RESEARCH ARTICLES

Updating the content of education through the integration of seven modules

Actualización del contenido de la educación mediante la integración de siete módulos



Master of Pedagogical Sciences, doctoral candidate of socio-pedagogical disciplines, senior lecturer of the Department of Foreign Languages and Translation at Kokshetau University named after Abay Myrzakhmetov

ORCID: https://orcid.org/0000-0003-2184-6382

Lepeshev D

Candidate of Pedagogical Sciences, Professor, Academician of the Academy of Pedagogical Sciences, vice-rector for scientific work and international cooperation of Kokshetau University named after Abay Myrzakhmetov, Kazakhstan.

ORCID: https://orcid.org/0000-0002-9256-1571

Kulambayeva K

Doctor of Pedagogical Sciences, Associate Professor, Professor of socio-pedagogical disciplines of Kokshetau University named after Abay Myrzakhmetov, Kazakhstan

ORCID: https://orcid.org/0000-0002-9356-1856

Dossanova S

Doctor of Pedagogical Sciences, Professor, First Vice President of Kokshetau University named after Abay Myrzakhmetov, Kazakhstan.

ORCID: https://orcid.org/0000-0001-7421-5870

Kukubayeva A

Doctor of Psychological Sciences, Associate Professor of social and pedagogical disciplines at Kokshetau University named after Abay Myrzakhmetov, Kazakhstan ORCID: https://orcid.org/0000-0002-1702-4936

Ivankova N

Candidate of Pedagogical Sciences, Associate Professor, Head of Department of Social and Pedagogical Disciplines of Kokshetau University named after Abay Myrzakhmetov, Kazakhstan.

ORCID: https://orcid.org/0000-0003-0054-4721

Received 09-08-20 **Revised** 10-10-20 **Accepted** 20-12-21 **On line** 01-29-21

*Correspondence Cite as: Ali, R., Lepeshev, D., Kulambayeva, K., Dossanova, S., Kukubayeva, A., Ivankova, N. (2021). Updating the content of education through the integration of seven modules. *Propósitos y Representaciones, 9 (SPE2), e965. Doi: http://dx.doi.org.10.20511.pyr2021.v9nSPE2.965

Summary

The article is devoted to the analysis of modern trends in the field of updating the content of school education of the Republic of Kazakhstan. The introduction of seven educational modules in the content of education will improve the quality of Kazakhstan's education. Finding ways to integrate the seven modules of education makes the study relevant. The author describes the educational modules and their impact on the content of education, focusing on ways to integrate seven modules in a single lesson, changing the content of education under the influence of educational modules.

Keywords: Integration, education modules, learning, education content, secondary education, lesson, student, teacher, school, school subjects.

Resumen

El artículo está dedicado al análisis de las tendencias modernas en el campo de la actualización del contenido de la educación escolar de la República de Kazajstán. La introducción de siete módulos educativos en el contenido de la educación mejorará la calidad de la educación de Kazajstán. Encontrar formas de integrar los siete módulos de educación hace que el estudio sea relevante. El autor describe los módulos educativos y su impacto en el contenido de la educación, enfocándose en formas de integrar siete módulos en una sola lección, cambiando el contenido de la educación bajo la influencia de los módulos educativos.

Palabras clave: Integración, módulos educativos, aprendizaje, contenido educativo, educación secundaria, lección, estudiante, profesor, escuela, materias escolares

Introduction

The relevance of the study is due to the fact that technology and communication have become so firmly embedded in the life of the average person that it affected not only the development of science, but also the requirements for education (1). Modern secondary education shall not just provide basic knowledge on basic school subjects and form students with the necessary skills and abilities within the school curriculum (2). Modern transformations of society, its openness, rapid informatization and dynamism radically change the requirements of the education system. The aim of modern secondary education is to prepare a versatile personality with communicative competence, skills of working with information and communication technologies. It is important to form a new, independent type of thinking in students, to move away from the traditional system of evaluation, to teach students to express their thoughts and defend their position. For this purpose, it is necessary to reform the content of education (3).

