

MODERN PEDAGOGICAL APPROACHES AND PROSPECTS FOR THE DEVELOPMENT OF EDUCATIONAL QUALITY

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ABSTRACT

In the modern era, globalization, technological innovations, and the abundance of information place new demands on the education system. Education is not only a means of transferring knowledge, but also one of the main conditions for the development of personality, social adaptation, and the formation of creative and innovative thinking skills. In this regard, improving the quality of education has become an important statement of the strategic development of society. Improving the quality of education is possible through the application of scientific approaches rather than traditional approaches development. In Western pedagogical thought, issues of educational quality are studied on the basis of systems theory, a results-oriented approach, and innovative technologies. A number of studies have been conducted on this topic in Azerbaijan, and quality improvement has been identified as one of the main goals of education reform. However, a systematic analysis of scientific approaches in existing. Extensive research has been conducted in various countries on the quality of education and its studies and determination of their development prospects still require extensive scientific development.

The quality of education refers to the compliance of the educational process with the goals, the scientific basis of the content, and the effectiveness and sustainable development as a result of the interaction between teachers and students. According to modern scientific approaches, the main indicators that determine the quality of education are:

- Scientific and modern content.
- Pedagogical training and professionalism of teachers;
- Activity and innovation of teaching methods;
- Creative and critical thinking skills of pupils and students;
- Objectivity and transparency of assessment mechanisms;
- The role of information and communication technologies in education:

The scientific approach implies a systematic, objective, and analytical view of the educational process. This approach manifests itself in several aspects:

1. Systematic approach - ensures the unity of all components of the educational process (goal, content, method, result).
2. Innovative approach - based on the application of modern technologies, electronic resources and digital educational environments.
3. Personality-oriented approach - takes into account the individual characteristics, interests and potential of students.
4. Results-oriented approach - focuses not only on the acquisition of knowledge, but also on its application in practice, social and professional skills
5. Scientific-pedagogical research approach - involves studying educational problems on a scientific basis and proposing solutions.

Improving the quality of education in Azerbaijan is one of the priorities of state policy. The "State Strategy for the Development of Education in the Republic of Azerbaijan" lists the application of innovative pedagogical technologies, improvement of teacher training, and transparency of the assessment system as the main goals for improving quality.

Keywords: Quality of education, modern approach, personality development, innovative, skills.

Introduction

The 21st century is a period of rapid social, economic, technological and cultural changes in humanity. These changes necessitate the renewal of the education system, which is the mainstay of society. Modern education is not only about transferring knowledge, but also about the formation of human capital, the development of creative thinking, and the instillation of skills in the effective use of information technologies. In the global education space, a "learner-centered, not teacher-centered" approach is gaining ground. This requires that the teaching process move away from the traditional "teacher talks, student listens" model and toward an active learning model based on mutual collaboration, critical thinking, and problem-solving.

The Republic of Azerbaijan has not been left out of these global trends, and has identified the application of modern pedagogical approaches as a priority with the educational reforms implemented in recent years. In particular, curriculum reforms, electronic education platforms, and STEM teaching methodologies are a clear example of this process.

The essence of modern pedagogical approaches is that the person - the learner - is at the center of the educational process. For this, the teacher is not only a transmitter of knowledge, but also plays the role of a guide and facilitator. However, for the successful implementation of the approach, both the level of training of teachers, the material and technical base, and educational resources must be adapted.

Education has historically been closely linked to the development of society. If until the middle of the 20th century the main goal of education was the transfer of knowledge, in the 21st century the goal is to educate individuals who can use knowledge creatively.

In modern times, the education system has gone through 4 main stages.

1. Traditional education period - a teacher-centered model based on mechanical memorization of knowledge.
2. Compensatory education period - a stage where partial attention is paid to the individual differences of learners.
3. Constructivist education period - a methodology based on a learner-centered approach, collaboration and critical thinking.
4. Digital and innovative education period - a modern stage enriched with artificial intelligence, online education, and adaptive platforms.

