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## **INTERDISCIPLINARY INTEGRATION AS ONE OF THE MAIN MEANS OF TRANSFORMING MODERN EDUCATION**

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There is a transformation of the traditional mission of education in the context of modern dimensions of social development. Particularly, globalization, *integration* and informatization as markers of modern society progress, require young people to master rather “portfolio of tools” than “portfolio of knowledge and skill” for sustainable development throughout life. In the New Ukrainian School Concept [5], the transformation of the content of general secondary education and the organization of training in elementary, basic and high specialized schools on the basis of competence and *integration* are distinguished among the major innovations. The *integrated approach* is increasingly involved in the methodological foundations of determining and substantiating the content and specifics of the learning process in a modern school [1].

According to O.I. Hlobin [3], the problem of educational integration is classical, since it arose at the time when separate teaching of educational disciplines was introduced at schools due to the differentiation of sciences. The scientist describes the formation and development of the integrated learning theory noting the outstanding educators and scholars who worked at the problem, e.g. Jan Amos Comenius, John Locke, Disterweg, K.D. Ushynsky, et. al. Since ancient times, teachers emphasized that the content of a subject should be filled with concepts, elements and facts from another subject in order to obtain not only knowledge of science fundamentals, but various skills for its practical application in life.

O.I. Hlobin [3] believed that in classical pedagogics, the most complete psychological pedagogical substantiation of the significance of interdisciplinary integrative connections was made by K.D. Ushynsky. He considered that students would not have systemic and holistic knowledge without interdisciplinary connections. In the pedagogy of the early XX century, the problem of integration in education also became of paramount importance. In particular, the participants of the Moscow City Teachers' Circle (1910-1915), led by N. I. Popova, developed a curriculum based on the idea of the most complete association of subjects in the integrated course of

“Theology” integrating the educational disciplines of the humanities, natural sciences and mathematics orientation into a single educational complex.

Thus, in 1920s, the educational process at school was built on the basis of comprehensive curricula built on the basis of educational material integration of various disciplines. The essence of complex teaching system consisted in the concentration of phenomena and objects around the general idea. There were three main educational blocks, which determined the direction of the education content: social science, labour introduction, natural science. As a result, educational subjects were deprived of their independence; classes did not give students the necessary subject matter, and moreover, systematic knowledge [3]. In 1931, comprehensive education was rejected. The main reason was the rigid opposition of complexity and objectivity, the objection of the independent part of educational disciplines leading to the disregard of the following important didactic principles: scientific, systematic and consistent character of education [3].

The curricula of 1931 - 1932 formed the content of school education on a subject basis. However, the problem of integration in education came with a new force in the second half of the twentieth century, in connection with the rapid development of scientific and technological progress. In 1960s-1980s there were the works (Yu. A. Samarin) focused on the broad possibilities of integration in pedagogy, its objective necessity, the forms and mechanisms of realization, its influence on the structure of pedagogical knowledge and education. However, despite a wide range of theoretical studies, pedagogical practice showed the lack of practical implementation of theoretical developments. The last quarter of the twentieth century was characterized by the considerable attention of scientists to the integration processes in education. At present, interdisciplinary integration needs to be rethought and scientifically substantiated from today's point of view. Scientists Zh.-L. Martinan, J. Fure [2], I. Akulenko, O. Kolomiets, O. Bocchok [1] et al. [4; 6] promote the idea of the integrated approach in modern education and consider the principle of integration as one of defining principles of modern educational process.

It should be noted that the concept of integration in the educational process has certain admonitions, which are emphasized, in particular by J. Brochie and J. Flemon [4], S. Denem and S. Ed [6]. The scientists point out that the integrated thematic sections can lead to partial coverage of the topic, unnecessary educational actions, enthusiasm concerning interdisciplinary connection; they cannot give schoolchildren the opportunity for comprehensive learning; their “artificial” combination can distort students' idea about the object of study, form the students' misconception about school.

Thus, the problem of integration in education has not lost its significance; moreover, it is becoming more relevant considering the society requirements to a modern school. Many educators, methodologists and teachers are aware that integration should have a new quality in today's conditions. First and foremost, it is an effective means of complex solving of educational problems through the generalization and systematization of knowledge, the purposeful formation of general educational and special skills, raising the students' cognitive interest, but the practice of its implementation is not yet perfect.

## Literature

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