For this purpose, 7 educational modules were introduced in Kazakhstan. It is necessary to analyze how their integration affects the change in the content of education and improvement of its quality. The purpose of the study is to analyze the role of psychological support in the development of teacher mobility.

Research objectives are as follows:

- 1. Studying scientific literature on the topic of the study.
- 2. Describing 7 educational modules.
- 3. Analyzing the ways of integration of educational modules in the learning process and their influence on the change of educational content.

The methodological basis of the study are the works of domestic and foreign authors. Foreign authors Adler J.E., Biesta G., Alexander H.A. and Elgin, C.Z. in their works justified the need to reform modern education, the introduction of new teaching methods and changing the content of education. I. Dukarev, Ye.Karavayeva, Ye. Kovtun described the main guidelines for the development of new educational programs. Kazakhstan researchers A.T.Baiturbayeva, T.N.Chumachenko in their research analyzed the priorities of domestic education in the

implementation of the strategy "Kazakhstan-2050". S.D.Mukanova, Sh.Karbayeva, O.I.Mozhayeva, A.V. Dudarchuk described the implementation of educational modules in the learning process, ways of their integration.

Main part of study

In today's world there is a crisis of the existing educational system. Almost all countries in the world are in search of a new actual system of education, which will meet the requirements of modern society. This is due to the fact that the skills and abilities that are formed in school students do not meet the requirements of society (4).

A modern person shall be mobile, active, have good computer skills, think critically, be able to analyze a lot of information, make decisions independently, think creatively, and be tolerant. Modern secondary education does not meet these requirements. That is why it is important to reform the content of education, to work on improving its quality (5).

The main trend of modern Kazakhstan education is a separation from the traditional style of learning, the creation of a new constructive model of education, which will provide independent thinking of students. Today, the system of general education of the country works on the updated content of education. According to the updated content of education as a result of the training students shall develop skills of critical thinking, independent research and indepth analysis of information. Under the old model of education, knowledge was given to students as the truth, and critical thinking about the information obtained was not implied. The new model of teaching implies that the teacher only guides students to obtain knowledge, gives them a direction (6).

This model of education is criticized by society. Many believe that the teacher shall give knowledge, as in the Soviet system of education. There is also a widespread belief that children do not learn new information on their own. These are not entirely correct statements. Today's teenagers get much more information than the older generation in their years. Students point out that they are not interested in learning from the old educational system, they like to work independently, do projects and research papers. They are not interested in just reading a textbook in class and doing exercises. Consequently, it is necessary to change the methods and approaches of education, the content of education (7).

For this purpose, 7 modules of the educational program were developed:

- 1. New approaches in learning and teaching. The essence of this module is the use of modern approaches to learning, separation from traditional methods. For example, dialogue, discussions, round table, methodical and business games, case method and project activities. It is also possible to use new forms of conducting a lesson.
- 2. Teaching critical thinking is aimed at developing students' ability to reason, analyze, draw conclusions, explain, compare, and summarize information. Students learn to solve problems and tasks set during the lesson independently. The teacher shall carefully choose tasks for the whole lesson so that as they are solved students form the skill of critical thinking. At this stage it is also necessary to take into account the indicators of another module: the age peculiarities of students (8).
- 3. Assessment for learning and assessment of learning. Traditional five-point grading system is no longer used in Kazakhstan's education. Today it is recognized as ineffective, its negative impact on formation of students' motivation for learning and their self-esteem has been proved. Instead of expressing an opinion or giving an answer to a question students preferred to keep silent in order not to get a bad mark for a wrong answer. A modern grading system relieves students' anxiety, increases their engagement and self-esteem, and develops the student's personality. In addition to formative assessment, self-assessment and peer evaluation can be used in pairs or groups. This helps students to evaluate their level of mastery of the material objectively. There may also be non-standard assessments, such as stickers, the "thumbs up and thumbs down" system, or verbal comments from the teacher or the students. The main condition is that assessment shall not be stressful for students (9).
- 4. Using ICT in education. Modern education shall include the use of computer technology. It allows making the learning process more modern, visual, dynamic and

interesting. It is possible to use audio and video materials, presentations, create interactive quizzes and interesting tasks, show video lectures, etc. (10).

