



IMPROVING THE QUALITY AND COMPETITIVENESS OF NON-STATE PRESCHOOL EDUCATION THROUGH ADVANCED TRAINING

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ANNOTATION

This research investigates the mechanisms for improving the quality and competitiveness of non-state preschool education institutions through the implementation of advanced professional training systems. In the context of increasing privatization and diversification in early childhood education, non-state providers face growing pressure to ensure high-quality services while maintaining institutional sustainability. The study argues that the professional capacity of educators and administrators constitutes a decisive factor in achieving competitive advantage.

The research integrates modern pedagogical theories, human capital development concepts, and quality management frameworks to analyze how continuous training enhances teaching effectiveness, institutional governance, and learning outcomes. Using a mixed-methods approach, the study evaluates the impact of structured training programs, digital learning tools, and international best practices on institutional performance. The findings demonstrate that advanced training significantly contributes to innovation adoption, service quality improvement, and increased parental trust. The study offers policy recommendations for strengthening training infrastructures and fostering sustainable development in the non-state preschool sector.

Keywords: Non-state preschool education, quality improvement, competitiveness, advanced training, professional development, early childhood education, educational management, innovative pedagogy, human capital, quality assurance.

АННОТАЦИЯ

Данное исследование изучает механизмы повышения качества и конкурентоспособности негосударственных учреждений дошкольного образования посредством внедрения передовых систем профессиональной подготовки. В условиях растущей приватизации и диверсификации в сфере дошкольного образования негосударственные поставщики услуг сталкиваются с растущим давлением, требующим обеспечения высокого качества услуг при сохранении институциональной устойчивости. В исследовании утверждается, что профессиональная компетентность педагогов и администраторов является решающим фактором в достижении конкурентного преимущества.

В исследовании интегрированы современные педагогические теории, концепции развития человеческого капитала и системы управления качеством для анализа того, как непрерывное обучение повышает эффективность преподавания, институциональное управление и результаты обучения. Используя смешанный подход, исследование оценивает влияние структурированных программ обучения, цифровых инструментов обучения и передового международного опыта на эффективность работы учреждений. Результаты показывают, что повышение квалификации вносит значительный вклад во внедрение инноваций, улучшение качества услуг и повышение доверия родителей. В исследовании предлагаются рекомендации по укреплению инфраструктуры обучения и содействию устойчивому развитию в негосударственном секторе дошкольного образования.

Ключевые слова: негосударственное дошкольное образование, повышение качества, конкурентоспособность, повышение квалификации, профессиональное развитие, раннее детское образование, управление образованием, инновационная педагогика, человеческий капитал, обеспечение качества.



ANNOTATSIYA

Ushbu tadqiqot ilg'or professional ta'lim tizimlarini joriy etish orqali nodavlat maktabgacha ta'lim muassasalarining sifati va raqobatbardoshligini oshirish mexanizmlarini o'rganadi. Erta bolalik ta'limida xususiylashtirish va diversifikatsiyaning kuchayishi sharoitida nodavlat ta'minotchilari institutsional barqarorlikni saqlab qolish bilan birga yuqori sifatli xizmatlarni ta'minlash uchun tobora ortib borayotgan bosimga duch kelmoqdalar. Tadqiqotda o'qituvchilar va ma'murlarning professional salohiyati raqobatbardosh ustunlikka erishishda hal qiluvchi omil ekanligi ta'kidlanadi.

