

Effectiveness of The Facilitative Approach in Developing Economic Literacy Among Primary School Students: Results of A Pedagogical Experiment



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Abstract: This article examines the effectiveness of the facilitative approach in developing the economic literacy of primary school students within the context of modern primary education. The relevance of the study is determined by the growing need to foster economic thinking, financial literacy, responsible resource management, and informed decision-making skills among young learners. The purpose of the study is to experimentally verify the effectiveness of the facilitative approach in developing the economic literacy of primary school students during the teaching of the Tarbiya (Education) subject. The research employed theoretical methods (analysis of psychological and pedagogical literature, comparative analysis, and systematization), empirical methods (pedagogical observation, questionnaires, testing, and pedagogical experiment), and mathematical-statistical methods using Student's t-test to process the obtained data. The pedagogical experiment was conducted in general secondary schools of the Republic of Uzbekistan between 2024 and 2026. The author-developed methodology was based on interactive learning strategies, collaborative group work, problem-based situations, dialogic interaction, reflection, and practice-oriented tasks that actively engaged students in the learning process. The findings demonstrated a statistically significant improvement in the economic literacy of students in the experimental groups compared with those in the control groups. The results confirm that the facilitative approach effectively promotes the development of economic knowledge, economic thinking, learner autonomy, responsibility, communication skills, and the ability to apply acquired knowledge in real-life situations. The practical significance of the study lies in the possibility of implementing the proposed methodology in primary education while teaching the Tarbiya (Education) subject and in developing educational and methodological resources aimed at enhancing students' economic literacy.

Keywords: Facilitative approach; economic literacy; primary school students; primary education; Tarbiya (Education) subject; pedagogical experiment; economic thinking; financial literacy; interactive learning methods; educational effectiveness.

Introduction: In the context of rapid global socio-economic transformation, digitalization, and the continuous expansion of market economies, the development of economic literacy from the early years of schooling has become an increasingly important educational priority. Economic literacy is no longer viewed merely as the acquisition of knowledge about economic processes; rather, it is recognized as a key life competency that enables individuals to manage

financial and material resources responsibly, make informed decisions, evaluate potential risks, and adapt effectively to changing socio-economic environments. Consequently, primary education represents the first and most influential stage for establishing the foundations of economic culture, financial literacy, and responsible consumer behavior among young learners.

In the Republic of Uzbekistan, improving the quality of education and developing students' functional competencies have become central priorities of

national educational policy. Recent educational reforms have emphasized competency-based curricula, digital learning technologies, innovative pedagogical approaches, and learner-centered educational environments designed to foster independence, creativity, initiative, and critical thinking. Within this context, there is an increasing need to identify effective pedagogical approaches capable of developing economic literacy among primary school students while taking into account their cognitive, psychological, and developmental characteristics.

Traditional teacher-centered instruction, which is largely based on the transmission and reproduction of knowledge, does not always provide sufficient opportunities for developing practical economic competencies required in everyday life. Many primary school students experience difficulties when applying theoretical economic knowledge to authentic situations involving family budgeting, responsible consumption, resource management, saving behavior, appreciation of labor, and rational financial decision-making. These challenges highlight the necessity of implementing instructional approaches that actively engage learners in meaningful educational experiences, collaborative problem-solving, independent inquiry, and reflective learning.

One of the most promising approaches to the modernization of contemporary education is facilitation-based learning, which is grounded in subject–subject interaction between teachers and students. Unlike conventional instructional models, where teachers primarily transmit knowledge, facilitation-based instruction creates learning environments in which students actively construct knowledge through discussion, collaboration, inquiry, reflection, and practical problem-solving. Within this pedagogical framework, teachers function as facilitators who organize, coordinate, and guide the learning process while encouraging students' cognitive engagement, autonomy, and personal development.