- 5. Teaching and learning according to the age specifics of the students. In teaching, it is important to take into account the age specifics of students. This can be done by allocating roles in group work, selecting age-appropriate tasks for students.
- 6. Teaching gifted and talented students. The purpose of this module is to involve gifted and talented children in the learning process and to create conditions for the realization of their capabilities. This can be performed by deepening and broadening the tasks, for gifted children the tasks are chosen with increased complexity, allowing in the solution to apply all the knowledge obtained. Gifted students can also be asked to help explain the material to students who are falling behind. This will increase the students' engagement in learning and encourage responsibility in them.
- 7. Management and leadership in learning. In the classroom it is appropriate to create a situation in which students will take the initiative and act as leaders. This requires the use of special strategies for developing leadership skills in students, teaching them to express their opinions and to take the initiative. As a result of the work on leadership skills development students in due course independently distribute roles in group work (11).

The use of the described educational modules affects the change in the content of education. The teacher cannot use outdated material, give all students the same tasks, it is necessary to prepare multi-level exercises that will take into account the degree of preparation of students.

In order to qualitatively update the content of education, it is necessary to introduce into the learning process not separate modules, but to integrate them all into one lesson. It is on the integration of seven educational modules that the concept of modern Kazakhstani effective education is built. Their introduction and integration in each lesson will contribute to updating the content of education (12).

The use of new teaching methods shall be based on taking into account the age characteristics of students, teaching shall be aimed not only at the average student, but take into account the interests of gifted children, promote their development. For this purpose, the teacher shall introduce multilevel tasks, stimulating students to perform simple exercises more quickly. The introduction of ICT will modernize the informational content of the lesson.

We will consider the integration of all seven models on the example of one lesson. For example, a geography lesson in a middle school. In the traditional methodology, the teacher told students the basic information on the topic, often duplicating the textbook material, and then students read the textbook text, took notes, answered questions, and did assignments. The modern geography lesson is built on a different principle.

The teacher gives students a general direction by using new approaches to learning. The teacher does not retell the textbook material, but highlights the main directions of the topic, questions. The study of learning material shall develop critical thinking. For example, the teacher may tell several facts, among which there will be incorrect facts. The students shall find the incorrect facts using the textbook material.

It is important to take into account the age specifics of students. For example, high school students will be uninterested in methods and new teaching approaches for elementary school or teenagers, the middle level will find it difficult to perform tasks oriented to the older school age. It is reasonable to include in the course of the lesson didactic games suitable for students of age. For example, a quiz on a passed topic or devoted to the country being studied.

The use of the computer is mandatory. It is especially interesting when studying the geography of a country or region, when the teacher can show on the screen a three-dimensional model of the state outline on the map, show its attractions, include audio with a speech in the language of the country being studied. Special attention shall be given to students who are retarded or gifted. Retarded students shall have an interest in the class, coping with tasks that will gradually become more difficult. Separate tasks shall be prepared for gifted children. For example, work with a map or geographical puzzle, group work at the computer. A gifted student may be given an anticipatory task to prepare a report or presentation on the topic of the lesson to make a presentation to the class. Such an assignment will also develop leadership skills.

Students who are given individual assignments feel chosen and take responsibility for the task. Leadership skills can be developed by using elements of self-management. For example, the teacher might ask students to divide into groups and assign roles themselves. Another type of leadership development activity could be an assignment where each student has to take an active stance, expressing his or her opinion. For example, a lesson in the form of a discussion or a round table.

