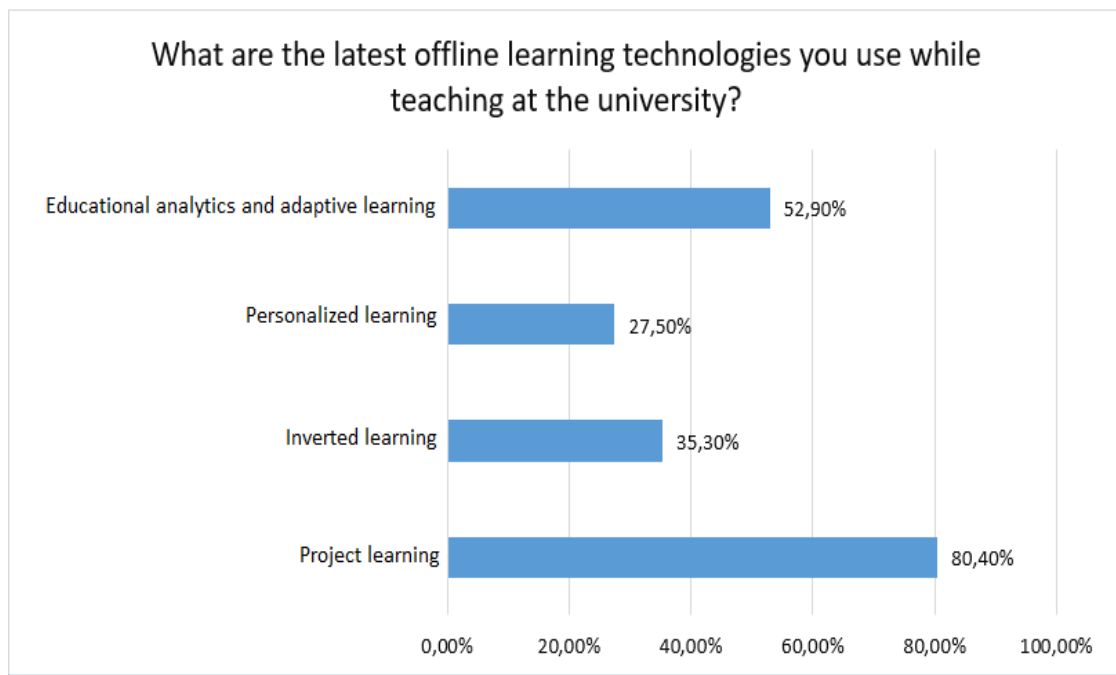
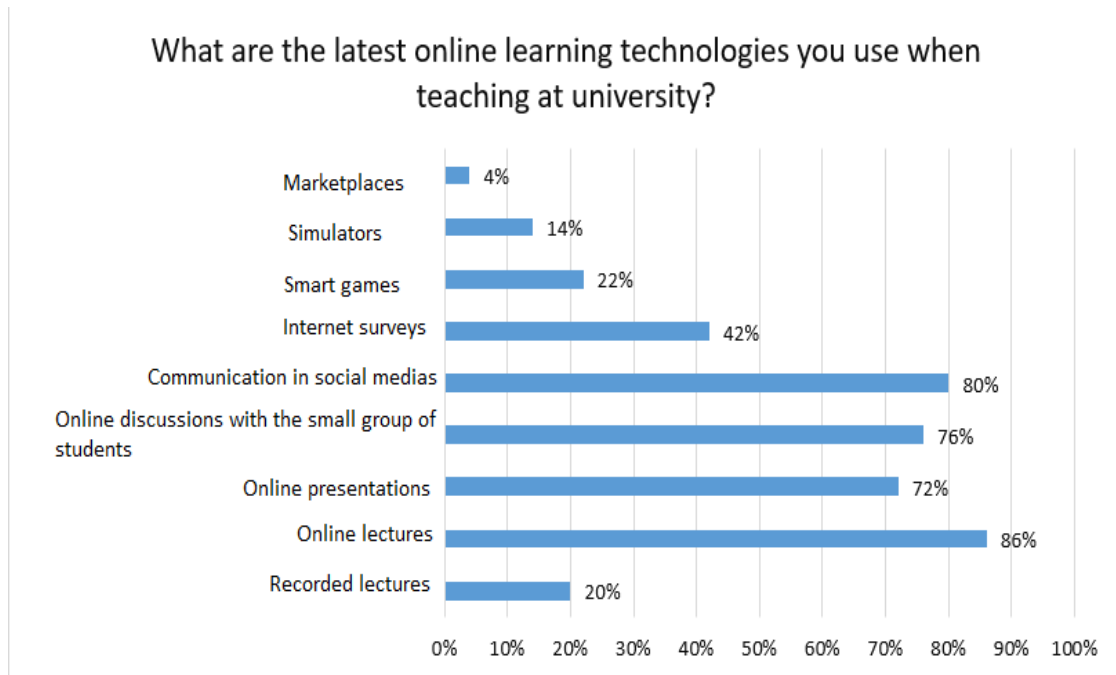
Annex 1 - A

