LIFELONG E-LEARNING AS A TREND FOR LABOR MARKET DEVELOPMENT

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ABSTRACT

The paper reflects the importance of e-learning for the labor market. The essence of lifelong learning is determined too. The main differences between e-learning and learning in the classroom are shown. The paper also describes the importance of e-learning while searching for a job and improving professional skills. Research on the use of e-learning in the labor market is conducted based on the results of global open-source statistics in 2020, including the materials about the e-learning process during the COVID-2019 quarantine. The main advantages of using e-learning techniques for employers, employees and the global economy are described

Keywords: Lifelong learning, E-Learning
1. INTRODUCTION

Today we live in a world that is constantly changing. The knowledge we have gained as a tool for self-realization in professional, personal, and social life is becoming obsolete very quickly. That is why we often try to update the baggage of our knowledge in order to get the best place in the labor market and accordingly find an interesting, modern job with a high level of wages.

The problem of lifelong learning was previously perceived not just in the form of a specific concept but in the form of an idea. Lifelong learning ideas have been studied for a long time. In history, you can find several sayings of Plato, Confucius, Socrates, Aristotle, as well as the Bible and the Koran, which linked lifelong learning with the development of civilization, and the ability to fulfill desires and realize human abilities [1].

A special place in lifelong learning today is occupied by distance education, which is most often conducted through the Internet. E-learning has become particularly relevant during quarantine, as it has become the only way to obtain an education in self-isolation. We believe that after 2020, the importance of e-learning will be overestimated and it will become part of everyone’s general education. The attitude to such education in the labor market will also change. People who are able to organize themselves for the e-learning process are needed in any business, especially because they are focused on new technologies. E-learning is becoming a key part of self-education, which allows everyone to get a better level of knowledge, better skills, more interesting work, and, as a result, build innovative products and businesses. People who engage in lifelong self-education can pass on their knowledge in decades, as it will always be relevant.

The purpose of this study is to determine the importance of lifelong e-learning in building a qualitatively new labor market and the economy as well.

2. LITERATURE REVIEW

The idea of lifelong learning was first implemented in the 13th and 14th centuries in Europe. Its practice was based on craft schools, which were opened at workshops engaged in various jobs. In particular, in France, the origin of the idea of lifelong learning is associated with the teachings of the philosopher and educator [2], who believed that the development of the mind forms the basis of historical progress. The project program of public education, which was proposed by the same philosopher, was based on the idea of lifelong learning. Its main principles were universality, comprehensiveness, and, of course, freedom of choice.

In the work “Society and Education” B. Simon notes that in the 19th century the boards of technical education tried to create a system of lifelong learning [2]. In this format, each subsequent stage of education occurred after the previous one. In the work “Realists” D. Pisarev emphasized the importance of extracurricular education [3]. He believed that schools are important in the studying process [3], but it is even more important to study after school. In this case, the second education in its consequences and impact on the person is much more important than the first one [3].

But there is also the opposite approach to understanding the need and importance of lifelong learning. In particular, [4] believes that people don’t need to be taught such a complex program for so long. There is a certain amount of time for education, which is enough to get a job. If
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there are problems in the labor market, and a person will need to find a new job, for this reason he can get the appropriate education for some time, and without problems to start a new job.

The concept of e-education appeared not so long ago. In practice, Canada’s first online course instructor in 2008, J. Siemens, called it the “shadow economy of education” E-learning, in his opinion, operates in parallel with formal [5].

Ukrainian scientists [6, 7] are also skeptical about e-learning. They believe that the acquisition of knowledge from the Web can hardly be considered as an alternative to full-fledged higher education, it is only a push, a direction in development. In this situation, publicly available long-term online university programs have a chance to significantly displace low-quality commercial courses from the market of educational services. It can be argued that the scientific community does not trust educational services over the Internet.

