

*Addressing the Root Causes: An In-Depth Analysis of Uzbekistan's Approach to Resolving the Issue of Underqualified Preschool Teachers*

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**Abstract**

This article seeks to evaluate one of the components of the “Promoting early childhood development” project introduced to improve the qualification and Early Childhood Development (ECD) knowledge of preschool teachers in Uzbekistan. The Theory of Change (ToC) framework and SWOT analysis are adopted to evaluate the intervention. The ToC comments on the design of the intervention which complements the exploration of strengths, weaknesses, opportunities, and threats of the project. The article findings are presented upon these frameworks and arguments are justified with evidence from research papers. The intervention attempts to address the issue connected with the poor qualification of preschool teachers in Uzbekistan and brings them into a new level of development with the help of an updated in-service curriculum that is used to conduct a series of training. The critical analysis of the intervention explores an array of benefits of the intervention which brings positive change to the preschool teachers’ pedagogical competencies as well as improves their understanding of ECD. Along with it, the demerits of the intervention are identified, and it requires immediate mitigation. The article finishes by recapping the main points followed by the author’s recommendation to resolve the shortage of preschool teachers in Uzbekistan.

Keywords: ECD, Theory of Change, SWOT

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## **Introduction**

### **Planning Problem: Poor Qualification of Preschool Teachers in Uzbekistan**

The provision of good quality education by qualified teachers has always been one of the issues that challenge the GoU. Despite the efforts of the GoU, the attempts to improve the qualifications of teachers have resulted in uncertainty (The World Bank, 2019). According to the World Bank's report as of May 7, 2019, 77 percent of preschool teachers have a secondary vocational degree, so the country is facing a shortage of qualified preschool teachers (The World Bank, 2019). Despite a high number of graduates from local and foreign pedagogical universities, professionals with a degree in preschool education are departing from their careers and it is causing the disruptions in provision of good quality education as well as depriving children to develop physically and mentally in this critical stage of life. The GoU as a solution is focusing on the provision of training current preschool teachers which requires investment, as well as time. It is interesting to observe if this approach can improve teachers' knowledge, competencies, intrinsic motivation, and commitment.

## **Background**

Having gained its independence from the Union of Soviet Socialist Republics (USSR) in 1991, the Government of Uzbekistan (GoU) has prioritized the education sector as the main tool of development. With the emergence of the Sustainable Development Goals Agenda (SDG) 2030, the GoU has focused on reaching a high enrolment rate in preschool education by 2030 to meet the requirements of SDG4.2 which states that the government should ensure access to a good quality preschool education delivery by the well-trained teachers so that children are ready for primary education. With the emergence of this goal, the issues related to preschool education became obvious.

From a critical assessment of preschool educational institutions, preschool education has been far from the level of modern requirements both in quantitative and qualitative terms. The President of the Republic of Uzbekistan Sh. M. Mirziyoev in his speech stressed that preschool education has been lagging for 25 years because the system was not adequately funded (Mirziyoyev, 2016). Statistics show the enrolment of children aged between 1 to 6 to preschool education in the republic decreased from 35.1 percent in 1991 to 17.3 percent in 2016 which happened due to the reduction of preschools across the country. In 1991 there were 9834 preschools, but by 2016 their number decreased to 5138, which means the number decreased by 47 percent (The Statistics Committee of the Republic of Uzbekistan, 2016). Inadequate support and attention to the system led to significant problems such as the deterioration in the quality of the educational process, limited economic opportunities, and low level of knowledge and qualifications of those working in this area, especially teachers. The state's ignorance of this system can still be observed, and the recovery will require a huge amount of effort, time, and finance.

The establishment of the Ministry of preschool education in 2016 was one of the biggest transformations in the country's history in the field of early childhood development. Since then, to ensure the legal status and support activities of the ministry, 27 regulatory documents have been adopted (Muminova, 2020). As a result of the reforms, the number of private preschool educational institutions increased to 568 meanwhile public-private preschool educational institutions reached 741 (Muminova, 2020). Within a short period of time, MPSE could double the salary of teachers and adopted policies expanded the enrolment and

attendance rate: from 2017 to 2019, the rate increased from 29 % to 52% and was expected to reach 100% for kids in grades 6-7 by 2022.

Due to the low percentage of preschool teachers with a university degree, over 9,000 preschool teachers have been retrained. Also, the GoU has started opening branches of foreign universities like Bucheon University in Tashkent and Russian State Pedagogical University named after A.I.Herzena which focus on training highly qualified preschool teachers (Muminova, 2020).

Despite these reforms, the level of qualification of preschool teachers does not allow children to prepare well for primary school, and an unknown preschool curriculum does not develop the social, personal, emotional, speech, mathematical, physical, and creative skills of children as many parents are using shadow education to help their children to develop.

The policymakers of Uzbekistan have stressed the significance of expanding preschool education and improving the teachers' qualifications as part of the country's educational policy because the shortage of qualified teachers and issues related to their retention have significant drawbacks on the child outcome and this lowers the status of the education system in general (Watlington et al., 2010a).