Modern educational competencies are divided into several main directions:

Constructivism - knowledge is constructed by the student himself, the teacher is the guide.

Humanism - respect for the personality of each student, the individual pace of development

Contextual approach - education is connected with life.

Competency-based approach - the goal is not knowledge, but the formation of skills and competences

One of the biggest innovations in the modern education system is digitalization and the introduction of innovative educational technologies. Information and communication technologies (ICT) open up new opportunities in the planning, implementation, and evaluation of education.

The concept of innovative education means not only the use of technologies, but also the renewal of the content, methods and management structure of education.

Thus, in a modern school, a teacher can support the individual development of learners by using electronic resources.

The "Virtual School" (2020) platform, created at the initiative of the Ministry of Education of the Republic of Azerbaijan, ensured the continuity of education during the COVID-19 pandemic. Approximately 1.5 million students and 100 thousand teachers participated in classes through this platform. Currently, this system has become a permanent element of education and has laid the foundation for a hybrid (blended) education model.

Since the period of independence, the Azerbaijani education system has entered a phase of radical reforms. The Law "On Education" adopted in 1999 and the State Strategy for the Development of Education in the Republic of Azerbaijan (2013) adopted in subsequent years laid the foundation for new conceptual approaches in this direction.

These documents define the goals of education not only as the transfer of knowledge, but also as the formation of creativity, critical thinking, communication and cooperation skills (State Strategy for the Development of Education in the Republic of Azerbaijan. 2013)

Against the backdrop of the technological challenges of the 21st century, the main goal of Azerbaijani education is to create a personality-oriented, competency-based and innovative educational environment.

Since 2006, the national curriculum has been implemented in the general education system. The essence of this reform is the implementation of student-centered, active learning-based approaches, as opposed to the traditional "teacher-centered" educational model. The main principles of the curriculum are as follows:

- Individualized and differentiated learning;
- Competency-based outcomes;
- Application of active learning methods;

-Modern assessment forms (formative and summative assessment)

As a result of this reform, the teaching process in educational institutions has been transformed into a system based on interactive, collaborative and independent thinking. Students have become subjects who find, apply and evaluate knowledge, rather than receiving ready-made knowledge.

Research

The teacher factor is of crucial importance in the modernization of the Azerbaijani education system. Modern education requires the teacher to be not only a transmitter of knowledge, but also an organizer, innovator and facilitator of the learning process. In new approaches, the teacher:

- Prefers the application of active learning methods;
- Develops students' critical thinking and creative abilities;
- Uses information technologies in the learning process;
- Continuously updates their professional knowledge;

As a result of the application of modern pedagogical approaches, the quality indicators of education are increasing. Critical thinking, problem-solving and creative skills are developing in teaching.

- Interest and motivation in learning are increasing in education.
- Teacher-student (student) relationships are based on more democratic cooperation.
- Transparency and objectivity are ensured in the assessment system.

The Strategy for Socio-Economic Development of the Republic of Azerbaijan for 2022-2026 also identifies the expansion of modern approaches in education and the establishment of the educational process on a digital and competency-based basis as a priority direction.

Modern approaches in education refer to systems of learning based on activity, collaboration, critical thinking and creativity. These approaches make learners not passive recipients of knowledge, but rather three issues that form the basis of teaching.

“Why should one learn?”, “What should one learn?”, “How should one learn?”

The aspects that answer the question "Why should one learn?" constitute the goals and objectives of the educational process. This is mainly expressed in the explanatory notes of the educational programs, methodological aids and instructions, and "Pedagogy" textbooks.

The answer to the question “How should one learn?” is already methodology. These issues cover where, by whom, how and with what methods the materials included in the subject are studied.

It should be noted that it is difficult to give instructions on "how to learn" the materials included in the teaching, what work forms, methods and tools to use, because the teaching process is an original, unique pedagogical process, specific only to the teacher's teaching methodology.

