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REFLECTION AS A FACTOR IN THE FORMATION OF ECONOMIC COMPETENCE IN FUTURE TECHNOLOGY TEACHERS

Abstract

The issue addressed in this article concerns an important aspect of professional training for future technology teachers, specifically the development of economic competence through reflection. Economic competence is one of the key components of general pedagogical training, which includes the ability to assess and effectively apply economic knowledge in the educational process. It has been proven that one of the important tools for developing this competence is

reflection, which allows teachers to critically analyze their activities and constantly improve their professional skills.

It is argued that reflection is an essential component of educational activity, as it enables the analysis and adjustment of the outcomes of educational activities, evaluates the effectiveness of applied economic approaches and methods, and ensures the continuous improvement of the teacher's professional skills. Reflective activity contributes to the development of critical thinking, which is important for applying economic knowledge in the practice of teaching technology, as well as for preparing students for real economic conditions in the labor market.

A review of the scientific literature on the essence of economic competence and its components, including reflective skills, indicates that this concept is considered a multidimensional entity, combining knowledge, skills, values, and practical abilities that ensure effective decision-making in various life and professional contexts. In this context, reflection serves as an integral component that ensures the subject’s ability to consciously analyze their own economic experience, assess decisions made, and correct them based on self-observation and self-assessment.

The article also characterizes practical tools that help develop reflective skills, particularly in the context of economic competence. These include self-assessment methods, the use of feedback, and tools that allow analysis of one's own pedagogical activity from the perspective of economic approaches and principles. An important component is the participation of future technology teachers in training and courses aimed at enhancing economic knowledge and skills, as well as integrating them into the educational process.

Keywords: economic competence, reflection, formation of economic competence, future technology teachers.

Problem Statement. In the current context of reforming Ukraine's educational system, the preparation of future technology teachers who can effectively conduct the educational process by integrating economic knowledge into teaching technology has become particularly significant. One of the key components of this preparation is the formation of economic competence, which allows teachers to not only impart theoretical knowledge but also develop practical skills in students, necessary for their successful integration into the labor market. However, to this day, approaches to the effective formation of economic competence in future technology teachers, particularly through the mechanism of reflection, remain insufficiently developed.

Reflection, as the ability to analyze and evaluate one’s own activities, is an important tool in the process of forming economic competence, as it allows future technology teachers not only to assess the outcomes of their pedagogical activities but also to adjust their methods and approaches to teaching in a changing economic environment. Through reflection, teachers can identify the strengths and weaknesses of their work, helping them refine their practice while taking into account the latest economic trends and the needs of students.

The relevance of this issue lies in the fact that, in the context of globalization and the integration of economic processes, the need to form deep economic knowledge and practical skills in future technology teachers becomes particularly important. Since modern educational standards require teachers to adapt their teaching methods to the demands of a rapidly changing labor market, the development of economic competence through a reflective approach is an integral part of the professional preparation of future technology teachers. Therefore, research on reflection in the context of forming economic competence is necessary to improve methodological strategies and ensure the high quality of training specialists in this field.

Analysis of Recent Research and Publications. The issue of forming economic competence in future technology teachers, particularly through reflection, is actively studied by domestic researchers in the fields of pedagogy and psychology. The topic of professional reflection, as a component of pedagogical activity, is quite relevant and is examined through various approaches, including innovative activities, personal and professional development of the teacher, and their growth in the context of a changing educational environment.

One of the key scientific works that addresses pedagogical reflection is the study by Horodyska O., in which she emphasizes the importance of developing reflective skills in teachers, as this allows for a deeper analysis of their activities, particularly in the context of innovative practices, and enables the correction of teaching methods to achieve greater effectiveness. The study substantiates that reflection is an important mechanism for improving the quality of the educational process and ensuring the professional development of teachers [1].

Zhelanova V.'s research expands the understanding of reflection as an interdisciplinary context, in which various types of reflection are considered, including the reflection of pedagogical innovations, which directly influences the formation of economic competence in teachers. The work also defines the main categories that help form the reflective competence of teachers in the context of modern educational requirements [2].

Reflection as an important element of a teacher's professional development is also analyzed in the research by Korolova I., who emphasizes the significance of reflection for developing management and organizational skills in teachers, which is crucial for the implementation of innovations in the educational process, especially in the field of economic education [3].

Research also discusses the role of reflection as a component of innovative competence, particularly in the context of integrating economic knowledge into

the educational process. Oliinyk notes that pedagogical reflection is the foundation for developing a creative approach in teachers to the implementation of economic concepts in teaching [4].