### **Theory of Change to Improve Preschool Teacher Qualifications in Uzbekistan**

Currently, the MPSE has ongoing the "Promoting Early Childhood Development" Project, which costs US\$ 73.85 million. The length of the project is 5 years (2019-2024) and by the end of the cycle it aims to "increase access to early childhood education, improve the quality of learning environments in selected public preschools, and enable a systematic measurement of education quality for informed decision-making" (The World Bank, 2019). The improvement in education quality at preschool is going to be achieved by training teachers using a reviewed in-service training program because the project anticipates thousands of new preschool instructors and supervisors are annually needed to develop Early Childhood Education (ECD) services across the country. Broadly, qualified/trained teachers are one of the factors that produce a better outcome. Therefore, one of the components of the intervention is to improve the in-service training program which ultimately improves the quality of preschool education. The project allocates US \$5 million for the teacher training program (ibid.). The intervention aims to upgrade teachers' skills in developing the content and materials, and class delivery competencies in the form of continuous professional development (ibid.). Moreover, teachers are expected to be delivered complimentary modules on ECD development, climate change, child safety, and so on (ibid.). Financial technical assistance like the purchase of printing machines is expected to be delivered so that teaching happens in line with international practices. The program's goal is to reach out to 14,000 public preschool teachers, which represent nearly 25 percent of all public preschool teachers in Uzbekistan under the supervision of 700 master trainers (ibid.). The rest of the preschool teachers' training expenses are to be covered by other funding sources, such as the state budget, and are monitored during project implementation. From the intervention description, the following ToC has been framed.

**Table 1 – The Theory of Change framework of the intervention**

PDO: Improve quality of education in project supported public preschools				
Input	Activities	Output	Short-term Impact (PDO)	Long-term Impact
<ul style="list-style-type: none"> <li>Improving the existing in-service training program for preschool teachers.</li> <li>Supporting the content, materials, and plan of delivery development processes.</li> <li>Engaging 700 master trainers to the program</li> <li>Purchase and installation of printing equipment and supplies for this equipment</li> <li>Technical assistance to develop a framework for professional development of preschool education staff</li> </ul>	<ul style="list-style-type: none"> <li>Delivering peer-to-peer training program to public preschool teachers across the country to improve their skills and competencies</li> <li>Delivering complementary modules on child nutrition, hygiene, immunization, child protection, labour rights, climate change and child safety</li> <li>Training the remaining of preschool teachers with the state budget and other funds.</li> </ul>	<ul style="list-style-type: none"> <li>In-service training program is updated with modern approaches and content</li> <li>14000 preschool teachers are trained with modern child-centered approach</li> <li>14000 preschool teachers expertise on child nutrition, hygiene, immunization, child protection, labour rights, climate change and child safety</li> <li>75 percent of preschool teachers are training with the help of state budget</li> </ul>	<ul style="list-style-type: none"> <li>Increased human resources capacity in preschool education</li> </ul>	<ul style="list-style-type: none"> <li>Improved child development and human capital accumulation</li> </ul>

(Source: The author’s interpretation of ToC according to the intervention description)

## Methodology

This study adopts the Theory of Change (ToC) as a framework to analyze the design of the intervention to understand how and why the initiative works. The analysis investigates the results chain which includes input, activities, output, and outcome to understand if they help achieve the objective of the intervention. Each division is introduced with its corresponding definition followed by its importance in relation to the designing process and comments to what extent each division is designed well. Having analyzed the design, the SWOT framework will be adopted to identify strengths, weaknesses, opportunities, and threads of the intervention. Conclusions and recommendations will be based on these frameworks.

## Analysis and Findings

### The Analysis of the Design of Theory of Change

A theory of change is a technical planning tool used to make a causal analysis based on the available data about a specific field to explain how an intervention is likely to result in a development change (United Nations Development Group, n.d.). A good ToC describes how the project is supposed to achieve the anticipated results (Gertler et al., 2016), addresses the root of the problem that impedes progress, and serves as a solution mechanism that embraces benefits, effectiveness, and feasibility (United Nations Development Group, n.d.). Moreover, it identifies important assumptions and risks to ensure that the intended change is achievable (ibid). It is important to strategically plan the intervention which should map out the results chain that includes input, activities, output, and outcomes (Gertler et al., 2015). Mostly, it is

presented in the form of a diagram or table (ibid.). The evaluation of the results chain will be based on these questions <sup>1</sup>:

**Table 2 - Questions to evaluate the results chain**

Results chain components	Questions
Input	Does it define the necessary resources to accomplish the objective?
Activities	Are the actions complimenting the project objectives?
<u>Output</u>	Is the time frame clearly stated? Is the output comprehensive? Is it beneficiary oriented? Is it demand-driven? It it feasible in terms of resources?
Impact	What changes are emerging in education and society ultimately?

The *ToC* is targeted to address an issue regarding the poor quality of preschool services and low capacity. The “low capacity” refers to the poor qualifications of teachers and the capacity of preschool teachers in the system. The MPSE stated the need for the introduction of modern pedagogical technologies, effective forms and methods of education to integrate into the educational process (Ministry of Preschool Education of the Republic of Uzbekistan, 2018). The intervention is addressing the issue.

Moving further, the *input* element of the results chain clearly states the allocated budget for the teacher training program, the number of master trainers engaged in the training process, the support to update the training develops the content, resources, and delivery method of the in-service training program which result in a linear impact. However, there are some points that challenge the completeness of the input section. Firstly, an accountable person or organization for updating the in-service training curriculum is obscure. Secondly, if master teachers are hired locally or internationally and if their qualifications, as well as competencies, are sufficient to train preschool teachers using a reviewed curriculum are not mentioned in the description part of *ToC*. In case, local professionals are engaged in program design, the extent they are likely to influence the current in-service program is uncertain. Thirdly, it remains unclear to the reader if the MPSE has an in-service program in general and how it is superior in comparison with the reviewed one. The situational analysis part fails to shed the light on the current in-service programs. Lastly, other resources necessary for a long-term change, such as how continuous professional development is ensured not stated in the *ToC*. In terms of program content, the intervention fails to verify the integration of digital literacy skills. The covid-19 outbreak urged the need for digital literacy and accordingly, with the integration of ICT skills into the curriculum, teachers will be able to create digital learning resources (Nilsen et al., 2020).

