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Formation and development of engineering pedagogy in the postmodern era

Abstract: The report analyzes the theoretical formulation at the end of the 19th century of a new conceptualization of "engineering pedagogy", which captures certain aspects of the development of the engineering personnel training system. The change in technological structures required a change in educational technologies for training qualified personnel with in-demand qualifications, which was reflected in the gradual abandonment of direct demonstrations of fragments of labor operations and their most accurate reproduction by future performers. Approaches and solutions in the field of organizing the learning process are analyzed, which arose under the influence of meeting the needs for training a creative, but at the same time rationally thinking person, who has a sufficient amount of technological knowledge, design and constructive skills, allowing the creation of new products and solutions within the framework of the "experience economy" (D.B. Pine and J. Gilmore). The logical and substantive emphasis of the report is on the problems of transforming the definitions of an object, the subject of engineering pedagogy, its goals and objectives, forms of organizing the educational process and the introduction of immersive technologies that ensure readiness for engineering activities. New trends are identified related to the recognition of the importance of studying not only professionally significant examples of success as a result of scientific and technical knowledge, but also failures, which are considered as productive problem fields that allow one to overcome positivist traditions in thinking and contribute to the recognition of the value of the idea of plurality, realized through simulacra.