



COMPARATIVE ANALYSIS OF THE EDUCATIONAL CONCEPTS OF KARL POPPER AND JOHN DEWEY

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Abstract

The article examines the educational concepts of John Dewey and Karl Popper in a comparative way. The analysis is carried out at the level of epistemological foundations, objectives, didactic methods and political and ethical contexts. Dewey understands education as a process of continuous growth and democratic experience, whereas Popper associates it with the formation of a critical attitude and the maintenance of institutions of an open society. The comparison reveals both differences in the initial assumptions and a common focus on overcoming dogmatism and developing the ability to think critically. The conclusion is made about the complementarity of their approaches and the importance of the ideas of Dewey and Popper for modern pedagogical discussions.

Keywords: Philosophy of education, pragmatism, critical rationalism, experience, democracy, ethics.

Introduction

The figures of Karl Popper and John Dewey occupy a special place in the history of educational philosophy of the 20th century. Despite the difference in the intellectual traditions to which they belong – critical rationalism and pragmatism – they are united by the desire to understand education not as a simple transfer of knowledge, but as a process of forming thinking that is open to criticism, experience and social responsibility. Dewey, reflecting on the democratic school as an “embryonic society”, viewed education in terms of continuous experience,



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where research and cooperation form the basis of personal and social growth. Popper, on the contrary, proceeded from the principle of fallibilism and saw in education a mechanism for introducing an individual to a culture of criticism in which mistakes become a condition for progress. Comparing these two concepts turns out to be productive for several reasons. First, it allows us to identify differences in the understanding of the sources of educational norms: Dewey's is democratic experience and social practice, Popper's is institutionally guaranteed procedures for critical refutation. Secondly, the comparison shows that despite all the differences, both theories proceed from similar ethical premises – recognition of individual autonomy, the value of freedom and the need for open communication. Finally, the appeal to the ideas of Dewey and Popper has practical significance for modern educational discussions: from the problems of building research education to the search for models of civic education in the digital age.

Literature Review

The studies of the pedagogical philosophy of John Dewey and Karl Popper are conducted in different traditions and are rarely considered in a comparative way. The works devoted to Dewey focus primarily on his idea of education as a democratic experience. In the classic book “Democracy and Education” (1916), he formulates the school as an “embryonic society” and connects pedagogical practice with the formation of a culture of cooperation [1]. The later work “Experience and Education” (1938) clarifies the methodology: education is understood as a process of reconstruction of experience, where the principles of continuity and interaction occupy a central place [2]. Commentators emphasize that these categories became the core of discussions about project-based learning and the “experimental school” in the 20th century [3; 4]. Popper's philosophy of education is developing not as a separate system, but as an application of his epistemology to pedagogy. In “The Open Society and Its Enemies” (1945) and “The Poverty of Historicism” (1957), he addresses the political and ethical side of education, emphasizing its role in protecting institutions of criticism and an open society [5]. More specific methodological accents are contained in the collection *Conjectures and Refutations* (1963), where the concept of “guesses and



refutations” is described as the basis of cognition and can be transferred to didactics [6].

Methods

The present study is comparative and analytical in nature and is based on three levels of analysis: epistemological, ethical-philosophical and pedagogical-methodical. This approach allows us to consider the concepts of John Dewey and Karl Popper not in isolation, but in their mutual correlation and in the context of current discussions about the nature of education.

The methodological toolkit consists of three components:

1. Historical and philosophical analysis is the identification of the context of the formation of concepts and basic concepts (experience, growth, open society, criticism).
2. The comparative-analytical approach is a comparison of the positions of Dewey and Popper on key issues: epistemology, educational goals, teaching methods, political and ethical foundations.
3. The application level is to identify possible implications of their ideas for modern educational discourse, including problem-based learning, critical thinking, and democratic education.

This methodological design makes it possible not to reduce research to a description, but also to avoid the construction of artificial syntheses. The comparison is based on the principle of identifying points of intersection and divergence, with an emphasis on productive opportunities for modern pedagogy.