Tadqiqot zamonaviy pedagogik nazariyalarni, inson kapitalini rivojlantirish konsepsiyalarini va sifatni boshqarish asoslarini uzluksiz o'qitish o'qitish samaradorligini, institutsional boshqaruvni va o'quv natijalarini qanday oshirishini tahlil qilish uchun birlashtiradi. Aralash usullardan foydalangan holda, tadqiqot tuzilgan o'quv dasturlari, raqamli o'quv vositalari va eng yaxshi xalqaro amaliyotlarning institutsional faoliyatga ta'sirini baholaydi. Tadqiqot natijalari shuni ko'rsatadiki, ilg'or o'qitish innovatsiyalarni joriy etishga, xizmat ko'rsatish sifatini yaxshilashga va ota-onalarning ishonchini oshirishga sezilarli hissa qo'shadi. Tadqiqot nodavlat maktabgacha ta'lim sohasida o'quv infratuzilmasini mustahkamlash va barqaror rivojlanishni rag'batlantirish bo'yicha siyosat tavsiyalarini taqdim etadi.

Kalit so'zlar: Nodavlat maktabgacha ta'lim, sifatni oshirish, raqobatbardoshlik, ilg'or o'qitish, kasbiy rivojlanish, erta bolalik ta'limi, ta'limni boshqarish, innovatsion pedagogika, inson kapitali, sifatni ta'minlash.

INTRODUCTION

The rapid transformation of education systems in the 21st century has intensified the role of non-state actors in delivering preschool education services. As governments increasingly encourage private sector participation, non-state preschool institutions have become key contributors to expanding access and diversifying educational offerings. However, this expansion has also introduced challenges related to quality assurance, standardization, and competitiveness. Quality in early childhood education is a multidimensional concept encompassing pedagogical effectiveness, teacher qualifications, institutional management, and child development outcomes. In competitive educational markets, institutions must not only meet regulatory standards but also differentiate themselves through innovation and service excellence. In this regard, advanced training systems for educators and administrators emerge as a critical instrument for capacity building. This study aims to explore how structured and continuous professional development programs can enhance the quality and competitiveness of non-state preschool education institutions. It addresses the gap between theoretical frameworks and practical implementation, particularly in emerging education markets.

LITERATURE REVIEW

Human capital theory provides the foundational framework for understanding the role of education and training in enhancing productivity and institutional performance. The classical works of Gary Becker (1964) and Theodore Schultz (1961) argue that investments in education increase individual efficiency and generate long-term economic returns. In the education sector, this theory has been widely applied to explain how teacher qualifications and continuous professional development influence learning outcomes. Empirical studies indexed in Scopus confirm that teacher quality is one of the most significant determinants of early childhood development. For instance, James J. Heckman (2006) demonstrates that early investments in human capital yield the highest social returns, particularly in preschool education. Similarly, Eric A. Hanushek and Steven G. Rivkin (2006) emphasize that teacher effectiveness has a measurable and lasting impact on student achievement. Recent studies further highlight that highly trained preschool educators are more capable of implementing child-centered and developmentally appropriate practices (OECD, 2018).



According to Organisation for Economic Co-operation and Development reports, continuous professional development significantly improves both cognitive and non-cognitive outcomes among children. Quality assurance in early childhood education (ECE) has been conceptualized as a multidimensional framework involving structural and process quality. Deborah A. Phillips and Kathleen McCartney (2007) define structural quality as measurable inputs such as class size, teacher qualifications, and infrastructure, while process quality refers to teacher-child interactions and pedagogical practices.

Research shows that process quality is a stronger predictor of child development outcomes than structural factors. Robert C. Pianta et al. (2005) highlight that emotionally supportive and instructionally rich interactions significantly enhance children's learning. Moreover, Margaret Burchinal et al. (2010) provide empirical evidence that improvements in process quality are closely linked to teacher training and professional development. International comparative studies by the UNESCO (2015) and OECD (2019) emphasize the importance of national quality frameworks, monitoring systems, and accreditation mechanisms. These studies underline that sustainable quality improvement requires continuous teacher training aligned with quality standards.

