

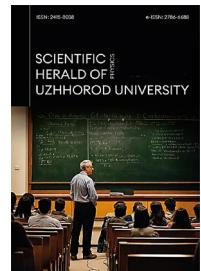
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## Philosophy of education in the context of the Kazakh secondary education space

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## Abstract

**Relevance.** In today's fast-paced and ever-evolving world, it is crucial to equip students with the skills and knowledge they will need to navigate and succeed in the future. This preparation must begin during their school years.

**Purpose.** The purpose of this scientific paper is to determine the philosophy of secondary education in Kazakhstan by revealing the general trends in the philosophy of the modern world as well as by considering certain aspects.

**Methodology.** The following series of methods of the theoretical block was used during the study: analysis, synthesis, concretization and generalization of information.

**Results.** Based on an examination of the labor market in Kazakhstan and a review of global trends, it has been ascertained that professions requiring mental labor will hold significance in the future. Therefore, fostering students' creative thinking abilities is imperative. Communication and teamwork skills are one of the main skills that a modern worker should have, so it is necessary to develop them from school age. An important feature of modern teenagers, which should be taken into account in the learning process, is their desire for independence, as well as the significant role of social networks in their lives. It is also worth noting that despite the fact that distance education is crucial today, Kazakhstan faces significant problems with Internet coverage in remote areas and poor material provision of schools.

**Conclusions.** The philosophy of secondary education in the 21st century has evolved significantly, emphasizing modern philosophical trends such as globalization and multiculturalism. Today's education focuses on developing universal skills, particularly soft skills, like teamwork and creative problem-solving. The results of this article will be useful for scientific

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teachers who develop the curriculum and are responsible for the introduction of new methods of conducting the educational process.

**Keywords:** globalization; labor market; generation Z; soft skills; remote education.

## **Introduction**

The issue of education is quite relevant today, because, given that the modern world is rapidly transforming, it is important to prepare the younger generation for the challenges of the future. The research problem lies in the fact that the philosophy of education is a broad topic. Therefore, it is necessary to consider many different aspects, in particular, the philosophy of the modern world, the psychological characteristics of secondary school students, as well as the impact of technology. In addition, it is necessary to consider them in a complex in order to draw general conclusions. Also, consideration of modern secondary education in Kazakhstan is impossible without paying attention to general global trends.

The problem of studying education issues has existed since the very beginning of pedagogy. In the course of the development of this science, periodization of education was carried out, as a result of which such a concept as secondary education arose. The study of the issue of secondary education has never lost its relevance, since the curriculum depends on world trends, and, in addition, different generations of adolescents have different psychological characteristics, and therefore this topic requires new research. Now the issue of secondary education was addressed by a large number of scientists who, in their papers, considered various aspects of this issue. However, it is important to understand that there is a small number of papers that describe the general trends in the development of secondary education in Kazakhstan [1; 2].

In the course of writing this scientific paper, a number of other studies related to various fields of activities were analyzed. One of the sources was the book of the modern philosopher U.N. Harari "21 Lessons for the 21st Century" [3]. In this book, the author describes the philosophy of the modern world, due to which one can understand the general trends in the development of the world in the 21st century. The author pays much attention to the study of the global labor market and the impact of technology on it, due to which enables determining the most necessary skills that people should have in the future. The article by I.B. Shmigirilova [1] is important for this research, since in her scientific paper, the author fully describes the main issues of education in Kazakhstan at the present stage.

Analysis of soft skills constituted one of the main parts of this research. Their analysis was made possible by considering the paper of Sh. Foster [4], who in his article provided a general description of soft skills, as well as stressed on their importance in the modern world. The article also described the importance of learning for teamwork. In his work, J. Reid [5] explored a number of methods of teamwork in the course of the educational process. These methods are characterized by their diversity and the fact that the use of each allows the development of different types of skills and abilities. In his study, the author P. Pečiuliauskienė [6] analyzed the psychological characteristics of modern adolescents and their impact on the educational process. The author paid special attention

to the fact that representatives of the Generation Z strive for self-development and self-improvement. The study also examined the impact of technology on their activities.