The scientific foundations of active learning are constructivist and humanistic pedagogical theories. According to constructivism, knowledge should not be given ready-made, but should be formed based on the learners' own experience. (Heydarov A. 2020)

Humanistic pedagogy emphasizes the personality, interests, and potential of learners. Here, the interests and abilities of learners are taken into account. From a pedagogical point of view, the activity covers the following content:

- Cognitive activity - the student's ability to think independently, ask questions, analyze and compare, and draw conclusions;
- Emotional activity - the formation of interest, motivation, and a positive attitude to learning;
- Practical activity - the ability to apply the acquired knowledge, complete various tasks, and gain experience;
- Communicative activity is the ability to take an active position in group work, discussions, and debates, and to demonstrate the ability to cooperate with each other.

The concept of activity requires that education be built on subject-subject relations. That is, in the learning process, the teacher acts not as the sole transmitter of knowledge, but as the organizer and guide of the learning process. The learner, on the other hand, is not a passive object, but occupies the position of a subject with the ability to perceive and creatively apply knowledge.

In modern pedagogical research, the concept of activity is approached from two aspects:

1. In the psychological aspect, activity is a manifestation of a person's cognitive interests, motives and internal energy directed towards action.
2. In the pedagogical aspect, activity is the learner's direct involvement in cognitive and practical activity in the learning process, the ability to independently search and creatively apply.

Activity is not only manifested in individual learners, but also in collective learning environments. Group work, discussion, debate, project and problem solving ensure that students learn in a collaborative environment in the learning process. This leads to the development of both social skills and increased motivation in the educational process.

Thus, activity in the educational process is understood as the unity of the mental, emotional and practical efforts of the learner to master knowledge. This concept is considered one of the main principles of modern education and forms the theoretical basis of active learning methods.

The changes taking place in the education system in modern times require special attention to the development of students' creative abilities, critical and logical thinking, and independent decision-making skills, in addition to their acquisition of knowledge. The capabilities of the necessary teaching methods are not enough to meet this need. In such circumstances, the concept of active learning comes to the fore in pedagogical theory and practice. (Heydarov A. 2020)

The essence of active learning is that learners move from being passive listeners to being direct participants in the learning process. That is, knowledge is not presented to the pupil or student in a ready-made form, but is discovered, learned, and applied through various methods. In this regard, active learning changes the nature of learning and takes a learner-centered approach as its basis.

The main principle of active learning is "teaching to learn." This approach involves not only providing students with ready-made knowledge, but also developing their skills to search, ask, analyze, draw conclusions, and apply. Here, the teacher performs a guiding, organizing, and motivating function rather than the traditional "information provider" function.

The main features of active learning can be grouped as follows:

1. Learner-centered approach. In the learning process, the focus is not on the teacher, but on the learner. His interests, motives, thinking style, and individual characteristics are taken into account.
2. Independence and initiative. Active learning develops the ability of learners to conduct independent research, take initiative, and freely express their ideas.
3. Increasing cognitive activity. These methods activate the thinking of learners, involving them in asking questions, searching for answers, and solving problems.
4. Collaboration and communication. Active learning methods, especially group work, discussions, role-playing games, create conditions for students to cooperate together and improve their communication skills.
5. Practical orientation. Active learning involves not only the transfer of theoretical knowledge, but also its application in practical situations. This helps students develop professional skills.
6. Increasing motivation. Since active learning methods are based on interesting activities, they strengthen students' interest in the lesson and internal motivation.
7. Stimulating creative activity. Methods such as various situational tasks, brainstorming, and problem-based learning create conditions for the emergence of new ideas in students and the development of creative thinking.
8. Creating lifelong learning habits. Active learning shapes learners' continuous learning needs and prepares them for self-development in a changing world.

Active learning has many advantages over traditional learning. While the traditional approach focuses on memorizing facts and rules, the main goal of active learning is to analyze and apply that knowledge in new situations. Therefore, active learning focuses not only on learning outcomes, but also on the quality of the learning process

Thus, the essence of active learning is that the learner is at the center of active learning, and the teacher plays a guiding and supporting role. Its main features are independence, cooperation, creativity, practicality and motivation. Active learning constitutes an important theoretical basis for the development of modern pedagogically oriented education and plays an indispensable role in the professional training of future teachers.

