DEVELOPING FUNCTIONAL LITERACY OF STUDENTS BASED ON THE PISA INTERNATIONAL RESEARCH

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Annotation. This article explores the significance of developing students' functional literacy in accordance with the principles of the PISA (Programme for International Student Assessment) international research. Functional literacy refers to learners' ability to apply knowledge and skills in real-life contexts rather than relying solely on theoretical understanding. The paper discusses the components of functional literacy assessed by PISA—reading, mathematical, and scientific literacy—and examines effective pedagogical strategies for improving these competencies. Challenges faced by educators in preparing students for PISA-like tasks are also analyzed, along with practical recommendations to enhance learning outcomes. The study concludes that focusing on functional literacy helps students become more independent, critical thinkers, and active participants in modern society.

Аннотация. В данной статье рассматривается процесс развития функциональной грамотности учащихся на основе международного исследования PISA. Функциональная грамотность включает способность применять знания и навыки в реальных жизненных ситуациях. В работе анализируются компоненты функциональной грамотности, оцениваемые в рамках PISA: читательская, математическая и естественно-научная грамотность. Также обсуждаются эффективные педагогические методы, направленные на улучшение этих навыков.

Отдельное внимание уделяется трудностям, с которыми сталкиваются преподаватели, и предлагаются рекомендации по их преодолению. В заключение подчеркивается, что развитие функциональной грамотности способствует формированию самостоятельных и критически мыслящих учащихся.

Annotatsiya. Ushbu maqolada PISA xalqaro tadqiqoti asosida o‘quvchilarda funksional savodxonlikni rivojlantirish masalasi yoritiladi. Funksional savodxonlik olingan bilimlarni real hayotiy vaziyatlarda qo‘llash qobiliyatini anglatadi. Maqolada PISA baholaydigan savodxonlik turlari—o‘qish savodxonligi, matematika savodxonligi va tabiiy fanlar bo‘yicha savodxonlik—tahlil qilinadi. Shuningdek, ushbu kompetensiyalarni oshirishga xizmat qiluvchi samarali pedagogik yondashuvlar ko‘rib chiqiladi.
O‘qituvchilar duch keladigan qiyinchiliklar va ularni bartaraf etish bo‘yicha amaliy tavsiyalar ham beriladi. Xulosa qismida funksional savodxonlikni rivojlantirish o‘quvchilarning mustaqil va tanqidiy fikrlovchi shaxslar bo‘lib shakllanishiga xizmat qilishi ta’kidlanadi.

Keywords: Functional literacy, PISA, competencies, critical thinking, real-life tasks

Ключевые слова: функциональная грамотность, PISA, компетенции, критическое мышление

Kalit so‘zlar: funksional savodxonlik, PISA, kompetensiyalar, tanqidiy fikrlash

Introduction. In the era of global transformation, education systems worldwide aim not only to transfer knowledge but also to cultivate practical skills that enable students to solve authentic problems. PISA, conducted by the OECD, plays a crucial role in evaluating how well students can use their knowledge in real-life contexts. Unlike traditional school assessments, PISA focuses on functional literacy—students’ ability to interpret information, analyze situations, and make decisions independently. This shift requires educators to revise teaching methods and emphasize problem-based, inquiry-based, and competency-based learning approaches.

Functional Literacy Within the PISA Framework

PISA defines functional literacy through three core domains:

1. Reading Literacy

Reading literacy involves the capacity to understand, interpret, and evaluate written texts. It trains students to extract key ideas, distinguish facts from opinions, and reflect on the purpose of a text. PISA tasks often require working with charts, instructions, online messages, and non-linear texts, which reflect modern information formats.

2. Mathematical Literacy

Mathematical literacy is the ability to apply mathematical concepts to everyday life. Students must analyze real-world problems, interpret graphs, calculate values, and justify solutions. This approach helps students move beyond memorized formulas toward applicable reasoning.

3. Scientific Literacy

Scientific literacy refers to the ability to evaluate scientific information, understand data, and make rational decisions regarding science-related issues. PISA emphasizes inquiry, hypothesis testing, and argumentation based on evidence.

Together, these literacies shape a holistic understanding of how knowledge functions outside the classroom.

Methods for Developing Functional Literacy

1. Problem-Based Learning (PBL)

Students are presented with real-life problems that require research, teamwork, and critical thinking. This method mirrors PISA-style tasks and encourages independent decision-making.

2. Integrated Learning

Combining subjects—such as mathematics and science or reading and ICT—helps students make connections and see knowledge as interconnected rather than isolated.

3. Working With Authentic Materials

Using newspaper articles, infographics, maps, online platforms, and data charts provides students with real-life content similar to PISA test formats.

4. Designing Open-Ended Questions

Teachers should focus on tasks that require explanation, justification, and analysis instead of simple recall. Examples include interpreting diagrams or evaluating problem solutions.

5. Collaborative Activities

Pair and group work develop communication, negotiation, and reasoning skills, all central to functional literacy development.

Challenges in Developing Functional Literacy

Teachers often encounter the following difficulties:

- Traditional teaching models: Many classrooms still prioritize memorization instead of analytical thinking.
- Limited resources: Some schools lack technological tools or authentic materials needed for practice.
- Teacher preparation: Educators may require additional training to design PISA-style lessons.
- Students' low motivation: Students accustomed to standard tests may initially struggle with open-ended tasks requiring deeper reasoning.

Overcoming these challenges requires systematic support, professional development programs, and integration of competency-based curricula. Recommendations for Effective Implementation

1. Introduce PISA-like tasks regularly to familiarize students with real-life problem-solving.
2. Encourage independent research projects where students collect, analyze, and present information.
3. Use digital learning platforms to enhance reading, mathematical, and scientific literacy.
4. Provide teacher training on designing competency-based lessons.
5. Promote classroom discussions to strengthen argumentation and critical thinking skills.
6. Align assessments with functional literacy outcomes, not just theoretical knowledge.

Conclusion. Developing functional literacy is essential for preparing students to succeed in modern society. PISA-based approaches provide valuable frameworks for shaping students' ability to think critically, evaluate information, and apply knowledge in

practical contexts. Although challenges exist, systematic planning and modern pedagogical strategies can significantly enhance learning outcomes. Ultimately, promoting functional literacy transforms students into active, competent, and future-oriented individuals capable of navigating complex real-world situations. **References**

1. V Samadova “Simile is one of the oldest form of a speech” Science and innovation in education system 1(4),82-83,2022
2. V Samadova “SIMILE IS A TYPE OF METAPHOR” Science and innovation in education system 1(4),84-86,2022
3. 3.V Samadova “SIMILARITIES AND DIFFERENCES BETWEEN METAPHOR AND SIMILES IN ENGLISH” Theoretical aspects in the formation of pedagogical sciences 1(4),258-260,2022
4. Aytmatov, C. (1980). *The Day Lasts More Than a Hundred Years.* Moscow: Progress Publishers.
5. Woolf, V. (1925). *Mrs. Dalloway.* London: Hogarth Press.
6. Karimov, M. (2019). *Modern Uzbek Literature: Continuity and Transformation.* Tashkent State University Press.
7. Richards, J. C., & Rodgers, T. S. (2014). *Approaches and Methods in Language Teaching.* Cambridge University Press.

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