<sup>1</sup> The World Bank’s The LogFrame handbook has been used to develop questions

<sup>2</sup> The COM-B model of behaviour assumes that the combination of capabilities (C), opportunities (O), and motivation (M) produce a change in behaviour (B) (Mayne, 2016)

*The activities* state the actions that transfer inputs into outputs (Gertler et al., 2016). ToC is targeting to improve the conditions for quality teaching by improving the existing in-service training program which is aimed at training teachers' skills (The World Bank, 2019). The rationale is based on the evidence – poor qualification of teachers (ibid.), but the intervention's causal chain does not present full information on how the teacher training process happens. From the description, a newly adopted in-service training program avoids the traditional way of teaching, and instead, peer-to-peer teaching practice is adopted. There is no justification if peer-to-peer teaching is effective. It raises concern if beneficiaries can comment on each other's performance without developing an adequate understanding of new methods or approaches. According to the research of Isner et al., coaching appears to be beneficial in in-service training programs (Egert et al., 2018) and the training delivery mode needs to be reconsidered. Another thing that is worth mentioning about activities, before scaling up on the country level and massively training 14000 teachers with an unspecified curriculum, the initial focus should be targeted on designing the curriculum and then piloting it with a control and target group as randomized controlled trials (RCTs). To understand what works in education and why, policy-making decisions should be based on practical evidence using RCTs rather than blindly following political desires (Morrison, 2001).

*The output* section of the results chain shows the impact that is produced due to the activities (Gertler et al., 2016). The expected output is that a new teacher training program is developed and teachers are trained in modern child-centered approaches. In terms of time frame, the duration of the teacher training program is not specified and if the duration of training can produce the desired impact remains unclear. Furthermore, ToC does not provide adequate information on the number of sessions, and the number of teachers expected to participate in each session. Eventually, it raises the question if the training can cause the COM-B<sup>2</sup> model of behavior change (Mayne, 2016). The vision should be plausible and must focus on the qualitative change that will happen in people's behavior, attitude, capabilities, or values (Keystone, 2009) rather than the quantitative. The class size yet need to be clarified. The mitigation measures to deal with the larger class ratio should be adequately stated in the intervention. A newly adopted in-service training curriculum most probably will create a demand for new teaching resources like textbooks. The intervention should come up with the ways of integrating new resources to the system in the next phases of the intervention. It is also worth mentioning that short-term courses can be equally beneficial as long-term ones if they are targeted at developing a specific set of skills (Egert et al., 2018). However, the scope of the training is broad, and it is uncertain if it produces the ultimate result. The studies of Barenthien et al. (2020) found that professional development courses may enhance teachers' motivation, but they may not ensure that teachers in fact learn knowledge.

One of the essential elements of the results chain is the *outcomes* which show that the results are attained only when the population starts using the project's output within a short or medium period (Gertler et al., 2016). A glance at the intervention reveals that PDOs and output not producing the desired outcome. The PDO aims at improving the quality of education and teacher training has been chosen as one of the actions. Nowadays, teacher training has become the most popular strategy for raising teacher quality (Shanti Mahendra & Sandra Baxter, 2011) but the measurement of the impact and effectiveness of teacher training programs on improving the quality of preschool education remain vague because

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<sup>2</sup> The COM-B model of behaviour assumes that the combination of capabilities (C), opportunities (O), and motivation (M) produce a change in behaviour (B) (Mayne, 2016)

accomplishment indicators are measured only in numbers. Furthermore, the measurements of the teacher’s learning impact on child outcomes need to be specified in the intervention.

### Adapting Swot Analysis for Evaluation of Intervention

SWOT analysis is used to discover the strength, weaknesses, opportunities, and threats of the project or project planning processes<sup>3</sup>. The following diagram with questions has been created by the writer to assess the intervention. The analysis will help to understand what impact the project creates on society.

**Table 3 – Questions to evaluate the strength, weaknesses, opportunities, and threats of the project or project planning processes**

	Strengths – project features that bring change.	Weaknesses – project features which cause challenges.
Internal factors	<ul style="list-style-type: none"> <li>- What makes the project strong?</li> <li>- What will the audience benefit from the project?</li> <li>- What is the greatest achievement of the project?</li> </ul>	<ul style="list-style-type: none"> <li>- What needs to be improved?</li> <li>- What knowledge, talent, or resources does the project lack?</li> </ul>
	Opportunities – aspect of the project that creates additional benefits.	Threats – aspects of project produce unintentional consequences
External factors	<ul style="list-style-type: none"> <li>- What unexpected positive impact does the project create in society?</li> <li>- What could the project do that has not been done yet?</li> </ul>	<ul style="list-style-type: none"> <li>- What is the unintended negative consequence that the project create?</li> <li>- What obstacles does the project face?</li> </ul>

(Source: Wikipedia. Accessed 10.01.23)

**Strength.** The following points make the intervention strong:

**Sustainable Project.** Intervention assumes to attract SIB for ECD projects which allow the country to pay when the results are obtained. The projects run in cooperation with SIB are result driven and can be used to reach specific outcomes. (Gustafsson-Wright & Gardiner, n.d.) With this, the GoU can avoid the risks in the provision of ineffective services (ibid.). International Educational can be attracted with the help of intermediaries to design effective in-service teacher training programs. Another option can be engaging giants in education like

<sup>3</sup> [https://en.wikipedia.org/wiki/SWOT\\_analysis](https://en.wikipedia.org/wiki/SWOT_analysis)

the British or American Council who can provide consultancy of developing adequate training programs. This will benefit the country not only in term of the effectiveness of the program, but it opens the way to integrate world standards into the system and improve the overall image of the country in delivering quality preschool education.