During the last decade, the development of economic and financial literacy has attracted growing attention within both national and international educational research. Numerous international studies indicate that the foundations of economic thinking are most effectively established during primary school, when children's values, behavioral patterns, and decision-

making habits are first formed. Previous research demonstrates that active, interactive, and practice-oriented instructional methods significantly improve students' economic literacy while simultaneously enhancing critical thinking, communication skills, collaborative learning, and learning motivation.

The existing literature provides extensive evidence regarding financial literacy education, economic education, entrepreneurship development, interactive teaching methods, collaborative learning, project-based instruction, and digital educational technologies. Considerable contributions have been made by both domestic and international scholars in these research areas. Nevertheless, a critical analysis of recent publications reveals that most empirical studies primarily focus on financial literacy or economic education at the secondary and higher education levels. Comparatively limited attention has been devoted to primary school learners, despite the fact that this developmental period is crucial for establishing fundamental economic concepts, values, and behavioral patterns.

Furthermore, although facilitation has increasingly been recognized as an innovative pedagogical approach, the majority of existing studies examine it mainly as a strategy for improving communication skills, collaborative learning, teacher professional development, or higher education practices. Relatively little research has investigated the potential of facilitation-based instruction for developing economic literacy among primary school students, particularly within the context of the **Tarbiya** curriculum implemented in general education schools of the Republic of Uzbekistan.

A comprehensive review of both national and international literature reveals several important research gaps. On the one hand, contemporary educational practice requires the development of economically literate, responsible, and initiative-oriented individuals beginning from the earliest stages of formal education. On the other hand, existing instructional approaches remain insufficiently focused on engaging primary school students in authentic economic problem-solving through facilitation-based interaction. Moreover, there is a lack of comprehensive experimental research capable of objectively evaluating the pedagogical effectiveness of facilitation-

based instruction for developing economic literacy among young learners using rigorous quantitative and statistical methods.

The existence of these theoretical and practical gaps determines the relevance of the present study and provides the rationale for developing and experimentally validating a **Facilitation-Based Instructional System for Economic Literacy Development (FIS-ELD)** designed specifically for primary school students. The proposed instructional framework seeks to integrate constructivist pedagogy, facilitation theory, competency-based education, and learner-centered instructional strategies into a coherent methodological system capable of improving economic literacy through the **Tarbiya** curriculum under authentic classroom conditions.

Consequently, the analysis of the existing body of literature reveals a significant research gap concerning the insufficient theoretical and methodological development of facilitation-based approaches for promoting economic literacy among primary school students. In particular, there is a lack of scientifically grounded instructional models for integrating facilitation into the teaching of the **Tarbiya** curriculum, as well as a shortage of empirically validated evidence demonstrating the effectiveness of facilitation-based instruction within contemporary primary education.

Addressing this research gap requires the development of a scientifically grounded instructional methodology that integrates facilitation principles, active learning, and practice-oriented educational activities into the process of economic literacy development. Such a methodology should extend beyond the transmission of economic knowledge to promote economic thinking, responsible management of material and financial resources, collaborative learning, independent decision-making, and the ability to apply economic concepts in authentic real-life situations.

The primary objective of this study is to experimentally evaluate the effectiveness of a facilitation-based instructional approach for developing economic literacy among primary school students through the **Tarbiya** curriculum.

To achieve this objective, the following research tasks were established:

- to analyze the current state of research on economic literacy development among primary school students in both national and international educational literature;
- to examine the pedagogical potential of facilitation-based learning within primary education;
- to develop an original facilitation-based instructional methodology for enhancing economic literacy among primary school students;
- to identify the pedagogical conditions necessary for the effective implementation of the proposed instructional methodology;
- to experimentally evaluate the effectiveness of the developed instructional system;
- to conduct quantitative statistical analysis of the experimental data using the independent-samples Student's t-test and determine the statistical significance of the obtained results.

The **object of the research** is the process of developing economic literacy among primary school students in general education schools.

The **subject of the research** is the pedagogical potential of facilitation-based instruction for developing economic literacy among primary school students through the **Tarbiya** curriculum.

