

THE ROLE OF RESEARCH-ORIENTED LEARNING IN UNDERGRADUATE EDUCATION AT HIGHER INSTITUTIONS

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Abstract: The article examines the importance and role of research-oriented learning in undergraduate education. In the modern education system, research-oriented learning is presented as a key mechanism that develops students' analytical thinking, creativity, and independent decision-making skills. The pedagogical principles of research-oriented learning, its implementation mechanisms, and its effectiveness in the teaching process are analyzed from a scientific and pedagogical perspective.

Keywords: research-oriented learning, undergraduate education, higher education, scientific activity, independent learning

In the era of globalization, the higher education system is no longer limited to the transmission of knowledge but also serves the formation of a research culture. In modern times, the main goal of undergraduate education is to develop students' critical and creative thinking abilities as well as their scientific and cognitive skills.

In this regard, research-oriented learning plays an important role in the modernization of higher education. The research-oriented learning model transforms the student from a passive listener into an active researcher. This approach develops students' abilities to formulate scientific questions, solve problems, and draw conclusions (Kolb, 1984).

Research-oriented learning is a form of instruction aimed at developing students' skills in scientific inquiry, hypothesis formation, reasoning, and justification of their ideas within the learning process. This model is based on the principle of "learning through inquiry."

According to John Dewey's theory of experiential learning, a person can understand what they learn only through practical activity and research. In this sense, research-oriented learning is both a process of knowledge acquisition and the development of a culture of thinking.

The main pedagogical principles of this approach are as follows:

1. *Active learning and reflection:* the student actively participates in the learning process and analyzes results;
2. *Collaboration and interactivity:* learning deepens through group research and discussion;

3. *Interdisciplinary integration*: the combination of different scientific fields enhances creativity;

4. *Formation of research culture*: the student masters and applies scientific methodology.

The main function of research-oriented learning in higher education is to form students' scientific way of thinking. This creates a foundation for their independent decision-making in future scientific and professional activities.

The role of research oriented learning in undergraduate preparation manifests itself in the following aspects:

1. *Development of scientific and cognitive skills*: students learn to identify problems, formulate hypotheses, and present research findings.

2. *Formation of creative and critical thinking*: students not only acquire facts but also analyze, compare, and draw new conclusions.

3. *Enhancement of motivation*: research-oriented learning makes the learning process meaningful and engaging.

4. *Formation of professional independence*: students learn to apply scientific approaches to real-world problems.

The “Strategy for the Development of Higher Education in the Republic of Azerbaijan (2019–2030)” also emphasizes that the development of research-oriented thinking and innovation skills among students is one of the priority directions of higher education policy.

Research-oriented learning can be implemented in various forms:

- *Project-based learning*: students prepare specific research projects related to their courses.

- *Problem-based learning*: scientific problem-solving is explored through real-life situations.

- *Scientific clubs and seminars*: students gain experience by independently making academic presentations.

- *Research papers and course projects*: considered as the initial stages of scientific activity at the undergraduate level.

The purpose of these methods is to shift the student's learning from a passive to an active phase. Experience shows that such approaches increase students' self-confidence, interest in research, and sense of responsibility.

Observations in groups where research-oriented learning was applied show that students:

- solve critical thinking tasks more easily;
- participate more actively in scientific work;
- apply interdisciplinary knowledge to practical problems.

These findings demonstrate that ROL is a key mechanism for improving the quality and sustainability of education in higher institutions.

Research-oriented learning is a strategic direction of modern higher education. This model transforms undergraduate students from mere knowledge receivers into scientifically thinking, exploring, and innovative individuals. As a result of implementing ROL, students' self-education, critical thinking, and creative abilities develop, contributing significantly to the strengthening of the nation's scientific and intellectual potential.

References

1. Dewey, J. (1938). *Experience and Education*. New York: Macmillan.
2. Kolb, D. (1984). *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs: Prentice Hall.
3. Hattie, J., & Donoghue, G. (2016). *Learning strategies: A synthesis and conceptual model*. *Review of Educational Research*, 86(2), 455–479.
4. Ministry of Education of the Republic of Azerbaijan. (2019). *Strategy for the Development of Higher Education in the Republic of Azerbaijan (2019–2030)*.
5. Quliyev, M. (2020). *Methodology of Research-Oriented Learning in Higher Education*. Baku: ADPU Press.