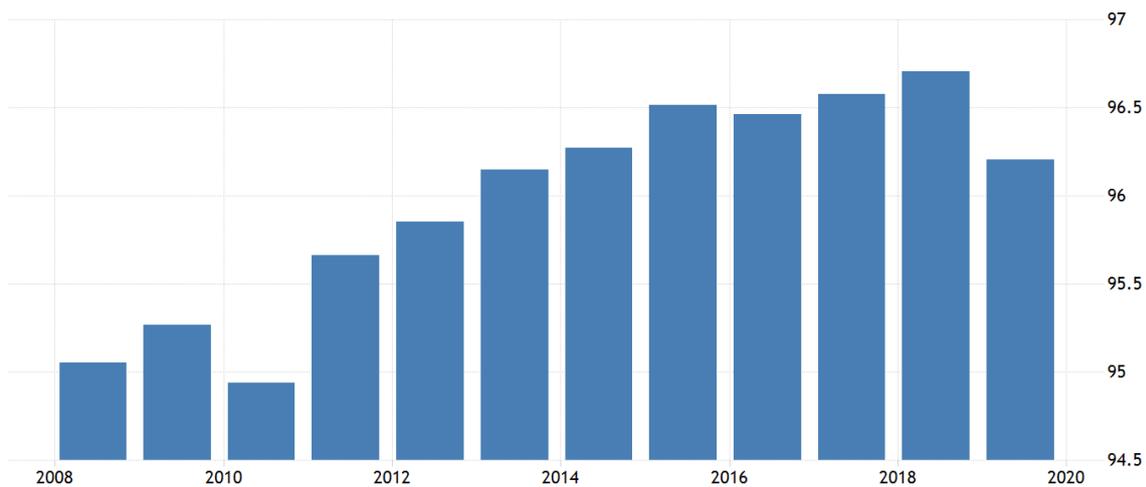
**Professional Development.** Teachers' knowledge and skills play a paramount role in a child's mental and physical development. If a newly adopted curriculum delivers the necessary content, integrates modern child development concepts, and hones preschool teachers' competencies, this program will truly be advantageous for Uzbek context in term of human capital development. Moreover, bringing up together preschool teachers across the country is another strength of the intervention because it gives teachers an opportunity to exchange knowledge and experience. Peer-to-peer learning gives an opportunity to look at teaching and learning processes from different perspectives (Aykaç, 2018). Peer learning hastens the development of mutual trust among learners (Pranger, 2016). Moreover, attending training sessions can boost teachers' confidence and develop networking with other teachers across the country. If organized adequately, teachers who complete the teacher training can all be united under the "Preschool Teachers' Association" which does not exist in Uzbek context with this intervention.

**Weakness.** Along with strength, the intervention should fix the following points to reach a desirable objective:

**Lack of Monitoring and Evaluation.** The role of monitoring and evaluation is important to measure the value, usefulness, and importance of the intervention (OECD/DAC Network on Development Evaluation, 2019). The measurement tools can be different from project to project. The designers of ToC choose the most appropriate and contextualize it considering the purpose of the intervention (ibid.). This intervention states that MPSE is responsible for the implementation, monitoring, and evaluation phases, but the restricted data on measurement tools or evaluation criteria for the intervention overlooks how the effectiveness is measured. Literature shows the absence of monitoring and evaluation creates an opportunity for money leakages.

**Ignorance of Teachers' Well-being.** Training and upgrading the skills of teachers is good from an educational perspective, however from a teacher's perspective it is an extra burden as they need to work and at the same time attend the training. Considering preschool teachers' schedules, it is difficult to realize if there is space to attend a teacher training program in the teachers' schedule. According to the information-legal portal "norma.uz", the current workload for the early-year educator is 36 hours (2018). In addition, the intervention needs to consider existing social factors in the country. According to the World Bank's development indicators, derived from official sources, the percentage of full and part-time female teachers in preschool education was reported to be more than 96 % in 2020. The diagram below shows the percentage of female preschool teachers for different periods of time.

**Figure 1 – The percentage of female teachers in preschool education in Uzbekistan**



(Source: World Bank, Trading Economics, accessed on 18.01.23<sup>4</sup>)

In Uzbek culture, women bear responsibility for the household and childcare (The Open Society Institute & Winrock, 2000). It can be said that preschool teachers are overloaded by ambitious goals, and their mental and physical well-being are ignored. Moreover, intervention activities state that teachers are expected to be trained on additional topics such as child nutrition, hygiene, immunization, child protection, climate resilience, and many more which raises a concern in the reader's mind: is being a preschool teacher a multitasking and universal job in Uzbekistan?

***Vague Terminology.*** It is known that there are several developmental milestones for Preschoolers and this period includes children aged 3-7 in Uzbekistan (Sankar, 2021). Two preschool programs can be distinguished in the country: the first is intended to develop the cognitive and physical well-being of children (3-6) going to kindergarten and the second one offers a year before the start of primary education when children reach age 6. It teaches basic literacy and numeracy skills so that a child is ready to start primary education. The intervention fails to clearly specify the target audience. It is obscure to comprehend if it is preschool teachers who work with kids aged 3-6 or those who prepare children for primary education. In the Uzbek language, one terminology; “preschool education” is used to refer to both programs.

***Absence of ECD Scientific Research Support.*** The intervention fails to adopt ECD scientific researchers that can be used to generate data on the effectiveness of the old and newly adopted in-service teacher training programs for the government and donor organizations. The comparative and systematic analysis of the training program before and after intervention can help to visualize what is needed to be changed in the future. Moreover, the support of research in ECD can reflect the latest concepts and approaches in the world and the GoU can refer to them while developing ECD policies developed to ensure good quality learning at preschools.