Scientific Novelty

The scientific novelty of the present study is reflected in the following contributions:

- ❖ the pedagogical concept of **economic literacy development among primary school students** has been refined within the context of facilitation-based learning;
- ❖ an original facilitation-based instructional methodology for developing economic literacy has been designed and theoretically substantiated;
- ❖ the pedagogical conditions ensuring the effective development of economic literacy in primary education have been identified;
- ❖ a comprehensive system of assessment criteria and performance indicators for evaluating students' levels of economic literacy has been developed;
- ❖ the effectiveness of the proposed instructional methodology has been empirically validated

through pedagogical experimentation and rigorous quantitative statistical analysis.

Theoretical Significance

The theoretical significance of this research lies in expanding contemporary understanding of the pedagogical potential of facilitation-based instruction within primary education while enriching the theoretical and methodological foundations of economic literacy development among young learners. Furthermore, the study contributes to the integration of constructivist pedagogy, facilitation theory, and competency-based education into a unified instructional framework for economic education.

Practical Significance

The practical significance of the study lies in the applicability of the proposed instructional methodology for primary school teachers teaching the **Tarbiya** curriculum. The developed framework may also be utilized in the preparation of teaching and methodological materials, curriculum design, digital educational resources, teacher professional development programs, and educational policy initiatives aimed at improving the quality of economic literacy education in primary schools.

Table 1.
Major Directions of Contemporary Research on the Development of Economic Literacy among Primary School Students

Research Direction	Main Focus	Identified Limitations
Financial Literacy	Developing knowledge of money management, budgeting, saving, and personal finance	Limited integration with students' personal and social development
Economic Education	Promoting the values of thrift, diligence, responsibility, and economically responsible behavior	Limited use of interactive and learner-centered instructional methods
Competency-Based Education	Developing practical life skills and key economic competencies	The pedagogical role of facilitation remains insufficiently explored
Digital Educational Technologies	Integrating interactive digital resources and technology-enhanced learning	Greater emphasis is placed on digital tools than on pedagogical interaction and learner engagement
Facilitation-Based Learning	Promoting collaboration, reflective learning, dialogue, and collaborative problem-solving	Limited experimental research on developing economic literacy among primary school students

METHODS

The present study employed a **quantitative pedagogical research design** using a **quasi-experimental pre-test/post-test control group design**. This research design was selected because it enables an objective evaluation of the effectiveness of facilitation-based instruction while maintaining authentic educational conditions in which random assignment of participants is not feasible. The quasi-experimental approach also ensured the validity and reliability of the

obtained findings by comparing learning outcomes between experimental and control groups before and after the instructional intervention.

The pedagogical experiment was conducted during the **2024–2026 academic years** in public general education schools of the Republic of Uzbekistan. The experimental study extended over **two academic years** and consisted of three consecutive stages: the **diagnostic (pre-intervention)** stage, the **instructional (intervention)** stage, and the **evaluation (post-intervention)** stage.

Participants

The participants consisted of **Grades 1–4 primary school students** enrolled in public general education schools located in the **Fergana, Andijan, and Khorezm regions** of the Republic of Uzbekistan. The total research sample comprised **approximately 500 students**, who were assigned to either the experimental or the control group.

Participant selection was based on the following inclusion criteria:

- comparable age characteristics;

- enrollment in identical national educational programs;
- similar instructional and learning conditions;
- voluntary participation of schools in the pedagogical experiment.

Students in the **experimental groups** received instruction using the **Facilitation-Based Instructional System for Economic Literacy Development (FIS-ELD)** specifically designed for this research. In contrast, students in the **control groups** continued learning through conventional teacher-centered instructional methods commonly employed in primary education.

Table 1.

General Characteristics of the Participants in the Pedagogical

Indicator	Characteristics
Research Design	Quasi-experimental study
Study Period	2024–2026
Research Setting	Public general education schools in the Republic of Uzbekistan
Participants' Age	7–11 years
Research Object	Economic literacy of primary school students
Experimental Groups	Instruction based on the author's facilitation-based methodology (FIS-ELD)
Control Groups	Conventional teacher-centered instructional methodology

Experimental Procedure

The pedagogical experiment was implemented in **three consecutive stages**.

