



MODERN PROBLEMS IN EDUCATION AND THEIR SCIENTIFIC  
SOLUTIONS

THE METHODOLOGICAL ROLE OF THE METHODOLOGIST  
IN INTEGRATING STEAM EDUCATION INTO PRESCHOOL EDUCATION  
PROGRAMS

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**Аннотация:** В статье рассматриваются вопросы развития профессиональной и методической компетентности методистов дошкольных образовательных организаций в условиях внедрения инклюзивного, игрового и STEAM-ориентированного обучения. Проанализирована роль игровой деятельности в когнитивном, социально-эмоциональном и творческом развитии детей с различными образовательными потребностями. Обосновано значение семинаров, программ наставничества, онлайн-курсов, профессиональных сообществ и рефлексивных практик в системе непрерывного профессионального развития методистов. Особое внимание уделено методам самооценки, ведению рефлексивных журналов и проведению *action research* как средствам повышения профессиональной эффективности. Результаты исследования направлены на совершенствование методической деятельности и расширение практики инклюзивного образования в системе дошкольного образования.

**Ключевые слова:** инклюзивное образование, дошкольное образование, методист, игровое обучение, STEAM-образование, профессиональное развитие, рефлексивная практика.

**Abstract:** This article explores the development of professional and methodological competence of preschool education methodologists within the context of inclusive, play-based, and STEAM-oriented approaches. The study analyzes the role of play-based learning in supporting children's cognitive, social-emotional, and creative development, particularly for learners with diverse educational needs. It highlights the importance of continuous professional development through seminars, mentoring programs, online courses, collaborative learning communities, and reflective practices. Methods such as self-assessment, reflective journaling, and action research are examined as effective tools for enhancing methodological effectiveness. The findings contribute to improving the quality of methodological work and expanding inclusive practices in preschool education systems.

**Keywords:** inclusive education, preschool education, methodologist, play-based learning, STEAM education, professional development, reflective practice.

There is a growing emphasis on inclusive education practices aimed at meeting the diverse learning needs of all children in order to ensure that every child, regardless of





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their abilities or background, has access to high-quality educational experiences that support their personal growth and development. Research indicates that play-based learning is a vital component of early childhood education, as it naturally and joyfully fosters children's critical cognitive, social, and emotional skills, as well as creativity and problem-solving abilities.

The integration of STEAM education into preschool curricula is becoming increasingly important, as educators recognize the value of introducing fundamental concepts of science, technology, engineering, and mathematics at an early age. Such early exposure helps to cultivate children's innate curiosity about the world around them and prepares them for future academic success.

Continuous professional development seminars provide methodologists with up-to-date knowledge and skills related to modern teaching techniques. These seminars enable methodologists to collaborate with colleagues, communicate with subject-matter experts, and learn new strategies and tactics that can be applied when supporting teachers.

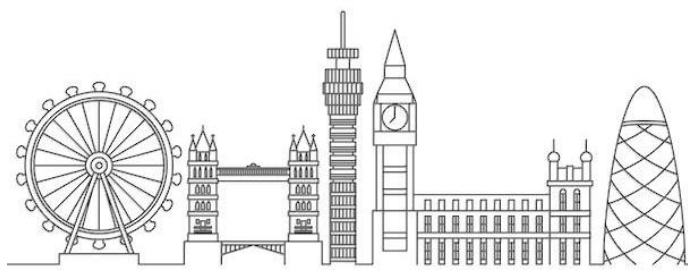
Mentoring programs facilitate the transfer of knowledge and the development of professional skills by connecting novice methodologists with more experienced practitioners. Through opportunities for practical training and coaching, aspiring methodologists can significantly increase their confidence and effectiveness in their professional roles.

Online courses offer methodologists flexible alternatives for continuous professional development in methodology, allowing them to learn at their own pace and gain access to a wide range of resources and materials from leading academics and practitioners.

### **Collaborative Practices**

The establishment of peer learning communities begins with the formation of structured groups of teachers and methodologists who meet regularly to exchange experiences, discuss challenges, and explore new ideas. These communities may include activities such as workshops, collaborative lesson planning, and sharing best practices. Research shows that when educators engage in collaborative reflection, they are more likely to implement effective teaching strategies that enhance children's learning experiences. Moreover, these networks foster a sense of belonging and support among methodologists, helping to reduce feelings of burnout and isolation.

Collaboration among methodologists and specialists from various fields—such as child psychology, social work, and technology—is strongly encouraged. For example, cooperation with technology specialists can lead to the integration of digital educational resources in preschool institutions, while collaboration with child psychologists can provide valuable insights into the developmental needs of young learners. This comprehensive approach not only enhances curriculum quality but also promotes diverse learning styles, thereby expanding educational inclusion. Teams working collaboratively tend to generate more innovative ideas and achieve improved outcomes.







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The establishment of systematic feedback mechanisms, such as regular surveys or suggestion boxes, enables methodologists to share their challenges and experiences related to methodological processes. Based on this feedback, professional development programs can be adjusted to better meet the needs of methodologists. In addition, conducting meaningful discussions during staff meetings fosters open communication and a culture of continuous improvement. Research indicates that organizations that prioritize adaptability and feedback are more successful in achieving their goals.

Focus groups are organized to help teachers discuss their interactions with methodologists and how these interactions have influenced their pedagogical strategies. In addition to providing methodological support, these sessions encourage dialogue among participants and promote a collaborative environment in which teachers can share effective strategies and ideas they have implemented.

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