

An Exciting Journey of Teaching and Learning; Professional Development of Early Years Teachers

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ABSTRACT: This paper summarizes findings from a report, written by the authors, titled the Professional Development of Early Childhood Education (ECE) in Balochistan. The data shows a change in knowledge, skills, and attitude of 300 early childhood educators' on inducting a play-based teaching and learning approach in their classrooms. The sample consisted of urban and rural educators working with children aged 4 to 7 years in public sector schools, in the province of Balochistan, Pakistan. A mixed-methods research approach was employed. A quantitative pre-test was conducted to assess the knowledge, skills, and attitude towards a play-based approach in the early years prior to a 40-hour training. The training used a "Theory to Practice Approach" and made the educators play and practice activities that children would do and then reflect on how they felt and what they learned. This method was believed to be effective as the educators were able to experience what they learned theoretically. After the training, a quantitative post-test was conducted to evaluate the impact of the training. Reflective accounts and group interviews were also conducted to get a sense of how the educators would take their knowledge to the classrooms. The post-test results were very encouraging showing a positive change in all areas. The interviews reflected the enthusiasm of educators to take their new learning to the classrooms.

KEYWORDS: education, professional development, early childhood education, developing country, pedagogy, play-based learning, theory to practice

Introduction

Pakistan faces a serious challenge to ensure all children stay and learn in school. Currently, Pakistan has the world's second-highest number of out-of-school children (OOSC) with an estimated 22.8 million children aged 5-16 not attending school, representing 44% of the population (Pakistan Education Statistics, 2016-17). In the 5-9 age bracket, 5 million children are not registered in schools, and after primary-school age, the amount of OOSC doubles, with 11.4 million adolescents between the ages of 10-14 (Pakistan Education Statistics, 2016-17) not getting formal education. In the province of Balochistan, there is a 72% drop-out rate from pre-primary to primary (Pakistan District Education Rankings, 2016) due to various reasons such as inhospitable school environments, corporal punishments, a lack of understanding of the benefits of school education, and a lack of professional development of Early Years Education (ECE) teachers to inspire parents and students to continue learning.

In order to accelerate progress and ensure the equitable expansion of quality education in line with UN's Sustainable Development Goals (SDG), UNICEF supports the Government of Balochistan's effort to significantly reduce the drop-out rate from pre-primary to primary levels by focusing on ECE to improve school readiness. One of the ways to improve school readiness and have encouraging learning environments is by training teachers. If teachers are professionally developed then they will be able to use innovative teaching strategies to increase the motivation of students to stay in school and become curious learners.

In hopes to professionally develop ECE teachers in Balochistan, Teaching Table, a company focusing on teacher training and teacher resource development, with technical support from UNICEF and financial support from EU collaborated with the School Education Department (SED), Government of Balochistan, (GoP), to train 300 teachers of Katchi, Pakki,

and Doim (Kindergarten, Grade 1, and Grade 2) classrooms across the 11 districts. The focal districts are Gwadar, Lasbela, Nasirabad, Jafferabad, Zhob, Sherani, Quetta, Bolan, Pishin, Killa Saifullah, and Killa Abdullah.

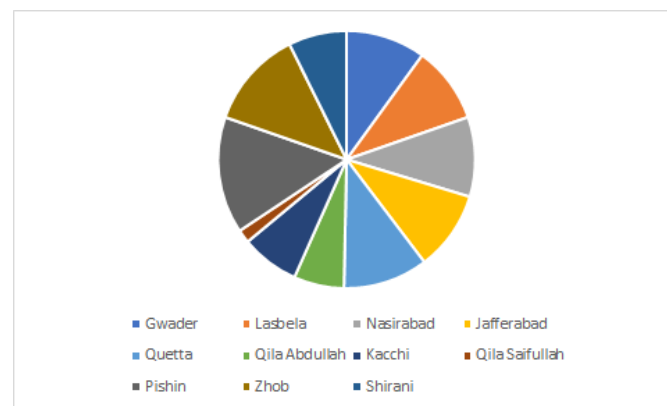


Figure 1. Teachers from 11 districts of Balochistan

Teaching Table conducted a six-day training for each district, covering play-based learning, class organization, time management, effective delivery techniques, child development, independence in thought, and innovation. The training was premised on three themes namely, child development and learning, play, and professional development. Using the three themes, the trainers provided each school with material to ensure they continue practicing the skills learned in the training. Based on these themes the teachers were trained to take the theoretical training into their classroom.

A Resource Kit was also developed for each school which included:

- USBs that were given to teachers. The USB's contained a large number of resources that teachers could use for their own development (phonic sounds and ideas for low cost no cost materials) as well as use to teach children (songs and stories English and Urdu)
- A Training Manual which was distributed which covered all the topics in the training.
- A cloth bag with logos of UNICEF, EU, SED GoB, and Teaching Table containing the training manual and a badge.
- A badge
- A six-day training schedule was provided.