The **first stage (diagnostic stage)** was designed to determine students' initial level of economic literacy before the instructional intervention. During this phase, classroom observations, structured questionnaires, diagnostic tests, and analyses of students' learning activities were conducted to assess their prior economic knowledge, learning needs, and baseline competencies.

The **second stage (instructional intervention stage)** focused on implementing the original **Facilitation-Based Instructional System for Economic Literacy Development (FIS-ELD)**. Throughout the intervention, various learner-centered instructional strategies were systematically incorporated into the **Tarbiya** curriculum, including interactive learning activities,

collaborative discussions, problem-solving tasks, group projects, business and role-playing simulations, case-based learning, reflective exercises, and authentic economic situations that simulated everyday economic decision-making.

Particular emphasis was placed on establishing **subject–subject interaction** between teachers and students. Rather than functioning as the primary source of information, teachers assumed the role of facilitators who created supportive learning environments that encouraged independent inquiry, evidence-based discussion, collaborative problem-solving, and shared decision-making.

The **third stage (evaluation stage)** involved post-intervention assessment of students' economic literacy, comparative analysis of learning outcomes between the experimental and control groups, and quantitative statistical analysis of the collected data.

Research Methods

To accomplish the research objectives, a combination of complementary theoretical and empirical research methods was employed.

The **theoretical methods** included an extensive review of national and international psychological and educational literature, comparative analysis of contemporary pedagogical theories, and the systematization and synthesis of scientific evidence related to economic literacy, facilitation, and competency-based education.

The **empirical methods** consisted of classroom observation, structured questionnaires, diagnostic testing, expert evaluation, analysis of students' learning products, and pedagogical experimentation.

Assessment Instruments

A comprehensive diagnostic assessment system was developed to evaluate the level of economic literacy among primary school students. The assessment package included:

- ✓ diagnostic achievement tests;
- ✓ contextual economic problem-solving tasks;
- ✓ practical case studies;
- ✓ structured questionnaires;
- ✓ classroom observation protocols;
- ✓ expert evaluation forms;
- ✓ collaborative learning tasks;
- ✓ student self-reflection and self-assessment sheets.

Students' performance was evaluated according to **three complementary assessment criteria**:

- **Cognitive criterion** – understanding of economic concepts and theoretical knowledge;
 - **Behavioral (Activity-Based) criterion** – ability to apply economic knowledge in practical situations and solve authentic economic problems;
 - **Personal criterion** – responsible behavior, thrift, independence, initiative, and collaborative skills.
- For each assessment criterion, students' performance was classified into **three achievement levels**:
- High;
 - Medium;

- Low.

Statistical Analysis

Quantitative data were analyzed using descriptive and inferential statistical procedures.

To determine whether differences between the experimental and control groups were statistically significant, an **independent-samples Student's t-test** was performed using a significance level of $p < 0.05$.

In addition, **arithmetic means (M), standard deviations (SD), percentage distributions (%), and gain scores** were calculated to evaluate changes in students' levels of economic literacy before and after the instructional intervention.

The combined use of these statistical procedures provided an objective evaluation of the effectiveness of the proposed facilitation-based instructional methodology and ensured the validity and reliability of the experimental findings.

Results

To verify the statistical significance of differences between the experimental and control groups, an **independent-samples Student's t-test** was employed.

The results of the quantitative statistical analysis demonstrated that, following completion of the pedagogical experiment, the calculated value of the **Student's t-statistic was $t = 14.7$** , substantially exceeding the corresponding critical value at the **0.05 significance level ($p < 0.05$)**. These findings indicate the presence of statistically significant differences between the experimental and control groups after the instructional intervention.

