Матеріали II Міжнародного симпозіуму освіта і здоров'я пі. дростаючого покоління 24–26 квітня 2018 р. С. 13–18.

- 4. Гончарова О. К. Соціальні навички учнів початкової школи як предмет педагогічного дослідження. Академічні студії. Серія «Педагогіка, Вип. 1, 2022. http://orcid.org/0000-0003-4584-1471
- 5. Мазін В., Оржицький Р., Використання засобів боксу у процесі фізичного виховання у закладах загальної середньої освіти Європи та України. Спортивна наука та здоров'я людини. 2024. 1(11):126-138. DOI: 10.28925/2664-2069.2024.110

DOI https://doi.org/10.30525/978-9934-26-478-8-21

## SPECIAL STRATEGIES OF LEARNING ACTIVITY IN THE PROCESS OF TRAINING FUTURE ENGINEERS ON A BILINGUAL BASIS

## СПЕЦІАЛЬНІ СТРАТЕГІЇ НАВЧАЛЬНОЇ ДІЯЛЬНОСТІ В ПРОЦЕСІ ПІДГОТОВКИ МАЙБУТНІХ ІНЖЕНЕРІВ НА БІЛІНГВАЛЬНІЙ ОСНОВІ

## Snizhko N. V. Сніжко Н. В.

Candidate of Science (Physics and Mathematics), Associate Professor, Associate Professor at the Department of Mathematics National University "Zaporizhzhia Polytechnic" Zaporizhzhia, Ukraine кандидат фізико-математичних наук, доцент, доцент кафедри математики Національний університет «Запорізька політехніка» м. Запоріжжя, Україна

In Ukraine, higher education is being modernized taking into account globalization phenomena in the international educational space, modern trends towards multicultural training of specialists. One of the manifestations of such modernization is the implementation of bilingual teaching/learning in the process of professional training of specialists in universities. Education on a bilingual basis involves the teaching of professional disciplines in a foreign language, which in this case acts as a means of studying various subject areas. In our study, such a field is mathematics, since this discipline is basic for students of engineering and technical specialties.

The logic of the development of modern society dictates the need for lifelong learning. This changes the approach to the concept of learning outcomes. In a situation of uncertainty and constant updating of the conditions

and content of professional activity, the amount of knowledge acquired by students cannot be an indicator of the effectiveness of the educational process. The majority of education theorists and practitioners agree that the most sought-after result of education is the mastery of the methods of acquiring knowledge by future specialists. In connection with this, the indicator of productive learning becomes the ability and readiness of a person for self-education, self-development, which involves mastering the strategies of educational activity. The problem of educational strategies is also relevant for the model of bilingual education in a technical university

The purpose of the work [1] is to identify and classify special strategies and methods of educational activity under the conditions of bilingual education of future engineers in the conditions of a technical university, namely, in the case of bilingual education of higher mathematics. Different approaches [2; 3; 4] to defining the essence of the learning strategies concept and learning strategies classification are analyzed. We note that currently there are practically no studies of special learning strategies for learning integrative courses, in particular those that are studied on a bilingual basis. The significance of the application of general and special learning strategies in the study of professional disciplines by future engineers on a bilingual basis is emphasized.

Based on the experience of bilingual teaching of higher mathematics for future engineers, special strategies and methods of learning activity for deepening mathematical knowledge through the use of a foreign language have been identified and systematized We cosider compensatory strategies; strategies for finding supports; contextualization strategies; resource strategies in more detail.

We emphasize the need to explicitly provide learning strategies, with their integration into a practical bilingual mathematics course.

Research shows that there are no universal or most effective learning strategies. in each specific learning process, there is both a selection of already existing ones and a selection of special strategies and methods conditioned by the requirements of a specific educational task or a specific educational discipline.

Identified and classified special strategies and methods of educational activity contribute to the deepening of mathematical knowledge through the use of a foreign language. As a result of the application of such strategies, the acquisition of subject content occurs simultaneously with the acquisition of a foreign language. Students can apply certain strategies also in further professional engineering activities, including in the conditions of a foreign language professional environment.

## Bibliography:

- 1. Сніжко Н.В. Спеціальні стратегії та прийоми навчальної діяльності при підготовці фахівців інженерних спеціальностей на білінгвальній основі. / Педагогічна Академія: наукові записки. 2024. № 6.
- 2. Cohen A. D. Strategies in Learning and Using a Second Language.  $2^{nd}$  ed. London : Routledge, 2011. 440 p.
- 3. Oxford R. L. Language learning strategies: What every teacher should know. New York: Newbury House, 1990. 342 p.
- 4. Oxford R. L., Leaver B. L. A synthesis of strategy instruction for language learners. *R. L. Oxford (Ed.), Language learning strategies around the world: Crosscultural perspectives.* Honolulu, HI: University of Hawaii Press, 1996. P. 227 246.