A hands-on, experiential and collaborative approach ensured that teachers were actively involved in the process of applying theory to practice. In order to track the teacher's learnings, the trainers used a quantitative and a qualitative tool for measurement. This allowed them to engage with the data in a meaningful way, by not only providing an objective analysis of their learnings but gave the trainers insight into how the information was being interpreted by the teachers.

The trainers used two tools to evaluate the knowledge, skills, and attitude of 300 teachers. The trainers provided an evaluative measure that tracked the teacher's learnings. The sections had questions pertaining to socio-emotional development, individualized teaching, play, learning, physical development, brain development, and creative thinking. The latter highlighted the lack of knowledge teachers had regarding vocational training, reflective practices, benefits of storytelling, the meaning and use of a physical environment, and general child development. It was observed that the teachers' responses improved by 52% in the Post-

Test. By having teachers fill out daily reflections, the trainers were also able to oversee the teacher's learnings. Here, it was observed that the teachers learned about concepts they were unaware of. A process of self-actualization had begun where the teachers understood the importance of continuous professional development. Several teachers noted down the need for this training and to have them on a more frequent basis.

Conceptual Framework

Table 1. Training Objective and Outcomes

Learning Objectives	Learning Outcome
Play-based learning	Teachers will be able to implement play-based activities
Class organization	Teachers will be able to make learning corners in their classroom
Imaginative, Creative, and Critical-thinking Skills	Teachers will be able to include art, rhymes, and storytelling to develop critical thinking skills in children
Time Management and Temporal Development	Teachers will be able to develop a yearly, monthly, weekly, and daily schedule
Effective Delivery Techniques	Teachers will be able to write age-appropriate simple lesson plans
Child Development	Teachers will understand the development and well-being of children
Communication and Psycho-Social Development	Teachers will have positive interactions with children, parents, and community members.
Innovation and Independence	Teachers will be able to make low cost no cost material to promote active learning in their classroom
Professional Development	Teachers will be able to reflect on their own practice and improve their teaching skills

Source: Teaching Table

Themes of Development, Learning & Play

The training was focused on developing the teacher's knowledge of **child development**, learning, and the importance of play in the early years. With respect to child development, teachers learned that it is impacted by genetics and the environment. The trainers drew from theorists such as Arnold Gessel (1928) who believed child development was composed of intrinsic and extrinsic factors. Internal factors include genetics, temperament, personality, learning styles, as well as physical and mental growth. At the same time, development is also influenced by external factors such as the environment, family, cultural influences, health, and generally early experiences shaped by peers and adults.

To elaborate on ideas about the **environment**, the training was also inspired by the works of Urie Bronfenbrenner's (1917-2005) Ecological Systems Theory. The interaction between the child, his or her immediate family/community, societal landscape, culture not only fuels but steers his or her development. The three aspects of a learning environment; physical, temporal and psychosocial were explored through various activities. The physical environment entailed setting up the learning corners and using them to play, the temporal environment was explained using the training manual and discussing the yearly and monthly breakdown of the curriculum. The teachers themselves made a pictorial daily schedule for the katchi class. They were to maintain a balance between active and passive, indoor and outdoor, and difficult and simple activities in the day. Adding transitions during the day was a requirement. Psychosocial environment was explored through the enactment of case studies.

The next theme elaborated on how children are born primed to **play** and have an innate drive to explore. Interestingly children do not need to be taught to play or be given a reward. During play, children gain knowledge and develop many skills and competencies. Research has ascertained that play is crucial to the overall development of children, hence an integral part of all recognized early years curriculum across the world. Drawing from the works of Tina Bruce (1947- till now), and Margaret McMillan (1860-1931), the trainers highlighted the significance of play.

According to Tina Bruce (2011), play provides children with sensory experiences, opportunities to create rules, and space where they can share ideas, and celebrate their skills. Further expanding on this notion, the trainers examined the work of Margaret McMillan (1919), who expounded upon the nursery school. According to her, "Children want space at all ages. But from the age of one to seven, space, that is ample space, is almost as much wanted as food and air. To move, to run, to find things out by new movement, to "feel one's life is every limb," that is the life of early childhood" (McMillan 1919, 28). McMillan believed that children learn best through first-hand experiences. By providing opportunities for outdoor play, children can maximize their development.

Based on Bruce and McMillan's theory the trainers developed training that allowed teachers to play in indoor and outdoor environments. The trainers created games and activities that are commonly used by children and made the teachers play them. The hands-on experience of playing gave teachers an insight into how children feel when they play, and the discussion after explored the knowledge skills and competencies children learn from the experience. There was a general consensus on the importance of play. Play creates a joyful environment, which is key to learning.