The works of Pavelkiv R. [5] and Rashidova S. and Roganova M. [6] also highlight the importance of developing reflection in future teachers to ensure high-quality teaching in a changing socio-economic environment. They emphasize that reflection is a key tool for developing the ability of teachers to adapt their methods to economic realities.

The regulatory and legal framework that governs the formation of economic competence in teachers, including in the context of reflection, includes provisions and requirements of modern educational standards. Specifically, in Ukraine, documents such as the State Standard of Basic and Full General Secondary Education and the Concept of Economic Education Development in Ukraine define the main directions for teacher preparation and their ability to integrate economic knowledge into the educational process.

Thus, the issue of developing reflection in the process of forming economic competence in future technology teachers is an important part of pedagogical theory and practice, requiring further research and implementation in teaching activities.

The purpose of this article is to analyze the role of reflection in the formation of economic competence in future technology teachers.

Presentation of the main material of the study. Reflection is an important component of a teacher's professional development, which directly impacts the formation of economic competence in future technology teachers. It serves as a process of understanding, analyzing, and evaluating one's own activities with the aim of identifying strengths and weaknesses, as well as adjusting actions to enhance the effectiveness of teaching. Reflective competence in teachers is a

necessary condition for the successful implementation of innovations in pedagogical practice, particularly in the context of economic education.

A teacher's reflection encompasses several levels, from understanding and evaluating their own activities to adjusting their approaches in line with new pedagogical and economic trends. Horodyska O. M. emphasizes the importance of developing reflective skills in teachers, as it allows them not only to assess the outcomes of their work but also to continuously improve teaching methods, especially in the context of integrating economic knowledge into the educational process. A teacher with reflective competence is able to respond appropriately to changes in the educational environment, ensure effective economic education for students, and adapt their teaching methods to economic realities [1].

Zhelanova V. proposes an interdisciplinary approach to understanding reflection, highlighting several types of reflection, among which the reflection of the teacher's professional activity, especially in the context of their economic competence, is particularly important. She points out that reflection should encompass both the assessment of one's actions and the analysis of the economic outcomes of teaching, which allows teachers to adapt their methods to the modern labor market's demands [2].

Pavelkiv R. in his work "Reflection as a Mechanism for the Personal and Professional Development of Future Teachers" (2019) notes that reflection is a necessary condition for developing not only professional but also economic skills in teachers. It helps technology teachers not only to correctly evaluate the results of their work but also to adjust their actions in response to changes in the socio-economic environment. Thus, reflection is an important tool for the continuous improvement of pedagogical skills and the development of economic competence [5].

For the effective development of economic competence in future technology teachers, it is crucial to integrate reflection as an inseparable part of the

educational process. Reflection, being a process of understanding and evaluating one's own pedagogical activities, should not only serve as a self-assessment tool for teachers but also as a powerful mechanism for forming deep economic knowledge and skills in students. Teachers should actively use reflection not only for self-improvement but also to engage students in considering the economic aspects of their activities.

One of the most effective ways to integrate reflection into pedagogical practice is through the use of economic case analysis, which allows students to learn to make economic decisions by applying theoretical knowledge to practical situations. For example, a teacher might use the case method, where students are presented with specific economic situations (such as managing a company's budget or determining a startup's financial strategy). Students must not only solve the problem but also justify their decision from an economic perspective, analyzing the strengths and weaknesses of the proposed options. After discussing the results with the students and receiving their feedback, the teacher can adjust their teaching methods and help students reflect more deeply on their decisions.

Another important aspect is role-playing on economic topics. The teacher can organize situations in which students make decisions as managers or entrepreneurs, helping develop economic competence through practical tasks. For example, students can take on roles as business participants, conduct economic calculations, allocate resources, plan budgets, and assess the effectiveness of financial usage. This approach not only fosters the development of critical thinking in students but also helps them better understand the connection between theoretical knowledge and real economic processes.

Furthermore, for the effective formation of economic competence, reflection should be oriented not only towards improving teaching methods but also towards developing students' independence in making economic decisions. Teachers should encourage students to independently analyze situations using various tools,

such as diagnostics, self-assessment, and feedback. For example, students can be involved in analyzing financial reports, creating business plans, or evaluating investment effectiveness. All these tasks develop practical skills and abilities that are critically important for successful professional activity in the modern economic environment.

To effectively develop economic competence in future technology teachers through reflection, it is necessary to develop a system of practical tasks that will foster the development of critical thinking and the ability to analyze and adjust pedagogical activity in the context of economic knowledge. Specifically, tasks could include both individual and group projects, allowing students to work both independently and in teams to solve economic problems and address practical challenges.