***Complications With Evaluation.*** The intervention causes complications to evaluate how the learning from teacher training programs transfers into reality. The available evaluation

<sup>4</sup> <https://tradingeconomics.com/uzbekistan/percentage-of-teachers-in-pre-primary-education-who-are-female-percent-wb-data.html>

strategies cannot be simply adopted due to contextual differences. In addition, evaluation is expensive and requires time, effort, and human resources (Ciraso, 2012). Moreover, the intervention does not mention how the project's effectiveness or efficiency will be mentioned.

***Obscure Content.*** Improvements in in-service training programs do not define the content of the program. The realization of a successful training program initially requires conducting a needs analysis among beneficiaries. Accordingly, amendments need to be made so that the content fully satisfies the needs and preferences of beneficiaries. At the end of the program, evaluation tools should be designed to realize if the learning process and content address the needs of preschool teachers via surveys or interviews. In accordance with the finding, necessary changes and corrections can be made further to refine the in-service training program. Moreover, nowadays many European countries are implementing early science education in preschool teachers' education referring to the fact that children's early comprehension of science can influence positively their performance at further stages of education (Barentien et al., 2020).

***Opportunities.*** This intervention introduces an array of opportunities for the countries' well-being which include:

***Developmental Outcomes for Children.*** One of the key factors that accelerate ECD is the enhanced skills and competencies of staff members. The research conducted by Heckman identifies a strong bond between the in-service training program and child development (Egert et al., 2018). He highlights major improvements in teachers have an impact on children's cognitive and socio-emotional development which ultimately leads to financial returns for society (Egert et al., 2018). This intervention benefits the young generation as human capital has become the most important factor in the development of the economy and society. By investing in it, it is possible to achieve economic growth rates which is a necessity for strengthening Uzbekistan's position in global competition. The quality of human capital is primarily formed by the education system, and the contribution of teachers is immense in this process.

***Learning Opportunities.*** The effectiveness of professional development courses is acknowledged worldwide (Hamre et al., 2012). The in-service program can serve as a driving tool that keeps teachers up to date with the modern concepts, approaches, or research related to their field (Omar, 2014). The expertise, knowledge, or competencies developed through the training program, can improve teachers' performance at educational establishments (Omar, 2014) which might ultimately increase parental satisfaction with the service. Along with it, the in-service program empowers teachers' confidence and resilience to unexpected situations because the training unites novice and professional teachers and allows them to share their experiences related to the field.

***Poverty Reduction.*** Qualified teachers have paramount importance to reduce the poverty rate, among vulnerable families or those living in rural areas. Poverty stroke areas are highly in need of professional teachers as they ensure the improvement in students' level of success and progress rather than novice ones. (Watlington et al., 2010b). This intervention may create an opportunity for a larger proportion of children coming from vulnerable families to get a good quality education so that they progress well at the further stages of education. Eventually, they will have more opportunities to become successful by having better job opportunities and increasing the outcome. Ultimately, the GoU might be able to bridge the gap between rich and poor in the future. Meanwhile, the state also benefits from this

intervention as when people earn more, they spend more and pay more taxes. Certainly, investment in human capital development has mutual benefits both for individuals and the state. All in all, in this century three things: education, skills, and knowledge determine the nation's as well as individuals' prosperity (Becker, Gary S. 1995).

**Threats.** As a result of the intervention unintended results may appear which include:

**“Synthetic” Incentive.** According to Sarvi et al. (2020), until recently the current in-service teacher training program in Uzbekistan has not been successful in creating motivation for professional development. Due to the introduction of a 25 percent growth in payment for completion of professional development courses, the situation has changed to a positive side (Sarvi et al., 2022). Due to the restricted number of literature available regarding this intervention, it is difficult to estimate the number of preschool teachers with a degree who started working in preschools after the salary increase policy. Also, teachers' incentives can differ contextually and culturally (Shanti Mahendra & Sandra Baxter, 2011). It is difficult to assume if teachers are intrinsically motivated for professional growth or if financial advantage is the only motivation for them. Financial incentives may cost the government and it does not show the improvement in the teachers' skills, competencies, or knowledge. Instead, the GoU could think of a performance-based promotion in a career like many other countries (Sarvi et al., 2022).

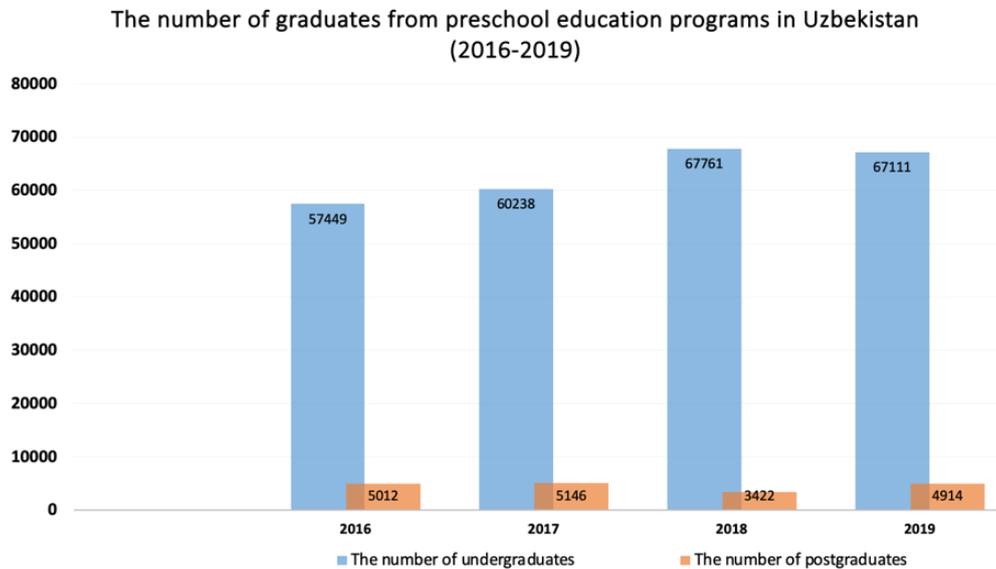
**Quality Challenges.** The content of the in-service teacher program in Uzbekistan has been based on memorization activities which hardly engaged teachers to think critically and develop competencies (Sarvi et al., 2022). Improving education quality requires a critical review of the content and research-based modern skills and knowledge needed for the future should be integrated into the content. Unless there is a change in the content, it is hard to achieve a change in the quality. Quality assurance remains one of the weakest points of this intervention. Moreover, if the amendments (not specified in the project) in in-service curriculum is small, the change in quality will be relatively small. Lastly, due to the limited information on the monitoring and evaluation process, it can be assumed the result of intervention will be uncertain and the preschool education system will benefit little from this intervention.