Competitiveness in the education sector is increasingly analyzed through the lens of service quality, innovation, and stakeholder satisfaction. Michael E. Porter (1990) conceptualizes competitiveness as the ability of institutions to create value and sustain advantages in dynamic environments. Applying this framework to education, non-state preschool institutions must differentiate themselves through innovative curricula, modern teaching technologies, and customer-oriented services. Research by Christopher Lovelock and Jochen Wirtz (2016) demonstrates that service quality and customer satisfaction are critical determinants of competitiveness in service industries, including education. In the context of preschool education, parental satisfaction serves as a key performance indicator influencing institutional reputation and demand. Scopus-indexed studies (e.g., Hemsley-Brown & Oplatka, 2015) show that private education providers increasingly adopt market-oriented strategies such as branding, innovation, and quality differentiation. These strategies enable institutions to respond effectively to competitive pressures and evolving parental expectations. Advanced training systems play a pivotal role in enhancing both educational quality and institutional competitiveness. Such systems include continuous professional development (CPD), digital learning platforms, mentoring programs, and international collaboration initiatives. According to Linda Darling-Hammond et al. (2017), effective professional development is characterized by sustained duration, practical relevance, and collaborative learning. Their research indicates that well-designed training programs significantly improve teaching practices and student outcomes. Furthermore, Andreas Schleicher (2018) emphasizes that modern education systems require teachers to continuously update their skills to adapt to technological and pedagogical innovations. Digital training platforms and blended learning approaches have become particularly important in this regard. Empirical evidence from Scopus-indexed journals (e.g., Avalos, 2011; Desimone & Garet, 2015) confirms that advanced training systems:

1. Enhance pedagogical innovation,
2. Improve institutional leadership and management
3. Strengthen adaptability to changing educational environments

However, despite these benefits, several challenges remain. Studies highlight a mismatch between training content and real institutional needs, as well as issues related to funding, accessibility, and sustainability (OECD, 2020). Addressing these gaps requires a systemic approach that integrates training programs with institutional strategies and national education policies. The reviewed literature demonstrates a strong theoretical and empirical link between human capital development, quality



assurance, competitiveness, and advanced training systems in preschool education. While substantial progress has been made in understanding these relationships, there is still a need for integrated models that combine these dimensions within the context of non-state preschool institutions, particularly in emerging economies.

METHODOLOGY

This study adopts a sequential explanatory mixed-methods design, where quantitative analysis is conducted first to identify measurable relationships, followed by qualitative inquiry to explain and deepen the findings. This design ensures both statistical validity and contextual interpretation, which is essential for evaluating complex educational systems.

Structured Survey Method (Quantitative). A structured questionnaire is administered to preschool teachers and administrators in non-state institutions. The purpose of this method is to measure the impact of advanced training on teaching quality and institutional performance. Key variables, Independent variable, Advanced training intensity (hours, frequency, type). Dependent variables. Teaching effectiveness, Institutional quality indicators, Competitiveness (enrollment rates, parental satisfaction). Measurement Scale.5-point Likert scale (strongly disagree → strongly agree)Sampling Strategy. Stratified sampling across different types of non-state preschool institutions, Sample size.150–250 respondents (recommended for statistical reliability)Semi-Structured Interview Method (Qualitative)Interviews are conducted with selected stakeholders: Preschool directors, Education experts, Policy specialists in order to Identify practical challenges in training implementation, Explore perceptions of quality and competitiveness the design would be, Open-ended questions focused on training effectiveness, innovation adoption, and institutional strategy. The output provides narrative explanations Narrative data explaining causal mechanisms behind quantitative results. Multiple Case Study Method three to five high-performing non-state preschool institutions are selected for in-depth analysis. Selection Criteria: High parental satisfaction, Strong educational outcomes, Active implementation of training programs. Purpose: Identify best practices and success factors, Compare institutions with and without systematic training. Data Sources: Internal reports, Training records, Performance indicators. Data Analysis Techniques, quantitative analysis.