Results and Discussion

Comparing the concepts of education by John Dewey and Karl Popper faces a methodological difficulty: thinkers belong to different philosophical traditions and work in different intellectual contexts. Dewey, forming a pragmatic pedagogy, proceeded from the idea of experience as an environment of growth and democracy as a “way of life”, where the school becomes a model of society in miniature [1]. Popper developed the line of critical rationalism, arguing that knowledge is promoted not by the accumulation of truth, but by the elimination of errors, and that is why the culture of education should be built around the



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practice of criticism and verification [2]. Despite the difference in their initial attitudes, they share a common distrust of dogmatic systems. Dewey insisted that education should be freed from fixed goals imposed from the outside and subject to the logic of research experiment [3]. Popper, in turn, saw “closed” pedagogical models as a threat to individual freedom and warned against ideological control over thought [5]. For both, it is fundamentally important to recognize the limitations of knowledge and the need for open discussion. The perspective of comparison is not to reduce one concept to another, but to discover complementarities. Dewey emphasizes the positive side – building experience and democratic interaction, while Popper emphasizes the negative side, disciplining through verification and refutation procedures. In their combination, a holistic understanding of education can arise: as a process in which growth and cooperation are combined with critical responsibility and institutional guarantees of freedom. This perspective allows us to consider the ideas of both thinkers not as a historical rarity, but as a living resource for analyzing educational practices in the 21st century [5].

For Dewey, knowledge does not exist outside the process of experience: it arises as a response to a “difficult situation” that requires a solution. In his opinion, the educational process is not the transmission of ready-made truths, but an organized study in which the student is an active participant. The central categories here are continuity and interaction: new experiences are formed through the reworking of the old, and learning is a consistent reconstruction of the environment of action [1]. In the book *Democracy and Education*, he emphasizes that the goals of education are not imposed from the outside, but “belong to the process itself”, becoming an internal part of the experience [2]. Thus, the epistemological foundation of Dewey’s pedagogy can be described as naturalistic: knowledge is born in the dynamics of experience and develops through its social expansion. According to this logic, school is a place where individual efforts and collective research are combined into a single fabric.

Popper builds a completely different but similar model. His thesis is simple: we cannot achieve final knowledge, we can only propose hypotheses and put them to the test. A scientist, and therefore a student, always stands in a situation of “conjectures and refutations” [6]. For Popper, critical thinking is not an optional



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virtue, but the very structure of cognition. This attitude radically changes the educational task: to teach means to form the ability to pose problems and to accept possible mistakes as a condition for moving forward. He insists that we should be “students of problems, not subjects” [6]. In other words, it is the problematic situation, not disciplinary logic, that becomes the source of educational content. To summarize, let’s say that while Dewey’s emphasis is on the creative reconstruction of experience, Popper’s is on the negative testing of hypotheses. The first thinker emphasizes the integration of experience into the social fabric, the second – the discipline of criticism as a guarantee of freedom from dogma. Together, they set a dialectic that can be productive for a modern school: experiential research needs critical verification procedures, and a culture of criticism requires reliance on live experience.

Now let’s look at the question of the goals of education. For Dewey, the purpose of education cannot be fixed in the form of a predefined set of knowledge or skills. It lies in the process itself – It is growth, understood as the expansion of an individual’s ability to interact with the environment and cooperate with others [1]. In “Democracy and Education”, he notes that education should reproduce the structure of democratic life: school is an “embryonic society” where students learn not only knowledge, but also the practice of collective decision-making [1]. Dewey connects educational goals with the democratic ideal, but not in the sense of a political declaration, but as a form of shared experience. For him, democracy is a way of organizing life based on dialogue and cooperation, and therefore every genuine school should be a platform where students learn to live and act together [2].

Popper’s interpretation of the goals of education is based on the principles of critical rationalism. The main goal is to form a critical attitude and willingness to subordinate one’s own beliefs to verification procedures. For him, education is inseparable from the ethical task of fostering responsibility for statements made [5]. The political framework for these goals is outlined in his concept of an open society, where education should serve to strengthen institutions of criticism, and therefore form a citizen capable of disagreement, argumentation, and protection of a minority from majority pressure [6].