## **Discussions**

The GoU's strong commitment to the development of the preschool education system has allowed positive changes to happen in a preschool teacher training program through intervention. Despite the limitation of the intervention, the training program will benefit preschool teachers as well as society, especially those living in rural areas. However, improving in-service programs and training teachers is not sufficient to meet the growing demand for quality education. Constant update of the training program requires funding and the measurement of impact. Therefore, the GoU should look for innovative, sustainable, long-term, and cost-effective solutions. The solution could be reconsidering current human resources and capacity. The greatest turnover in the country is the departure of high-quality teachers from the preschool field. According to the Statistics provided by the Ministry of Higher and Secondary Special Education (MHSSE) of the Republic of Uzbekistan, more than

270 000 students completed degrees (BA and MA) in preschool education between 2016-2019<sup>5</sup>.

**Figure 2 – The number of graduates from a preschool education degree program in Uzbekistan between 2016-2019**



(Source: MHSSE of the Republic of Uzbekistan. Unpublished material. Received 09.01.2023)

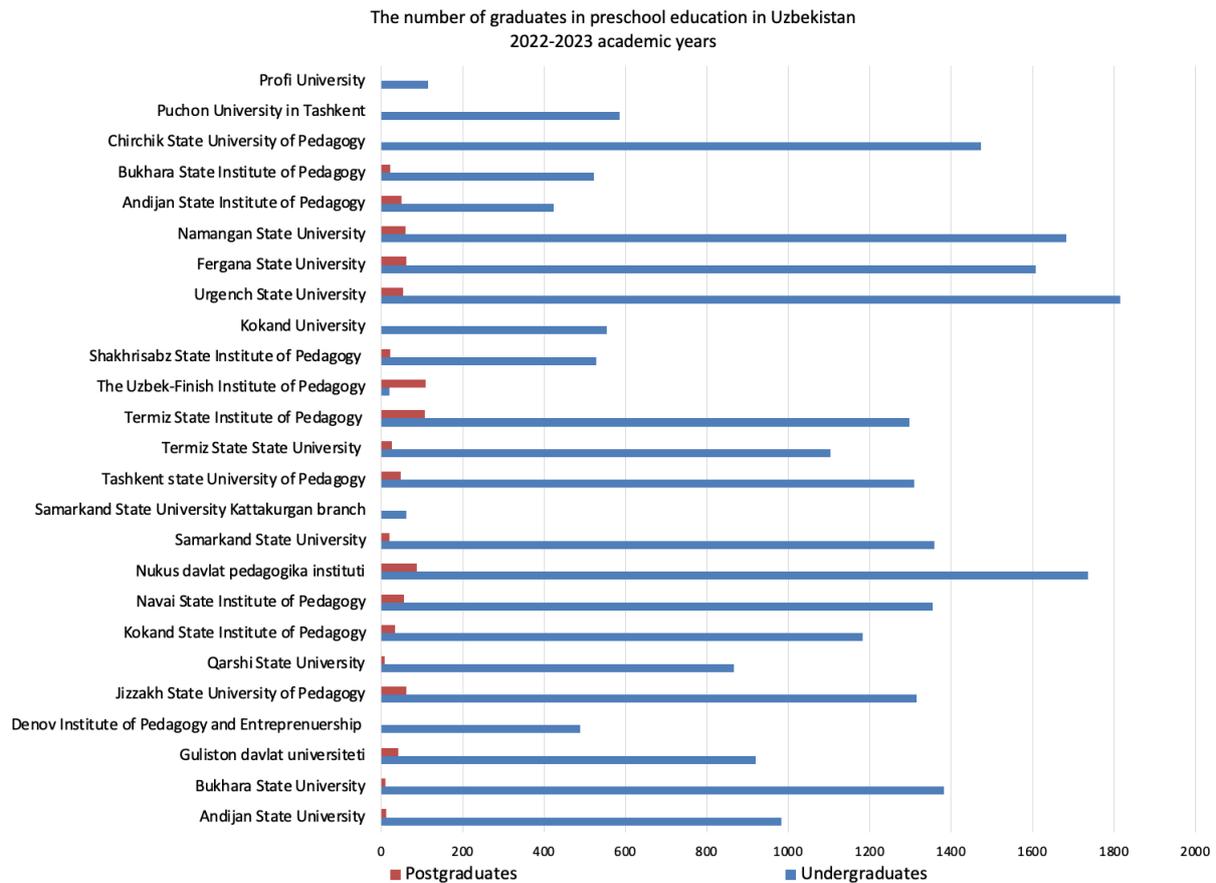
Despite a huge number of graduates in preschool education, more than 70 percent of preschool teachers have secondary or vocational degrees (World Bank Group, 2019). So, it is recommended to conduct a situational analysis to understand the barriers preventing university graduates with preschool education degrees to consider in the preschool system as a career. Instead of investing heavily in teacher training programs, finding ways to attract specialists back is advisable. Global Poverty Research Group finds that having a degree qualification in teaching increases students' achievement significantly (Shanti Mahendra & Sandra Baxter, 2011).