The purpose of this research is to determine the general trends in the philosophy of modern secondary education in Kazakhstan. At that, it was necessary to determine the key aspects that determine the directions and goals of modern secondary education. The task of the article was to determine the general philosophical trends of the modern world; study of topical problems of secondary education in Kazakhstan; analyze the labor market in Kazakhstan in order to determine the most relevant skills that an employee should have in the future; determine the psychological characteristics of modern adolescents; define the role and issues of remote learning format.

## **Materials and Methods**

At the first stage of this scientific research, information was selected. The topic of modern secondary education philosophy is multifaceted and includes a large number of scientific aspects. Given this, it was necessary to collect information from the areas of pedagogy, psychology, philosophy, sociology, as well as statistical data. In addition, it was necessary to take into account the fact that the article describes information relating to general global development trends, as well as materials that describe the situation of secondary education in Kazakhstan. The information analysis method was also used at this stage. Considering that the article contains a large number of elements from different scientific fields, it was necessary to analyze each source and select only essential and relevant information within the context of this research.

At the second stage of the research, the method of information synthesis was used. The consideration of such a broad topic requires not only an accurate analysis of individual aspects, but also its combination in the whole work. Thus, professional and non-professional skills that are relevant at the global level in general were described in the course of the analysis of the modern labor market in Kazakhstan, as a result of which certain conclusions were reached. In addition, during the analysis of the meaning and ways of learning soft skills, it was determined that this type of skills is important in the modern world. Also, the study of specific examples of learning the subject, during which students developed these skills, made it possible to expand the idea of the possibility of conducting the educational process. Another example of using the information synthesis method is the consideration of various aspects of the psychological characteristics of modern adolescents, which it enabled determining the general aspects of mental and behavioral activities.

The concretization method was used at the third stage of writing this paper. In the course of the paper, a large number of topics were analyzed, which are quite broad and deep, so it was necessary to concretize attention to certain details that are important within the context of the research. In particular, the description of the impact of technology and robotization of production is a broad topic that

includes a large number of aspects. However, using the concretization method, it was possible to focus on the impact these processes have on the labor market, i.e., the most significant aspects for this research were identified. The same method was used in the study of methods for the development of teamwork during the educational process. To create a table, it was necessary to highlight the most important elements of each of the analyzed approaches in order to focus on the very essence and peculiarity of each of these methods of conducting the educational process.

At the fourth stage of the research, the generalization method was used. This stage of writing the article was the final one, so it is characterized by summing up the general results and conclusions. With this in mind, the results of the analysis of all the structural elements of this scientific paper were summed up and general conclusions were made regarding the topic of this article.

## Results

As of 2022, the Kazakh education system in secondary schools is experiencing certain issues that need to be considered within the context of this research. First of all, it should be said that all schools in Kazakhstan can be divided into rural and urban. This is important, since many rural schools have a number of problems that are not relevant for urban ones. In particular, these problems include the small number of students and the lack of proper infrastructure, which, in particular, manifests itself in poor Internet coverage. Internet coverage is an important factor within the context of the modern educational process, since due to the coronavirus pandemic, most schools in the world have switched to remote learning.

As for the general problems of secondary education in Kazakhstan, one can single out a shortage of staff, since today the shortage of teachers in schools can be observed, as well as the fact that many young graduates of pedagogical universities do not plan to continue working in this area. In addition, it is necessary to pay attention to the lack of equipment in most schools. Another pressing issue to some extent is an outdated teaching program. In particular, this problem lies in the fact that a number of peculiarities of the modern world are not taken into account during teaching, which will be discussed below [1].

Speaking of modern times, it is necessary to understand the main trends that are the determining factor of activities in the modern world. The first and main peculiarity of modernity is globalization. This is a process of strengthening international cooperation in many areas of life, such as science, economics, politics, etc. The second peculiarity is closely related to the previous one and lies in strengthening intercultural ties in the modern world. Thus, tolerance for all peoples is an important feature that a modern person should have [3]. Another peculiarity is the impact of technology, since digital technologies are rapidly developing in the 21st century and will increase their impact on human activities in the future. In particular, this applies to the professional field of activities. Already today, in many developed countries, one can observe how replace humans in their job positions, the essence of which is to perform certain mechanical labor [7].