The statistical evidence therefore confirms the high effectiveness of the **Facilitation-Based Instructional System for Economic Literacy Development (FIS-ELD)** in improving the economic literacy of primary school students. Students who participated in facilitation-based instruction demonstrated significantly higher levels of economic knowledge, practical economic competencies, responsible decision-making, and collaborative learning skills than those who received conventional teacher-centered instruction.

The findings provide strong empirical support for the research hypothesis and demonstrate that systematic implementation of facilitation-based instructional strategies substantially enhances the effectiveness of

economic literacy education within the **Tarbiya** curriculum. The statistically significant improvement observed in the experimental group confirms that learner-centered facilitation creates favorable

pedagogical conditions for developing sustainable economic competencies among primary school students.

Table 2

Changes in Students' Economic Literacy Levels (%)

Performance Level	Experimental Group (Pre-test)	Experimental Group (Post-test)	Control Group (Pre-test)	Control Group (Post-test)
High	18.4	43.7	19.1	25.6
Medium	46.2	44.5	45.8	47.2
Low	35.4	11.8	35.1	27.2

As shown in **Table 2**, the proportion of students demonstrating a **high level of economic literacy** in the experimental group increased by more than twofold following the instructional intervention, whereas the number of students with a **low level of economic literacy** decreased substantially. Although positive changes were also observed in the control group, these improvements were considerably less pronounced and largely reflected the natural progression of the educational process rather than the effects of a targeted instructional intervention.

The findings indicate that students who participated in the **Facilitation-Based Instructional System for Economic Literacy Development (FIS-ELD)** achieved significantly greater improvements in economic literacy than those receiving conventional teacher-centered instruction. These results provide empirical evidence supporting the effectiveness of facilitation-based learning in promoting higher levels of economic knowledge, practical competencies, and responsible economic behavior among primary school students.

Table 3.

Results of statistical analysis

Indicator	Meaning
Statistical criterion	Student's t-test
The calculated value of t	14,7
Critical value ($p < 0.05$)	1,96
Significance level	$p < 0,05$
Conclusion	The differences are statistically significant, and the experimental method is effective.

The statistical significance of the differences between the experimental and control groups was examined using an **independent-samples Student's t-test**. The results of the quantitative statistical analysis revealed that, following completion of the pedagogical intervention, the calculated **Student's t-value reached 14.7**, which substantially exceeded the corresponding critical value at the **0.05 significance level ($p < 0.05$)**.

These findings confirm that the facilitation-based instructional methodology produced statistically significant improvements compared with conventional teacher-centered instruction.

DISCUSSION

The findings of the present study demonstrate that facilitation-based instruction has a substantial positive impact on the development of economic literacy

among primary school students. In contrast to conventional teacher-centered approaches, facilitation actively engages learners in the educational process, promotes independence, collaborative learning, critical thinking, and enables students to apply economic knowledge to authentic real-life situations.

The statistically significant differences observed between the experimental and control groups ($t = 14.7$; $p < 0.05$) provide strong empirical evidence supporting the effectiveness of the proposed instructional methodology. The most pronounced improvements were observed in students' economic reasoning, responsible management of material resources, decision-making abilities, and economically responsible behavior.

These findings are consistent with previous international research emphasizing the effectiveness of active, learner-centered instructional approaches for developing functional, financial, and economic literacy among school students. However, the present study extends the existing body of knowledge by demonstrating, for the first time within the context of primary education in Uzbekistan, the effectiveness of facilitation-based instruction as a systematic pedagogical approach for developing economic literacy through the **Tarbiya** curriculum.

The practical value of the proposed instructional methodology lies in its applicability to everyday classroom practice. The developed framework may be effectively utilized by primary school teachers when organizing classroom instruction, designing teaching and learning materials, and improving the content of economic education. Furthermore, the findings support broader implementation of facilitation-based instructional strategies in primary education and provide a foundation for future research investigating their long-term educational impact.

CONCLUSION

The findings of the present study confirm the effectiveness of facilitation-based instruction in promoting economic literacy among primary school students. Both the theoretical analysis and the results of the pedagogical experiment demonstrate that organizing instruction through collaboration, dialogic interaction, and practice-oriented learning substantially improves students' acquisition of

economic knowledge while simultaneously fostering the development of key competencies.