3. RESULTS AND DISCUSSION

The study of the importance of lifelong e-learning will begin with the definition of lifelong learning. The problem of lifelong learning is studied by specialists in various fields of humanities. There is no definite definition of lifelong learning. Each author interprets this concept in his own way and makes sense of it, in accordance with the context of speech.

Analyzing the statements of scientists and researchers, we can identify 4 approaches to understanding the concept of lifelong learning:

- professional education of adults, which allows to compensate the lack of knowledge and skills not acquired during training. This is a kind of compensatory, additional education;
- to learn throughout life as a life process;
- pedagogical organizations and formal structures, the main function of which is to improve skills or provide distance learning services;
- the desire for constant knowledge of themselves and the world around them, the value of education throughout life. The purpose of lifelong learning in this approach is comprehensive development, including human self-development, its biological, social and spiritual values. It is a kind of cultural creation of man.

Based on the above concepts, lifelong learning is a process of education that is obtained voluntarily on their own initiative through e-courses in various fields. People choose e-learning for different reasons. According to statistics, online learning tools are used mainly by students, who can’t get knowledge in universities or private educational courses for various reasons. About 21% of all online courses users receive regular training to get some needed knowledge. Another 21% attend online courses at the request of the employer. Only 8% of users use the opportunity to get knowledge from the university or organization with a high reputation (Figure 1).

Thus, we can conclude that the main advantages of online courses over traditional education are:

- the cost of online education is significantly lower than the cost of university education;
- the ability to obtain specialized knowledge as needed;
- the opportunity to improve the professional level;
- raising awareness.
In 2020, the statistics on the reason for e-learning have completely changed in terms of self-isolation and quarantine. The vast majority of students were forced to use online learning platforms due to the lack of alternative ways of getting knowledge. But, analysts and economists have different perceptions of the feasibility of e-learning. Despite the fact that almost every student in the world in 2020 switched to distance learning, e-learning in scientific circles is perceived as ancillary, it can not be basic. In turn, students believe that online education is better than university. According to a survey in [9], 52% of graduates believe that e-learning is better than classical education, while 38% believe that its level is approximately the same. Undergraduates have a slightly different opinion, 50% of them believe that there is no difference between classical learning and e-learning (Figure 2).

![Figure 1](image1.png)

**Figure 1** Main reasons for e-learning choice in 2019, % [8]

Isolated and have no chance to study in the classroom. If students have the right technology and access to the Internet, they can learn more effectively in a number of ways:

- research shows that students can retain 25-60% more information during online learning compared with the classroom. This is due to the students can better assimilate the information and learn much more faster;

- students learn in their familiar environment, that's why they are more relaxed, can going back to the unclear material, and re-read, re-listen it.

Nevertheless, depending on different age groups, the e-learning is more or less effective. As for small children, they more need classical classrooms because of a lack of concentration on new material. Mature students have learning skills in different environments, so they can easier acquire new information.

In article [10] believes that the accession of leading universities to free education programs will finally put an end to the question of how serious basic education is. At the same time, practice shows that in the near future, there will be no area, that cannot be studied through the
Internet. Medicine is no exception, and online courses are only gaining momentum. In 5 years, the number of students taking various medical courses has increased by 3%. At the same time, the IT sector is losing its popularity every year, as well as business courses (Figure 3).

According to [11], the idea of contrasting the two educational models is meaningless. He believes that the future of education is not in the confrontation of the old and the new methods, but in their fundamentally different combination. It is predicted that a mixed learning format will become more popular. For example, when students take a Stanford course and take counseling and take exams at university [11]

There are many opportunities for alternative learning, from master classes to online courses at various universities around the world. The person takes a few courses, goes to work, and then returns to school. Universities will be forced to follow the same path, to provide the opportunity to study in fragments. The education process will be flexible and modular. It will be divided into separate courses, which can be taken at a convenient time, combined with work.