Currently, 24686 students have enrolled in “Preschool Education” degree programs offered by 25 universities across the country<sup>6</sup>. The figures show that the GoU has got a big capacity of human resources in preschool education which can be used to improve the preschool education system.

<sup>5</sup> The statistics has been provided by the Department of Coordination of Higher Education Institutions in MHSSE of the Republic of Uzbekistan in the form of excel document. 2023. Unpublished material.

<sup>6</sup> The statistics has been provided by the Department of Coordination of Higher Education Institutions in MHSSE of the Republic of Uzbekistan in the form of excel document. 2023. Unpublished material.

**Figure 3 – The number of students studying a preschool education degree program in Uzbekistan in 2022-2023 academic years**



(Source: MHSSE of the Republic of Uzbekistan. Unpublished material. Received 09.01.2023)

## Conclusion

The analysis and findings section clearly indicates that the current intervention's impact on the issue is restricted, but there is potential for effectiveness if the identified limitations are appropriately addressed. One potential approach to address the issue could involve designing an intervention that aims at engaging new/ previous graduates to the field through internship programs can ultimately evoke intrinsic, extrinsic, and altruistic motives to stay in the system and it improves the commitment to teaching as well as retention rates (Zhang et al., 2019). In addition, hiring graduates is a cost-cutting tactic that can replace a temporary remedy: teacher training programs to address the teacher crisis. Also, it is worth mentioning policies that are evidence-driven and formed by the evidence can effectively address issues rather than being a simple reaction to immediate pressures and they address causes rather than symptoms (Godfrey et al., 2010). Another minor recommendation could be reconsidering teachers' responsibilities at preschool establishments. Having analyzed their weekly workload and social responsibility, outsourcing university graduates as a part of their degree program from urban areas (2 times a week) to deliver literacy, mental activities, nutrition, and other language-related classes can take away the additional burden from preschool teachers. By creating internship opportunities and giving legal status to this activity, the ECD/ Preschool education graduates will be able to practice their knowledge at preschools and share their knowledge with preschool teachers which can address the teacher shortage and education

quality issues. However, establishing transparent and regular monitoring of the process should be ensured.

## References

- Aykaç, N. (2018). Investigation of the In-service Teacher Training Programs in the United States and Recommendations for Turkey: The Case of Kent Education Excellence Partnership (KEEP) \*. In *Journal of Education and Future year* (Issue 14).
- Barenthien, J., Oppermann, E., Anders, Y., & Steffensky, M. (2020). Preschool teachers' learning opportunities in their initial teacher education and in-service professional development—do they have an influence on preschool teachers' science-specific professional knowledge and motivation? *International Journal of Science Education*, 42(5), 744–763. <https://doi.org/10.1080/09500693.2020.1727586>
- Becker, Gary S. 1995. *Human capital and poverty alleviation*. Human Capital Working Paper. Retrieved from <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/121791468764735830/human-capital-and-poverty-alleviation>
- Ciraso, A. (2012). An Evaluation of the Effectiveness of Teacher Training: Some Results from a Study on the Transfer Factors of Teacher Training in Barcelona Area. *Procedia - Social and Behavioral Sciences*, 46, 1776–1780. <https://doi.org/10.1016/j.sbspro.2012.05.377>
- Davies, R. (2012). *Criteria for assessing the evaluability of a Theory of Change*. <http://mandenews.blogspot.com/2012/04/criteria-for-assessing-evaluability-of.html>
- Egert, F., Fukkink, R. G., & Eckhardt, A. G. (2018). Impact of In-Service Professional Development Programs for Early Childhood Teachers on Quality Ratings and Child Outcomes: A Meta-Analysis. *Review of Educational Research*, 88(3), 401–433. <https://doi.org/10.3102/0034654317751918>
- Gertler, P., Martinez, S., Premand, P., Bank, W., & Vermeersch, C. M. J. (2015). Impact Evaluation in Practice Impact evaluation of the Nutritional Support Program (PAL) View project Preschool under extreme poverty View project. In *J. Vermeersch on* (Vol. 17). <https://www.researchgate.net/publication/280098184>
- Godfrey, L., Funk, N., & Mbizvo, C. (2010). Bridging the science-policy interface: A new era for South African research and the role of knowledge brokering. *South African Journal of Science*, 106(5–6). <https://doi.org/10.4102/sajs.v106i5/6.247>
- Hamre, B. K., Pianta, R. C., Burchinal, M., Field, S., LoCasale-Crouch, J., Downer, J. T., Howes, C., LaParo, K., & Scott-Little, C. (2012). A course on effective teacher-child interactions: Effects on teacher beliefs, knowledge, and observed practice. *American Educational Research Journal*, 49(1), 88–123. <https://doi.org/10.3102/0002831211434596/FORMAT/EPUB>
- Keystone. (2009). IPAL GUIDE 2. *Keystone*.
- Kim, J. H. (2022). Preschool participation and students' learning outcomes in primary school: Evidence from national reform of pre-primary education in Ethiopia. *International Journal of Educational Development*, 94, 102659. <https://doi.org/10.1016/J.IJEDUDEV.2022.102659>