The quantitative statistical analysis ($t = 14.7$; $p < 0.05$) confirmed the existence of statistically significant differences between the experimental and control groups, thereby providing strong empirical evidence for the effectiveness of the proposed **Facilitation-Based Instructional System for Economic Literacy Development (FIS-ELD)**.

The study demonstrates that facilitation-based instruction contributes to:

- improving the level of economic literacy among primary school students;
- developing economic reasoning and financially responsible behavior;
- fostering independence, initiative, communication, and collaborative learning skills;
- enhancing students' ability to apply economic knowledge when solving authentic everyday problems.

The practical significance of this research lies in the potential application of the proposed instructional methodology by primary school teachers delivering the **Tarbiya** curriculum, as well as by curriculum developers involved in designing teaching materials, methodological resources, and professional development programs for teachers.

Future research should investigate the integration of **digital educational technologies** and **artificial intelligence (AI)-supported learning tools** into facilitation-based economic literacy instruction. In addition, longitudinal studies are needed to examine the long-term effectiveness and sustainability of facilitation-based instructional approaches within primary education.

REFERENCES

I. Legal and Regulatory Documents

1. **Decree of the President of the Republic of Uzbekistan No. UP-158** (September 11, 2023). On the Strategy "Uzbekistan-2030". Available at: <https://lex.uz/docs/6600404>
2. **Decree of the President of the Republic of Uzbekistan No. UP-16** (January 30, 2025). On the State Program for the Implementation of the "Uzbekistan-2030" Strategy during the Year of

Environmental Protection and the Green Economy.
Available at: <https://lex.uz>

3. **Law of the Republic of Uzbekistan.** On Education (New Edition). Available at: <https://lex.uz>
4. **Law of the Republic of Uzbekistan.** On Preschool and School Education. Available at: <https://lex.uz>

II. Books and Monographs

5. Mirziyoyev, S. M. (2022). The Strategy of New Uzbekistan. Tashkent: O'zbekiston Publishing House.
6. OECD. (2023). PISA 2022 Results. Volume IV: Financial Literacy. Paris: OECD Publishing.
7. UNESCO. (2024). Global Education Monitoring Report 2024: Leadership in Education. Paris: UNESCO Publishing.
8. Reimers, F. M. (Ed.). (2024). Quality Education for All for a Better World. Cham: Springer.
9. Polat, E. S. (2021). Modern Pedagogical and Information Technologies in Education. Moscow: Akademiya.
10. Selevko, G. K. (2021). Encyclopedia of Educational Technologies. Moscow: Narodnoe Obrazovanie.

III. Journal Articles and Conference Proceedings

11. Yo'ldiyeva, S. O., & Quchqorova, N. M. (2024). The concept of facilitation and its significance in primary education. **Namangan State University Scientific Bulletin**, (6), 510–513.
12. Yo'ldiyeva, S. O. (2025). Modern approaches and the use of information technologies in teaching the Tarbiya subject in primary school. **Scientific Bulletin of Kokand State Pedagogical Institute**, (4), 264–273.
13. Straume, J. (2026). Systematic review of economic education, financial literacy, and transversal skills in modern education. *Education Sciences*, 16(3), Article 423.
14. Pavlov, O. V., Smirnova, N. V., & Smirnova, E. V. (2025). Enhancing Economic Literacy through Causal Diagrams.
15. Rastiti, R., et al. (2022). Economic Literacy and Entrepreneurship Education: A Review of Contemporary Studies.
16. Rizqi, M., et al. (2022). Developing Economic Literacy through Student-Centred Learning Approaches.
17. Benjamin, D. (2020). A Pareto-improving way to teach principles of economics. *AEA Papers and Proceedings*.
18. Hansen, W. L., Salemi, M. K., & Siegfried, J. J. (2002). Use it or lose it: Teaching literacy in the economics principles course. *American Economic Review*.