Many universities around the world have recognized distance learning as a strategy for gradual development and use educational platforms as a means of disseminating their own content. According to [9], International Adviser on Education and Innovation, IOC is a combination of video lectures, interactive assignments and forums to discuss learning materials. Their feature is to provide free and unpaid access to the best university-level courses to anyone, regardless of place of residence, age or wealth. The introduction of such a format is a demonstration of the concept of lifelong learning [9].

E-learning is widely used in the labor market as a kind of employee training. Managers that practice e-learning confirm that traditional classroom training has become ineffective. Employees find it boring, they don't like classical methods of education, consequently, they don't learn as they should. Modern people want not only to listen and read. They prefer including video, podcasts, games and expert instructions into the learning process. It is important that lectures can be listened to at any time. Take into account that most people spend a lot of time driving their cars, so e-learning can be effectively used to improve professional
skills. Internet has made a revolutionary contribution to the development of learning practices. That's why e-learning has many benefits, namely, it is cheaper, faster and more effective than personal training.

When it comes to e-learning, there is a set of benefits for both employees and employers:

- the convenience factor is crucial when choosing e-learning. Employers can monitor the learning process at any time convenient to them, while employees can also take advantage of every minute of waiting, moving or their free time;
- employees can divide training into stages. There is a proven practice of Harvard University about micro-lectures that last only 15-20 minutes. Each of the lectures is complete, so after spending a small amount of time learning, employees can gain some knowledge and move on to the next lecture when it is convenient for them;
- e-learning is flexible for every student. Some people can process and perceive information faster, while others need to repeat the lecture or listen to it several times. In any case, all students are treated as equal in the classroom and this reduces the effectiveness of learning. Instead, e-learning allows studying in employees' own tempo.

1. E-learning is available from any device. It can be a personal computer for people studying at their workplace or mobile phones for those who work while driving or waiting in traffic jams. The only thing that matters is the availability of the Internet, because all programs run online.

2. E-learning is developed in a user-friendly format which is interesting and intuitively understandable. It is accessible from a mobile phone and this is the most important fact about it. According to the researches, 77% of young people pick up a mobile phone as soon as they feel bored or free.

3. Online learning allows employees to master complex information. Traditional teaching tools are not available for everyone to understand. Frequently, employees cannot understand a complex article or specific terminology. In order to train each employee, accessible and simple video podcasts and explanations are created, which provide a more profound understanding of the intricacies of the issue.

4. Quite often you can find e-learning in the form of games. Games are created not only for children but also for adults. They allow modifying the environment and work out the correct sequence of actions that are required to solve certain tasks. Games make the learning process fun and interesting, employees enthusiastically take such courses, which in turn has a positive impact on their performance.

5. E-learning allows students to save and record every received piece of information. People can return to the learned materials at any time, review and repeat them. Studies show that if learning results are stored and people can return to them without any restriction, such knowledge is 60% better remembered for a long period of time [12].

E-learning is needed not only to improve the performance of corporations. Employees need it as well. Many people choose a profession not only for the sake of a salary but also due to the opportunities to develop and learn. The availability of free training also creates advantages when choosing the company to which employees plan to submit their CV.

Of course, the peculiarity of lifelong e-learning is a possibility to learn only through e-learning and digital course delivery platforms. While not all e-learning opportunities are created equal, here are six compelling statistics that prove its efficiency.

1. Over 75% of the US companies implemented e-learning in their management. The indicator grows every year, as online training on specialized platforms allows
companies to accelerate employee training and achieve the desired changes in the company faster.

2. Complex software packages allow increasing the income level per 1 employee by 218%. Deloitte, a survey and information gathering company, believes it is sufficient for employees to study only 1% of their working time, i.e. 40 minutes per week.

3. Research shows that if companies spend $1,500 per employee on e-learning, their profits will increase by 24%. Given this pattern, we can build an economic model of the dependence of training costs on profits. That’s why e-learning is one of the most convenient and simple factors of economic growth not only for businesses but for the economy as well.