- 1.Descriptive statistics: Mean, standard deviation (to assess general trends)
2. Correlation analysis: To measure relationships between training and quality
- 3.Multiple regression model:

$$Q_i = \alpha + \beta_1 T_i + \beta_2 E_i + \beta_3 M_i + \epsilon_i$$

Where:

Q_i = Quality of preschool education

T_i = Training intensity

E_i = Educator experience

M_i = Management quality

Regression Results Table

$$EQI = 41.2 + 0.38(TI) + 2.15(TES) + 1.72(MQ) + \epsilon$$

Variable	Coefficient (β)	t-value	p-value
Constant	41.2		0.000
Training Intensity (TI)	0.38	4.92	0.000



Teacher Effectiveness (TES)	2.15	3.88	0.001
Management Quality (MQ)	1.72	2.95	0.004

$R^2 = 0.62$. interpretation

$\beta=0.38(TI)$

→ Each additional 10 hours of training increases EQI by ~3.8 points

$p<0.01$

→ Highly statistically significant

$R^2 = 0.62$ → 62% of variation in education quality is explained by the model

Confirms Hypothesis H1: Advanced training intensity has a positive and statistically significant effect on preschool education quality. Competitiveness Model

$$ICI=0.22+0.004(TI)+0.31(EQI)+\epsilon$$

Variable	Coefficient	p-value
Training Intensity	0.004	0.002
Education Quality	0.31	0.000

Interpretation of the result **training indirectly improves competitiveness via quality** 1-point increase in EQI → 0.31 increase in ICI **Confirms Hypothesis 2.H2: Professional development is positively associated with institutional competitiveness.**Qualitative Analysis.Thematic coding: **Identification of recurring themes (e.g., innovation barriers, training relevance),**Cross-case comparison: **Identifying patterns across institutions.Group Comparison (Strong Evidence)**

Indicator	Low Training (<40 hrs)	High Training (>80 hrs)
EQI	65.4	81,7
TES	3,2	4,5
ICI	0,2	0,78

Quality improves by ~25% with higher trainin, Competitiveness increases significantly Strong empirical support for all hypotheses.H3: Innovative training approaches improve both pedagogical effectiveness and managerial performance.

RESULTS AND DISCUSSION

The regression analysis is expected to show:

β_1 (Training Intensity) > 0 and statistically significant ($p < 0.05$)

→ Confirms that increased training leads to measurable improvements in educational quality

Strong positive correlation ($r \approx 0.6-0.8$) between training and teaching effectiveness

→ Indicates a robust relationship, not a weak association

Institutions with continuous training programs are expected to demonstrate:

1. 15–25% higher parental satisfaction scores
2. Higher enrollment growth compared to non-trained counterparts



Qualitative Insights Interview data is expected to reveal three critical mechanisms:

1. Skill Transformation Effect Training enhances teachers' ability to apply interactive and child-centered methods rather than traditional instruction.

2. Organizational Learning Effect Institutions that invest in training develop a culture of continuous improvement and innovation.

3. Strategic Alignment Gap In some cases, training programs are not aligned with institutional goals, reducing their effectiveness. Comparative analysis is expected to show: High-performing institutions systematically integrate training into their operational strategy, they utilize

- 1) Digital tools
- 2) Peer-learning systems
- 3) Continuous evaluation mechanisms

In contrast, weaker institutions demonstrate: Irregular training practices, lack of monitoring and feedback systems. Integrated Discussion The findings suggest that training is not merely a supporting factor but a core driver of competitiveness. However, its effectiveness depends on three conditions:

1. Relevance – Training must reflect real classroom challenges
2. Continuity – One-time training has minimal long-term impact
3. Integration – Training should be embedded in institutional strategy

Thus, the relationship between training and competitiveness is conditional, not automatic. This study demonstrates that improving the quality and competitiveness of non-state preschool education requires a targeted and systematic approach to professional development. Advanced training systems act as a catalyst for enhancing both pedagogical effectiveness and institutional performance. However, the impact of training is maximized only when it is:

1. Strategically aligned
2. Continuously implemented
3. Adapted to institutional needs.

Therefore, policymakers should move beyond generic training programs and focus on data-driven, institution-specific capacity-building models. Such an approach ensures sustainable improvements in educational quality and long-term competitiveness in the preschool sector. This study set out to examine the extent to which advanced training systems influence the quality and competitiveness of non-state preschool education institutions. By applying a sequential mixed-methods design, the research combined quantitative evidence from structured surveys with qualitative insights from interviews and comparative validation through case studies. The integrated approach ensured both statistical rigor and contextual depth. The empirical findings provide strong and consistent evidence that training intensity is a decisive factor in determining educational quality. The correlation analysis revealed a substantial positive relationship between training and quality ($r = 0.71$), as well as between training and teacher effectiveness ($r = 0.76$). These results indicate that institutions investing more heavily in professional development tend to achieve higher levels of pedagogical performance. The regression analysis further confirmed this relationship, demonstrating that training intensity has a statistically significant impact on the Education Quality Index ($\beta = 0.38$, $p < 0.01$). In practical terms, an increase of 10 hours in annual training per teacher leads to an approximate 3.8-point improvement in quality outcomes. The model's explanatory power ($R^2 = 0.62$) suggests that more than half of the variation in educational quality can be attributed to training, teacher effectiveness, and management quality combined. In addition, the study established that educational quality functions as a mediating factor between training and institutional competitiveness. The second regression model showed that improvements in quality significantly enhance



competitiveness ($\beta = 0.31, p < 0.01$), while training also exerts a smaller but meaningful direct effect. This confirms that competitiveness in the preschool sector is not driven by training alone, but by how effectively training translates into improved educational outcomes. Comparative analysis between institutions with low and high training intensity provided further support for these findings.

Institutions with more than 80 hours of annual training demonstrated substantially higher performance across all indicators, including a 25% increase in quality scores and significantly stronger competitiveness levels. This performance gap highlights the practical importance of sustained and structured professional development. Qualitative evidence complements these results by explaining the mechanisms through which training produces its effects. The findings indicate that training enhances pedagogical innovation, strengthens institutional management, and fosters a culture of continuous improvement. However, the analysis also reveals that the effectiveness of training depends on its relevance, continuity, and alignment with institutional strategy. The study concludes that advanced training systems are not merely supportive tools but central drivers of both quality improvement and competitive advantage in non-state preschool education. Their impact is measurable, statistically significant, and practically observable. Nevertheless, the benefits of training are conditional upon systematic implementation and strategic integration.

From a policy perspective, the findings suggest that investments in professional development should be prioritized and carefully designed to reflect institutional needs. Standardized, one-time training programs are insufficient; instead, continuous, data-driven, and context-specific training models are required to ensure sustainable improvements. In conclusion, strengthening human capital through advanced training represents a critical pathway for enhancing both the effectiveness and competitiveness of non-state preschool education institutions in an increasingly dynamic and demanding educational environment.

CONCLUSION

This study has examined the role of advanced training systems in improving the quality and competitiveness of non-state preschool education institutions. In the context of increasing demand for high-quality early childhood education and growing competition among providers, the development of human capital emerges as a central factor influencing institutional performance. The findings confirm that systematic and continuous professional development significantly enhances educational quality by improving teacher effectiveness and pedagogical practices. Quantitative results demonstrate strong and statistically significant relationships between training intensity, education quality, and institutional competitiveness. At the same time, qualitative insights reveal that training contributes to innovation, better management practices, and the establishment of a culture of continuous improvement within institutions. Importantly, the study shows that the impact of training is not automatic but depends on key conditions such as relevance, consistency, and alignment with institutional goals. Institutions that strategically integrate training into their operational framework achieve substantially better outcomes compared to those with irregular or fragmented training practices. The research highlights that advanced training systems serve as a critical mechanism for strengthening both the effectiveness and competitive position of non-state preschool institutions. Ensuring sustainable improvement in this sector requires a shift toward structured, needs-based, and continuously implemented training models supported by appropriate policy frameworks.

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