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Let's consider how both philosophers considered the method (didactics) and the organization of the educational process. Dewey understood the method of education as an organized form of inquiry. An educational situation should arise from a real "difficult situation" and turn into a joint study, where students formulate hypotheses, test them in practice and reflect on the result [1]. His principle of "continuity of experience" means that learning should be connected to the student's life contexts, rather than remaining isolated in abstract schemes. In the book "Experience and Education", he emphasized that discipline in school should not follow from external pressure, but from the very logic of the research task [2]. Dewey's project work is not a methodical technique, but an expression of the very philosophy of education: a student learns knowledge when it is embedded in an activity where the result is valuable to both him and the group. Thus, Dewey's didactics is the pedagogy of lived experience, where theory and practice form a single cycle.

Popper built his didactics around a problematic statement. The learning process should begin not with the transfer of ready-made knowledge, but with the formulation of a problematic situation from which hypotheses are born. The teacher's task is not to propose a definitive solution, but to organize a space for criticizing these hypotheses, identifying their weaknesses, and verifying their consequences [3]. In this sense, the Popperian approach can be described as a "trial and error method", but not in a narrow behaviorist sense, but as a culture of conscious verification of assumptions. A Popper-based training session should contain a point of refutability: each statement should be associated with conditions under which it can be found to be false [5].

We will also consider such an important issue as the political and ethical contour of education. For Dewey, education cannot be separated from democracy. In his view, democracy is not only a political form, but above all a "way of life" in which communication, joint research and participation in decision-making are not external procedures, but the internal content of the experience [1]. According to Dewey, school should be a model of such a society: a space where students learn freedom through the practice of cooperation and dialogue. The ethical framework here is formed not as a system of norms imposed from above, but as a culture of participation.: Justice is expressed in the inclusion of everyone, discipline in



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shared responsibility, and truth in the open exchange of experiences [2]. In this sense, Dewey's pedagogy is not only a method of teaching, but also a project of educating a citizen for whom democracy is not an abstract ideal, but a habitual form of life.

Popper saw education as a means of strengthening the institutions of an open society, a society in which criticism is protected by law and a minority has the right to disagree [5]. He warned against the temptation of "great projects" and believed that social reforms, including educational ones, should be carried out in the form of "piecemeal social engineering", where every innovation is subject to verification and can be reversed [6]. The ethical meaning of this approach is to recognize our own limitations: we are not omniscient designers, but participants in the process of trial and error. An education built in this vein should foster modesty in judgment, respect for disagreement, and a willingness to critically evaluate even the most attractive ideas.

Conclusion

A comparison of the educational concepts of John Dewey and Karl Popper reveals both profound differences and the inner connection of their ideas. Dewey bases his pedagogy on the category of experience: for him, education is a process of growth based on the inclusion of the individual in democratic practice. He saw school not as a tool for transferring ready-made knowledge, but as a "society in miniature" where a child learns joint research and responsibility. Popper, on the contrary, proceeded from the epistemological limitations of man: knowledge is always subject to error, and therefore education should foster a culture of criticism, where every statement is ready for refutation. His project is not so much about the growth of experience, but rather about the discipline of testing and protecting the institutions of an open society.

Despite the difference in the initial assumptions, their approaches agree on the main thing: both reject dogmatism and see education as a space for the formation of a free personality. For Dewey, freedom manifests itself in democratic cooperation, for Popper, in a willingness to critically challenge and be challenged. The first focuses on the positive content of experience, the second on negative mechanisms of protection from delusions and the tyranny of ideas.



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For modern education, it is important not to choose between these positions, but to keep them together. The Dewey school of experience without Popper's criticism risks drowning in endless activity without measure and verification. Popper's discipline of criticism, without Dewey's understanding of growth, can turn into a formal logic of objections, divorced from the human environment. Together, they set a model in which education becomes both a life in a democratic community and a school of critical reason. It is in this dual perspective that one can look for an answer to the challenges of the 21st century, where educational practice should simultaneously be an environment of experience and an arena of criticism.

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