The last stage of the lesson is grading. With the traditional grading system, at this point many students feel anxious and discomfort, depressed because they are worried about the grade. The new kind of grading removes these negative effects. You can use reflection as a lesson grading, positive feedback with stickers, or verbal praise. The main thing is to abandon the ball grading system, which is often not objective.

Foreign education has long since abandoned this type of assessment, focusing on students' personal achievements rather than concentrating on the degree of material mastery (13).

Thus, the integration of the seven models of education has completely changed the content of the geography lesson in the modern school, making it more interesting and of higher quality.

Integration of educational modules in domestic education makes it possible to qualitatively change not only the content of the educational process, but also to make it more modern, interesting for students. Today there is a disconnect between education and the development of society. The introduction of new educational content will reduce this gap.

Conclusions

The study has established that the introduction of educational modules in studying improves its quality, develops the personality of students. Due to integration of seven modules, Kazakhstan education has moved to a new level: from teaching theory to formation of an active personality able to analyze information, think critically and creatively. If earlier the education averaged students, today the emphasis is placed on the development of leadership qualities. In general, the integration of educational modules positively affects the quality of Kazakhstani education.

References

Adler, J. E. (2003). Knowledge, Truth, and Learning. A Companion to the Philosophy of Education (ed. R. Curren), Oxford: Blackwell Publishing, 285–304.

Biesta G. (2011). Philosophy, Exposure, and Children: How to Resist the Instrumentalisation of Philosophy in Education. Journal of Philosophy of Education, 45(2), 305–319.

Alexander, H.A. (2006). A View from Somewhere: Explaining the Paradigms of Educational Research. Journal of Philosophy of Education, 40(2), 205–221.

Elgin, C.Z. (2007). Education and the Advancement of Education. A Companion to the Philosophy of Education (ed. R. Curren), Oxford: Blackwell, 417–422

Message of the Head of State Kassym-Zhomart Tokayev to the people of Kazakhstan dated September 02, 2019, Constructive public dialogue is the basis of stability and prosperity of Kazakhstan.

Date

Views

28.12.19

www. akorda.kz/ru/addresses/addresses_of_president/poslanie-glavy-gosudarstva-kasym-zhomarta-tokaeva-narodu-kazahstana.

Dyukarev, I., Karavayeva, Ye., Kovtun, Ye. (2013). Key benchmarks for the development and implementation of educational programs in the subject area "Education". Bilbao: Duesto University, 79.

Baiturbayeva, A.T., & Chumachenko, T.N. (2013). Priorities in the field of education in the strategy "Kazakhstan-2050". Newsletter of KazNPU, 3, 109-113.

Mukanova, S.D. (2013). A teacher at a 12-year-old school. Orleu. News of Continuing Education, 1, 4-6

Karbayeva, Sh.Sh. (2017). Criterial assessment of learning achievements in terms of updating the content of education. Newsletter of KazNPU, 4, 78-83.

Mozhayeva, O.I. (2015). On the Transfer of Nazarbayev Intellectual Schools' Experience in the Framework of General Secondary Education Content Renewal. Date Views 9.01.2020 www.open-school.kz/glavstr/tema_nomera/tema_nomerahtm.

Educational program of professional development courses for teachers in the subjects "History of Kazakhstan" and "Fundamentals of Law. Teacher's Guide. 2017. Astana: Center for Pedagogical Excellence of Nazarbayev Intellectual School, 118.

Dudarchuk, A.V. (2017). 7 education modules - 7 Kazakhstani teacher's aides. Before and after. Date Views 9.01.2020 www.videouroki.net/razrabotki/7-moduliei-obuchieniia-7-pomoshchnikov-kazakhstanskogho-uchitielia-do-i-poslie.html.

Kerr, D. (2006). Teaching Autonomy: The Obligations of Liberal Education in Plural Societies. Studies in Philosophy and Education, 25(6), 425–456.