Thus, it can be noted that attention in the modern world should be focused on the development of global

cooperation. In addition, it is necessary to understand that a person cannot perform mechanical labor better than work, and therefore, emphasis should be placed on creative and intellectual activities. Given this, it must be said that workers in the future must possess certain universal skills that everyone should have.

Referring to studies, which describe the modern labor market of Kazakhstan, one can find out that the most relevant professions today are programmer, architect, chemist, biotechnologist, logistician, engineer [8]. This allows us to conclude that, as of now, professions that do not require hard physical labor are relevant, but there is a demand for specialists who perform work involving the solving of complex intellectual problems. It is also worth noting that due to robotization, the labor market in the future will be quite volatile. It is impossible to accurately predict in which particular vacancies robots will be able to replace a person. In this regard, workers should be prepared for the fact that they can lose their jobs at any time.

Therefore, in educational activities, emphasis should be made on the development of universal abilities and skills. Skills related directly to a specific work activity are common for society. For example, a locksmith must be able to process metal on a lathe, a driver must be able to operate a vehicle, etc. However, in the modern world, two types of skills are defined. The first type, which was mentioned above, is "hard skills". The second type is called "soft skills", which are characterized by communication interaction between people, teamwork, critical thinking and the ability to find solutions in many extreme and unusual situations. Soft skills are characterized by their non-specialization and over-professionalism, i.e., they can be used in the activities of representatives of various professions [4]. It is important to note that in the future, the factor of a person's possession of these skills will become even more significant when applying for a job.

The article by Y. Rahmavati [9] described the approach of how students in chemistry lessons received not only highly specialized knowledge, but also developed soft skills. The topic that the students being taught was the study of polymers and plastics in a broad sense. Since these materials are quite common in the modern world, and almost all people have come across them, the students were given the task to explore the role of polymers in everyday life for themselves. Thus, each was provided with a research log and a list of various tasks. In particular, one of them was interviewing, during which the children questioned their parents on this topic, and in addition to this, there were various other tasks. As you can see, in the course of organizing such work, not only the content of the study was important, but the methods of this work, during which the students acquired various kinds of skills that they would need in any field of activities.

Another example of a modern approach to learning was the study by F. Gratani [10], which described the acquisition of various skills by children in the course of studying robotics. The most important element of this research was the visual presentation of information. This is an important element of the modern educational space, since students, especially those in elementary and secondary schools, absorb information much easier and

more efficiently if the level of its visual presentation is appropriate. In addition, the study of robotics allows not only the study of certain highly specialized skills in working with technology, but also allows exploring important issues of society, in particular the problem of climate pollution and renewable sources. As the authors note, in the course of such a study, it was found that students were able not only to better absorb the necessary thematic information, but also to develop communication and teamwork skills. In addition, they managed to develop divergent and creative thinking.

Given the above material, it can be noted that the development of soft skills can be integrated into the study

of certain subjects and courses. In addition, this type of skill is quite important, so it is important to develop them in students as early as possible. The development of teamwork skills among secondary school students was studied by J. Reid [5], during which he managed to find out that effective methods in the context of such training include brainstorming, round table, role-playing games, and seminar. These methods are important enough for modern education, so it is necessary to consider them in more detail. These methods for developing teamwork are presented in Table 1.

**Table 1.** Description of teamwork methods

| Method name        | Skills that can be acquired  | Peculiarities of applying the methods   |
|--------------------|--|---|
| Brainstorm         | Creative thinking; ability to discard all that is unnecessary; critical thinking.                        | This method will be effective only if there is an unusual problem that does not have universal solutions, so there is a need to create them.  |
| Round table        | Ability to lead discussions; communication skills.   | This method cannot always be used, since the round table assumes that students have a certain amount of knowledge, due to which they can discuss their developments.                                      |
| Role-playing games | Ability to adapt to different circumstances (roles); ability to look at a problem from different angles. | This method is quite specific, because role-playing games can only be used in the case of studying a problematic issue, during which it is possible to simulate a certain situation and distribute roles. |
| Seminar            | Ability to defend one's own opinion; oratorical skills.  | This method has a fairly wide field of application due to the fact that all students will always discuss the same questions together, but this method does not require special conditions.                |

Source: [5]

Analyzing the psychological characteristics of secondary school students, it is important to note that this particular period of study falls on that period of a person's life, which is called adolescence. Communication with peers is the leading activity of this psychological stage of human development. During this period, the physical and intellectual qualities of the child undergo serious changes, which is manifested in the rapid development and maturation. Modern research argues that the growing up of adolescents in the present has certain characteristics, in particular those associated with gender differences. Thus, independence from parents, material success, development of creativity and inner peace are more attractive for guys. At the same time, girls are more typical of activities, which they enjoy, as well as the mixing of different spheres of life [11].