1) Theoretical foundations for improving quality

A concise synthesis showing how curriculum alignment, formative assessment, large-scale evidence syntheses, competency/outcome orientations, teacher knowledge, digital pedagogy and evaluation frameworks jointly drive

educational quality. [[eu-prod.as...rosoft.com](#)], [[link.springer.com](#)], [[people.bath.ac.uk](#)], [[inspirasif...dation.org](#)], [[eric.ed.gov](#)]

2) Constructive alignment

Explains how to align intended learning outcomes with teaching and assessment (with examples of performance-oriented outcomes). Cites Biggs (1996) and later expositions. [[eu-prod.as...rosoft.com](#)], [[unesdoc.unesco.org](#)]

3) Assessment for learning

Summarises Black & Wiliam's evidence that formative assessment (feedback, self/peer assessment, questioning) raises achievement and narrows gaps. [[link.springer.com](#)], [[tru.ca](#)]

4) "What works" synthesis

Uses Hattie's Visible Learning to prioritise high-impact practices (e.g., teacher clarity, feedback; hinge-point around $d = 0.40$). [[people.bath.ac.uk](#)], [[michigan.gov](#)]

5) Competency-based & outcome-based orientations

Paraphrases Gervais's operational definition of CBE, and Spady's OBE rationale for system-wide outcomes focus. [[visible-learning.org](#)], [[onlinelibr...wiley.com](#)]

6) From PCK to TPACK

Locates teacher expertise in Shulman's PCK and extends to the TPACK framework for meaningful technology integration. [[eric.ed.gov](#)], [[depts.washington.edu](#)]

7) Digital pedagogy: SAMR + UNESCO ICT-CFT

Differentiates task-level transformation with SAMR and system-level expectations with UNESCO's ICT-CFT (v3). [[scirp.org](#)], [[eric.ed.gov](#)]

8) Learning theories underpinning active learning

Connects Kolb's experiential learning cycle with Bandura's social (cognitive) theory to support agency-building classroom designs. [[hippasus.com](#)], [[books.google.com](#)]

9) Cognitive demand with the Revised Bloom Taxonomy

Uses Anderson & Krathwohl's two-dimensional table (process \times knowledge) to set/assess challenging outcomes. [[books.google.com](#)], [[books.google.com](#)]

10) Evaluation for improvement (CIPP)

Frames quality monitoring with the CIPP model (Context–Input–Process–Product) to emphasise improvement over mere accountability. [[ctl.oregonstate.edu](#)], [[guilford.com](#)]

11) Global vision & national alignment

THE RESULT

The introduction of modern pedagogical approaches in the Azerbaijani education system has already become a strategic priority. Curriculum reforms, strengthening teacher training and integration of innovative methods are gradually improving the quality indicators of education.

In order to ensure the sustainability of activities in this direction in the future, it is necessary to modernize pedagogical management, financial mechanisms and monitoring systems at the same level. Modern pedagogical approaches change not only the level of knowledge but also the way of thinking and the culture of learning. From this perspective, the main task of Azerbaijani education is to fully ensure the transition from a system that transmits knowledge to a system that forms skills and values.

Educational quality is the level of compliance of the results of the educational process with certain standards, national and international indicators. It means ensuring not only knowledge and skills, but also social, spiritual and creative development. (Taghiyev R. 2021)

Improving the quality of education is related to a number of factors:

- The level of professionalism of pedagogical staff;
- The content of training programs and their compliance with modern requirements;
- The application of innovative teaching methods;
- The degree of technological support and inclusiveness of the educational environment;

The development of the quality of education is one of the strategic goals of our national education. The application of innovative technologies, improving the professionalism of teachers, mastering international experience, and strengthening social partnership are the main directions of this process. In the future, the main goal is to bring Azerbaijani education into line with world standards and form a competitive human capital.

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