4. Every dollar spent on e-learning per employee pays back in the form of a 30% increase in productivity. This is due to the fact that employees can test the acquired knowledge in practice immediately. New knowledge allows companies to introduce new, more advanced technological processes.

5. 72% of organizations believe that e-learning provides them with a solid competitive advantage.

6. 67% of corporations in the world use mobile training for their employees. This method of training is more accessible to employees and the training process brings not only pleasure but also good productivity. This leads to the conclusion that in 2020, mobile learning will increase the market for e-learning via mobile devices to $37.6 billion [13].

There is an interesting statistic for hiring employees who get online education. For example, designers are mostly in-demand as well as teachers, coaches, and consultants. Despite being the most studied, business start-ups reluctantly hire employees with e-learning. Instead, the most popular product management among IT companies is project management (Figure 4).

![Figure 4. Distribution e-learners by job [14]](image-url)
Lifelong learning is becoming a trend in the labor market. In developed countries, the labor market is being formed by people that acquire knowledge through e-learning. This labor market differs from the market formed by the specialists with higher education.

The main characteristic of the labor market with e-education is the possibility of getting a job with a slightly lower salary. It can be argued that this form of education completely reshapes the labor market, which has a positive effect on the overall dynamics of global unemployment. Every year the unemployment rate decreases, which can be attributed to the fact that the larger number of employees enters the labor market meeting the demands of employers (Figure 5).

E-learning allows students to get minimum amount of knowledge, which will be enough to perform a simple job. As for the e-learning of employees who already have a job, they do it to gain more skills. In this case, it’s very effective to use micro-learning services, which are 17% more efficient than conventional ones. The essence of micro-learning services is that for a single lesson a person can gain certain knowledge that can already be used to perform a job (Figure 6).

It is concluded that e-learning sets trends in the labor market, but of course, it remains just the basis for further improving employees' professional qualities.

Figure 5 Global unemployment rate, % [9]

<table>
<thead>
<tr>
<th>Year</th>
<th>Unemployment Rate (%)</th>
</tr>
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<tbody>
<tr>
<td>2016</td>
<td>5.22</td>
</tr>
<tr>
<td>2017</td>
<td>5.05</td>
</tr>
<tr>
<td>2018</td>
<td>4.95</td>
</tr>
<tr>
<td>2019</td>
<td>4.94</td>
</tr>
<tr>
<td>2020*</td>
<td>4.80</td>
</tr>
<tr>
<td>2021*</td>
<td>4.71</td>
</tr>
</tbody>
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Figure 6 The essence of e-micro-learning [15]
4. CONCLUSION
Lifelong learning is becoming the norm for modern society, which constantly tries to keep pace with the demands of the labor market. Nowadays, it can be argued that about 20% of people involved in e-learning study at the request of the employer. However, the rest of the people are the ones who choose lifelong learning as a way of life and self-development, since only e-learning allows to get the relevant education.

Such people build a new society that accepts new information on a regular basis and is ready for various challenges. Researches show that in developed countries, corporations choose e-learning instead of retraining. If you spend about $1,500 per employee on courses, the company's profitability will increase by 24%. At the same time, if 1% of an employee's working time is allocated for training, the total level of income per employee will increase by 218%. It has already been proven that those companies that use self-trained staff are more competitive. As for the areas of knowledge use, they are increasing every year and today even doctors take e-courses. Young people with e-education are forming a separate labor market unlike people who do not have enough experience to manage or deal with risks but can do a simple work. Having passed e-courses, the future specialist has significantly more employment prospects. Despite the fact the supporters of traditional education are skeptical of e-courses, students, in turn, appreciate their advantages. This is especially true of training using micro-courses, which allow to get effective and practical information for 1 lesson that can be used in work. In conditions of quarantine, when almost every student has experienced e-education, we can say this way of gaining knowledge will become more common. This will lead to the emergence of new professionals in the market who are ready for self-studying representing the main impetus for the development of both businesses and the economy as a whole.

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