The issue of communication and social interaction of adolescents is closely related to the influence of technology. First of all, we are talking about the development of social networks. Teenagers are active users of various instant messengers and other digital applications. In the study by B. Adhikari [12], during a survey of adolescents, the influence of social networks on their lives was described. Thus, it was possible to determine that each teenager uses more than two applications and spends most of their free time using them. The issue of Internet addiction was also considered, the analysis of which enabled determining that the development of adolescent dependence on social networks is associated with the level of self-regulation and self-discipline of a child.

It is also important to understand that today's children are representatives of the "Generation Z" or "zoomers". This generation is characterized by certain features that affect the educational process. "Zoomers" are characterized primarily by the active use of digital technologies, which are an integral part of their lives. In addition, it is important for the representatives of the "Generation Z" to strive for self-actualization in any activity, which involves recognizing the results of their work among their peers. The last element is strongly associated with the factor of communication, which also play an important role in the activities of "zoomers" [13].

Given this, it can be said that modern teenagers have a number of psychological characteristics, in particular, a tendency to independence and spending free time on social networks, as well as the requirement to recognize the results of their activities. It is important to understand that adolescents can often use various forms of protest, so limiting them in certain aspects may not always be effective. One should be aware of certain elements of their behavior and value orientations, and carry out educational and educational activities on the basis of this. For example, realizing that young people tend to be independent in their actions, they should be given more powers. In particular, giving students the freedom to self-organize certain events, such as festivities, can be an effective method. It should also be understood that social networks are an integral part of the life of modern high school students, so limiting the use of these applications can hardly give positive results. The use of social networks in the educational process, for

example, maintaining class pages, can be quite an effective tool.

Speaking of the impact of technology on the modern world, including in the field of education, it should be mentioned the remote learning format. The coronavirus pandemic has become a key event in modern history as almost every country in the world has implemented lockdown to prevent the spread of the disease. Given this, educational institutions had to adapt to new conditions, as a result of which a remote learning format was introduced. This type of knowledge acquisition is quite debatable. However, according to researcher Ph. Nhan [14], over a certain period of time, students get used to this format of learning and are happy to obtain new knowledge. It is important to understand that remote education today is an important way to obtain knowledge, and it will also play an important role in the future. For example, it will be easier for residents of small and remote villages to introduce a remote learning format than to develop the entire school infrastructure. Therefore, it is important for the authorities to provide high-quality Internet coverage throughout the country, and teachers should study in more detail the methods of conducting remote learning in order to improve its effectiveness.

## Discussion

The topic of research on the methods and goals of secondary education in the future is quite relevant and debatable. In particular, one can find different views on these issues among scientists from Kazakhstan. In his article, researcher O. Umerkhanovich [15] argues that a significant drawback of the current trend of digitalization of public life is the degradation of the moral values of children. This point of view is argued by the fact that the development of social networks and the spread of the Internet allows children to find a large amount of immoral content. However, this opinion is erroneous. Of course, teenagers can easily use a variety of content that will affect their consciousness. However, it should be understood that the use of modern technologies by teachers can help to carry out educational activities, in particular, possible methods have been described in this article. It should also be taken into account that the ideas of globalization and tolerance dominate in the modern world, which the teachers of older generations may consider unacceptable. Therefore, it should be understood that social networks and digital technologies are not destructive in terms of teaching children, but one should be able to correctly use these tools in educational activities [16-18].