The results of a sociological survey of teachers of higher educational institutions of Ukraine on the impact of the latest learning technologies on the teaching profession



Annex 1 - B

The results of a sociological survey of teachers of higher educational institutions of Ukraine on the impact of the latest learning technologies on the teaching profession



New technologies and pedagogical profession: analysis of best practices (on the example of a group of universities)

Novas tecnologias e profissão pedagógica: análise das melhores práticas (no exemplo de um grupo de universidades)

Nuevas tecnologías y profesión pedagógica: análisis de las mejores prácticas (sobre el ejemplo de un grupo de universidades)

Resumo

O objetivo do estudo é a análise das melhores práticas na implementação de novas tecnologias no sistema de educação universitária e seu impacto no desenvolvimento da profissão docente. Tarefas de pesquisa: - realizar um levantamento sociológico de professores de instituições de ensino superior sobre o impacto de novas tecnologias na profissão docente, a fim de identificar aspectos problemáticos e positivos da introdução de novas tecnologias educacionais; - analisar as melhores práticas de introdução de novas tecnologias educacionais nas principais universidades do mundo com o propósito de formação do algoritmo generalizado de adaptação de novas tecnologias ao processo educacional e desenvolvimento de uma profissão pedagógica; - formulação de recomendações para garantir alta qualidade da educação online e desenvolvimento da profissão pedagógica nas condições de aprendizagem online. notamos que as novas tecnologias certamente melhorarão as habilidades dos professores, mas desde que a universidade crie as condições de trabalho necessárias.

Palavras-chave: Novas tecnologias. Profissão pedagógica. Melhores práticas. Grupo de universidades.

Abstract

The purpose of the study is the analysis of best practices in the implementation of new technologies in the system of university education and their impact on the development of the teaching profession. Research tasks: - to conduct a sociological survey of teachers of higher educational institutions on the impact of new technologies on the teaching profession in order to identify problematic and positive aspects of the introduction of new educational technologies; - to analyze the best practices of introduction of new educational technologies in the leading universities of the world for the purpose of formation of the generalized algorithm of adaptation of new technologies to educational process and development of a pedagogical profession; - formulation of recommendations for ensuring high quality of online education and development of the pedagogical profession in the conditions of online learning. we note that new technologies will certainly improve the skills of teachers, but provided that the university creates the necessary working conditions.

Keywords: New technologies. Pedagogical profession. Best practices. Group of universities.

Resumen

El objetivo del estudio es el análisis de las mejores prácticas en la implantación de las nuevas tecnologías en el sistema de educación universitaria y su impacto en el desarrollo de la profesión docente. Tareas de investigación: - realizar una encuesta sociológica de profesores de instituciones de educación superior sobre el impacto de las nuevas tecnologías en la profesión docente con el fin de identificar aspectos problemáticos y positivos de la introducción de nuevas tecnologías educativas; - analizar las mejores prácticas de introducción de nuevas tecnologías educativas en las principales universidades del mundo con el fin de la formación del algoritmo generalizado de adaptación de las nuevas tecnologías al proceso educativo y desarrollo de una profesión pedagógica; - formulación de recomendaciones para garantizar una alta calidad de la educación en línea y el desarrollo de la profesión pedagógica en las condiciones de aprendizaje en línea. observamos que las nuevas tecnologías sin duda mejorarán las habilidades de los profesores, pero siempre que la universidad cree las condiciones de trabajo necesarias.

Palabras-clave: Nuevas tecnologías. Profesión pedagógica. Mejores prácticas. Grupo de universidades.