One effective method is the analysis of economic case studies. Students can be given tasks in which they must analyze an economic situation in conditions of limited resources. For example, a student receives a case in which they need to develop a budget for implementing a new technology in the educational process. The goal is not only to allocate financial resources but also to consider economic risks and potential profits. After completing the task, the student must write a reflective report in which they assess which economic strategies were most effective, which need adjustment, and explore alternatives that could have yielded better results.

Group projects allow students to work together, exchanging ideas, which promotes the development of their reflective competence. One possible project could focus on planning a school business, such as creating and selling eco-friendly products. Students would need to develop a business plan, taking into account costs for materials, production, distribution, and marketing. At the end of the project, they should conduct a collective reflection: analyze how effective the

business model choice was, which decisions helped achieve the best results, and where economic adjustments could have been made to increase profitability.

Role-playing games are an excellent tool for developing reflection, as they allow students to experience practical situations where they must make economically justified decisions. For example, a game can be organized in which students play the roles of managers from different departments of an educational institution (finance, marketing, administration). Within the game, they must decide how to optimize costs for educational materials while maintaining the quality of the educational process. After the game is completed, students conduct a reflective discussion: which strategies were the most effective, and what could be changed to improve the economic efficiency of the institution. This activity allows students to delve deeper into economic processes and the decisions made.

Situational tasks enable students to practically apply the knowledge they've gained in conditions of limited time and information. One example of such a task is when students are provided with a scenario where a school must reduce expenses due to budget cuts. They need to analyze various options for reducing costs: optimizing purchases, cutting salaries, or reviewing the number of educational activities. The student must assess which approach would be the most economically viable and justify their decision. Reflection in this case includes not only analyzing the choice but also evaluating the possible consequences for the educational process.

To make reflection a systematic part of the preparation for future technology teachers, it must be integrated into pedagogical programs. For example, while studying the economic part of the technology course, students can regularly assess their own pedagogical activities through feedback they receive from colleagues and instructors. They can participate in specialized seminars where specific economic situations are discussed and possible solutions are analyzed. These integrated activities allow students not only to grasp economic concepts but also to

develop the ability to independently analyze and adjust their activities based on the knowledge gained.

Including reflection in the educational process should become an essential part of pedagogical programs, so that future teachers can not only study theory but also apply it practically in real-life situations, developing self-control, critical thinking, and the ability to continuously improve their economic competencies.

Moreover, an important step is creating conditions for the ongoing professional development of teachers through participation in training sessions, seminars, and courses that promote the improvement of economic knowledge and skills. This will allow teachers not only to learn new teaching methods but also to actively implement innovative economic approaches into the educational process. Regular practice of reflection, in turn, will contribute to the development of future technology teachers' ability to self-monitor, critically assess their own activities, and seek ways to improve them, which is essential for ensuring high-quality teaching and the preparation of economically competent specialists.

Ultimately, integrating reflection into the process of forming economic competence in future technology teachers will prepare them for effective professional activity in a rapidly changing economic environment, which is crucial for the overall development of the educational system.

Conclusions. In the process of researching the development of economic competence in future technology teachers through reflection, the importance of integrating this tool into the pedagogical process was identified. Reflection, as the foundation for critically analyzing one’s own pedagogical activities, contributes not only to the professional self-improvement of the teacher but also to the effective implementation of economic knowledge in the educational process.

Reflective tools, including the analysis of economic case studies, role-playing games, and group projects, provide students with the opportunity to not only acquire economic knowledge but also develop practical skills for applying it

in real-world conditions. Through such tasks, future educators gain the ability to independently analyze economic situations, identify effective solutions, and adjust their own activities while considering various economic aspects. This fosters not only professional competence but also reflective competence, which is essential for successful professional activity in the context of an ever-changing socio-economic environment.

Integrating reflection into pedagogical programs for technology teacher preparation will enable students to develop the ability for self-monitoring and continuous professional development, which is vital for enhancing the effectiveness of their work in modern education. An important condition for this is creating an environment where reflection becomes part of the teachers' daily activities, as well as systematically using self-assessment and feedback methods, which will contribute to improving pedagogical practices.

Thus, the development of economic competence through reflection is not only an important aspect of the professional preparation of future technology teachers but also a necessary condition for improving the quality of education and ensuring the adaptability of pedagogical activities in the face of economic changes. Including reflection in the curriculum will promote the preparation of highly qualified educators capable of effectively implementing innovative economic approaches into the educational process.

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