In his article, I. Márquez [19] investigated the way social networks affect the educational process. The author argues that social networks have a rather negative feature, which is that students, creating their own image on the Internet, actively defend it, even if they understand that their position is not entirely correct. Thus, the author argues that the role of social media should be reduced in the lives of high school students. However, as already discussed in these articles, social networks are an integral part of the life of adolescents. In addition, given the psychological characteristics of students of this age, any attempt to limit adolescents from their favorite activity will entail a very strong reaction. Thus, educational sessions

should be introduced, during which the topic of safe use of the Internet will be raised.

The use of technology in the educational process was studied by the researcher A. Nambaev [2]. He focused on the digitalization of literature lessons. The experience of using electronic books during classes in schools in Almaty was described. As a result, it was possible to determine that this approach to learning is quite effective, since students get the opportunity to read books comfortably without having to burden themselves with heavy textbooks and carrying them to school. In addition, it was pointed out that with the use of such technologies, teachers can write comments in the text that students can see and learn more about the material. In general, this method of obtaining knowledge can become an effective part of remote education and can be applied not only in literature lessons. However, it must be understood that providing all students with e-books is a rather expensive process.

The author L. Messerschmidt [20] presented his thoughts on the working conditions of the future. In his article, the researcher argues that the robotization of manufacturing should not be feared, since the legislation protects citizens in the context of labor rights. However, it should be understood that modern robotics is developing rapidly and new automatic machines are being created that can perform mechanical labor with high efficiency. In addition, private entrepreneurs will greatly benefit from the purchase of robots that will work around the clock and will not require wages or days off, unlike people. Due to this, even today one can observe a strong influence of robotization on the global labor market [1; 21; 22]. In addition, this article examined the features of the modern labor market in Kazakhstan, on the basis of which it can be said that professions related to intellectual activities are already the most relevant.

The issue of developing and teaching soft skills is quite relevant in the modern world. In general, this type of skills is an integral part of activities in any area of life, and teaching these skills should be an obligatory part of the educational process in secondary schools. However, the development of communication skills is experiencing significant issues in terms of teaching children with special needs [23; 24]. In particular, S. Herrick [25] in his scientific article investigated the development of soft skills in children with autism. This is a serious disease that appears in children from birth and greatly affects various areas of life. People with autism experience serious problems in the context of communicating with other people, due to which they have difficulties in learning, and subsequently in employment. The author argues that a necessary element of the educational process of children with autism is learning in small groups, where they will feel more comfortable and will be able to develop communication skills.

Researcher Sh. Goli [26] studied the issues of education of children suffering from regular parental abuse. The author argues that the upbringing of such children is extremely difficult, since they are sensitive to many elements of educational work and cannot communicate normally with their peers. According to the researcher, the education of such children requires serious work with school psychologists. In addition, teachers should be as careful as possible when working with such children. It

should be understood that educational work with children with congenital psychological characteristics or with acquired mental problems is very difficult, but no less important. They must learn all the skills that are taught to ordinary students, but it should be understood that mastering these skills is quite problematic [27-29]. Therefore, scientists should study this topic in more detail and find effective methods of educational work.

The issue of remote education has been quite popular and relevant since the introduction of a total lockdown in many countries of the world in 2020. Thus, there are researchers who have views on the effectiveness of online learning, and those who strongly criticize the remote form of learning. In particular, one of these researchers is Z. Zou [30], who claims that remote education has a number of drawbacks, in particular, the lack of communication, a decrease in the level of attention, as well as the inefficiency of studying the material. Given this, the author argues that remote learning cannot have a place in the future. However, this opinion is not entirely true, since technology has a significant impact on modern life and on the educational process. Given this, the role of remote learning should not be excluded. The communication interaction of students is possible through the use of social networks, and is very developed today. And as Ph. Nhan [14] states in his research, the remote learning format is quite effective in the context of gaining knowledge, but it takes some time for students to adapt to it.

F. Tordo [31] raised an important issue of social interaction between representatives of the "Generation Z" in his article. The author argues that with the spread of remote learning, the phenomenon of bullying on the Internet or the so-called cyberbullying has become popular. This problem is quite difficult for educators, since the fight against this kind of bullying is quite difficult. It is important to conduct educational conversations about moral treatment on the Internet. To this opinion of the author, it should be added that teachers need to talk with the parents of those children who are actively harassing others on the Internet, since it is the parents who have the greatest influence on the behavior of their children. In general, it can be said that the philosophy of modern secondary school education in Kazakhstan is quite complex and multifaceted. It is important to take into account not only the traditional features of the educational process in Kazakhstan, but also modern global challenges.