- Mayne, J. (2016). *The COM-B Theory of Change Model*.
- Ministry of Preschool Education of the Republic of Uzbekistan. (2018, January 13). *On Measures to Improve the Management of the Preschool Education System*. <https://mpe.uz/post-detail/posts/departmental-normative-regulations/801>
- Mirziyoyev, Sh. “Tanqidiy tahlil, qat’iy tartib-intizom va shaxsiy javobgarlik – har bir rahbar faoliyatining kundalik qoidasi bo’lishi kerak”. Speech, Tashkent, 2016 Accessed January 11, 2023. Retrieved from [https://www.norma.uz/muhim\\_voqealar/tanqidiy\\_tahlil\\_qat'iy\\_tartib-intizom\\_va\\_shaxsiy\\_javobgarlik\\_-\\_har\\_bir\\_rahbar\\_faoliyatining\\_kundalik\\_qoidasi\\_bulishi\\_kerak](https://www.norma.uz/muhim_voqealar/tanqidiy_tahlil_qat'iy_tartib-intizom_va_shaxsiy_javobgarlik_-_har_bir_rahbar_faoliyatining_kundalik_qoidasi_bulishi_kerak)
- Morrison, K. (2001). Randomised controlled trials for evidence-based education: Some problems in Judging “what works.” *Evaluation and Research in Education*, 15(2), 69–83. <https://doi.org/10.1080/09500790108666984>
- Muminova, D. (n.d.). Preschool Teachers’ Beliefs and Practice Regarding Emergent Literacy in a Post-Stagnation Period: The Case of Uzbekistan. In *Sodobna pedagogika/Journal of Contemporary Educational Studies Let* (Vol. 71, Issue 137).
- Nilsen, A. G., Almås, A. G., & Gram, H. (2020). Producing Digital Learning Resources (DLR) for Teacher Training. *Designs for Learning*, 12(1), 71–80. <https://doi.org/10.16993/DFL.153>
- Norma.uz - information-legal portal. (2018, January 9). *Workload and payment amounts for preschool teachers*. [https://www.norma.uz/oz/qonunchilikda\\_yangi/maktabgacha\\_talim\\_pedagoglari\\_uchun\\_ish\\_yuklamasi\\_va\\_mehnatga\\_haq\\_tulash\\_miqdorlari\\_belgilandi](https://www.norma.uz/oz/qonunchilikda_yangi/maktabgacha_talim_pedagoglari_uchun_ish_yuklamasi_va_mehnatga_haq_tulash_miqdorlari_belgilandi)
- O’Flynn, M. (2015). *Theory of Change*. <https://www.intrac.org/wpcms/wp-content/uploads/2016/12/Monitoring-and-Evaluation-Planning-Series.-Theory-of-Change.-16.pdf>
- OECD/DAC Network on Development Evaluation. (2019). *Better Criteria for Better Evaluation Revised Evaluation Criteria Definitions and Principles for Use OECD/DAC Network on Development Evaluation*.
- Omar, C. M. Z. C. (2014). The Need for In-Service Training for Teachers and It’s Effectiveness In School. *International Journal for Innovation Education and Research*, 2(11), 1–9. <https://doi.org/10.31686/ijier.vol2.iss11.261>
- The Open Society Institute, A. F.-U., & Winrock, I. (2000). *The problems of women*. 1–54.
- Pranger, F. (2016). Potentials and limitations of peer-learning in small groups with respect to the homogenisation of heterogeneous learning collectives. *International Journal for Lesson and Learning Studies*, 5(1), 19–35. <https://doi.org/10.1108/IJLLS-09-2015-0031>
- Sankar, D., & Uzbekistan, U. (2021). *Uzbekistan Education Sector Analysis: 2021*.

- Sarvi, J., Tulivuori, J., & Asian Development Bank, for. (2022). *Challenges and Opportunities in Teacher Education Reforms Challenges and Opportunities in Teacher Education Reforms KEY POINTS*. <https://doi.org/10.22617/BRF220447>
- Shanti Mahendra, & Sandra Baxter. (2011). *Helpdesk Report: Impact of teacher training on students' learning outcomes*. <https://assets.publishing.service.gov.uk/media/57a08ab2ed915d3cfd0008ba/Impact-of-Teacher-Training-on-Learning-Outcomes-October-2011.pdf>
- Sims, M., & Brettig, K. (2018). Early childhood education and early childhood development: Do the differences matter? *Power and Education*, 10(3), 275–287. <https://doi.org/10.1177/1757743818771986>
- The Statistics Committee of the Republic of Uzbekistan, 2016. Access on 11.01.23. Retrieved from <https://www.stat.uz/ru/ofitsialnaya-statistika/social-protection>
- Stein, D., & Valters, C. (2012). *Understanding Theory of Change in International Development*.
- United Nations Development Group. (n.d.). *THEORY OF CHANGE. UNDAF CAMPANION GUIDANCE*.
- Watlington, E., Shockley, R., Guglielmino, P., & Felsher, R. (2010). The High Cost of Leaving: An Analysis of the Cost of Teacher Turnover. In *Source: Journal of Education Finance* (Vol. 36, Issue 1). <https://www.jstor.org/stable/40704404>
- The World Bank. (n.d.). *The LogFrame Handbook A Logical Framework Approach to Project Cycle Management*.
- World Bank Group. (2019). *Promoting Early Childhood Development Project*. <https://www.worldbank.org/en/news/press-release/2019/05/29/new-project-aims-to-strengthen-the-quality-and-access-to-early-childhood-education-in-uzbekistan>
- Zhang, L., Yu, S., & Liu, H. (2019). Understanding teachers' motivation for and commitment to teaching: profiles of Chinese early career, early childhood teachers. *Teachers and Teaching: Theory and Practice*, 25(7), 890–914. <https://doi.org/10.1080/13540602.2019.1670155>
- Zhang, L., Yu, S., & Liu, H. (2019). Understanding teachers' motivation for and commitment to teaching: profiles of Chinese early career, early childhood teachers. *Teachers and Teaching: Theory and Practice*, 25(7), 890–914. <https://doi.org/10.1080/13540602.2019.1670155>

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