## Conclusions

As a result of the research, it was determined that the philosophy of secondary school education in the 21st century is quite different from that of previous eras. The

main feature of the philosophy of education is following modern philosophical trends and ideas. The ideas of globalization and multiculturalism are leading in the modern world and should become an integral part of the moral education of students. In the 21st century, it is important for a person to master general and universal skills, so it is necessary to focus on the development of soft skills in the curriculum. People need to be able to work in a team and have a creative approach to solving various problems, so the article described teaching methods, the use of which allows developing the mentioned aspects. These methods include brainstorming, role playing, round table and workshop. Modern teenagers have unique psychological characteristics, since they are representatives of the "Generation Z", so it is necessary to take them into account in the educational process. Social networks should be integrated into the educational process, as they are an integral part of the life of modern secondary school students. Remote education has become an important way to gain knowledge and will continue to be used in the future, due to which attention should be paid to the prospects for the development of such a format of education.

In addition, this article directly examined the educational challenges of the future in Kazakhstan, due to which it was possible to find out that professions that involve the performance of mental and creative labor, rather than mechanical labor, are the most relevant in the labor market. This factor should be taken into account when developing curricula. The problem of material support of schools is significant, which is why certain regions have a problem in the provision of educational services. The lack of high-quality Internet coverage in certain regions does not allow all students to study online. It is necessary to draw the attention of the government to this problem. In general, it should be said that the essence of the philosophy of modern secondary education is the development of a person who will be able to live in the era of globalization, possessing a number of universal skills. Further research requires studying the topic of remote education, since this learning format has a number of peculiarities, so it is necessary to create unique teaching methods for this format. In addition, it is important to conduct descriptive research on the use of certain teaching methods in order to find the most effective of them.

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## Conflict of Interest

The authors declare no conflict of interests.

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## **Філософія освіти в контексті казахського простору середньої освіти**

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### **Анотація**

**Актуальність.** У сучасному швидкоплинному світі, який постійно розвивається, дуже важливо озброїти студентів навичками та знаннями, які їм знадобляться, щоб орієнтуватися та досягати успіху в майбутньому. Ця підготовка повинна починатися ще в шкільні роки.

**Мета.** Метою даної наукової роботи є визначення філософії середньої освіти в Казахстані шляхом виявлення загальних тенденцій у філософії сучасного світу, а також шляхом розгляду її окремих аспектів.

**Методологія.** Під час дослідження використовувався наступний ряд методів теоретичного блоку: аналіз, синтез, конкретизація та узагальнення інформації.

**Результати.** На основі дослідження ринку праці в Казахстані та огляду світових тенденцій встановлено, що професії, що вимагають розумової праці, будуть мати значущість у майбутньому. Тому вкрай необхідно розвивати творчі здібності учнів. Комунікабельність і навички роботи в команді є одними з основних навичок, якими повинен володіти сучасний працівник, тому розвивати їх необхідно зі шкільного віку. Важливою особливістю сучасних підлітків, яку варто враховувати в процесі навчання, є прагнення до самостійності, а також значна роль соціальних мереж у їхньому житті. Варто також зауважити, що попри те, що сьогодні дистанційна освіта має вирішальне значення, Казахстан стикається зі значними проблемами з покриттям Інтернетом у віддалених районах і поганим матеріальним забезпеченням шкіл.

**Висновки.** Філософія середньої освіти в 21-му столітті значно еволюціонувала, наголошуючи на сучасних філософських тенденціях, таких як глобалізація та мультикультурізм. Сучасна освіта зосереджена на розвитку універсальних навичок, особливо м'яких навичок, таких як команда робота та творче вирішення проблем. Результати даної статті будуть корисними викладачам-науковцям, які розробляють навчальні програми та відповідають за впровадження нових методик ведення навчального процесу.

**Ключові слова:** глобалізація; ринок праці; покоління Z; м'які навички; дистанційна освіта.