Data Collection Methodology

Collecting data is a distinct step in the training process that captures the details of the empirical and qualitative world. This training gathered quantitative and qualitative data in order to inform the training process and gauge the teacher's understanding in the form of numbers and words.

Quantitative data are in numerical form, representing a "uniform, standardized, and compact way to empirically represent abstract ideas" (Neuman 2014, 201). The teacher's knowledge regarding child development, learning, and play was sketched out through statistics and bar graphs to enable an objective analysis of their performance prior to and after the training. Qualitative data in this training was in the form of written words, representing various "actions,.. [and] symbols" (Neuman 2014, 204). This helped in assessing the way teachers interacted with the training material and their daily reflections enabled the trainers to generate new ideas and "suggest new ways to measure" (Neuman 2014, 204). In fact, the first training in Gwadar primarily used a qualitative measure. The answers received were vague, subjective in nature, and difficult to interpret. Due to poor Urdu language skills, the trainers discovered that not every teacher could expressively convey their experiences in the Pre-Test and Post-

Test, and so, the training included three sections in the evaluative measure that was purely quantitative.

By using two kinds of measurements, the trainers were able to engage with the data in an intimate and meaningful way, closely connecting them to the teachers that were behind them.

Results

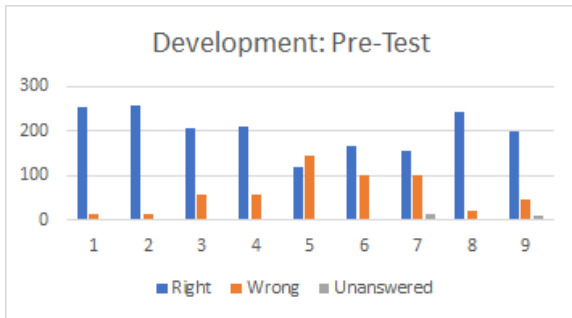


Figure 2. Development Pre-Test

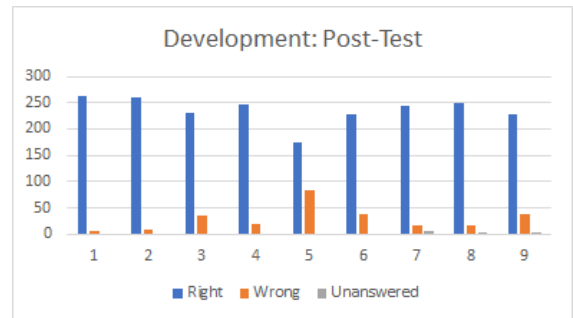


Figure 3. Development Post Test

The section on development was testing the teacher’s knowledge base on whether they knew about the various stages of development, how early the brain develops and why it is important to develop it during early childhood. The results indicated that 48% of the teachers were unaware of the process of growth and development in children while 34% were unaware of how a child’s brain can develop in the early years. After the training, 58 % and 82% of the teachers were now aware of the process of growth and development. The teachers were well aware about the important stakeholders in the development of children and about the importance of developing the brain during early childhood.

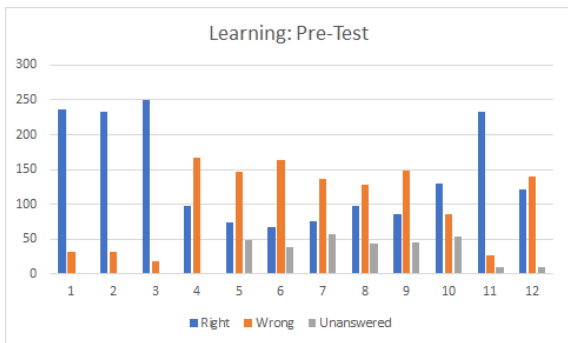


Figure 4. Learning Pre-Test

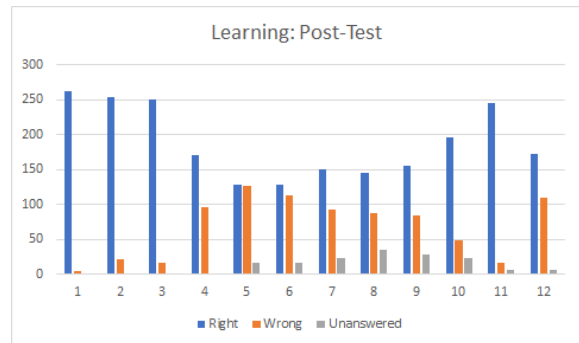


Figure 5. Learning Post Test

The next section tested the teacher’s knowledge of a child’s learning process. Each child is learning at their own pace and in order to make lessons effective, individual strengths need to be accounted for. By nurturing the holistic development of the child, either through reworking the physical spaces of the classroom by creating learning centers, creating story time, and discussing the essential skills that need to be developed in early childhood, we learned that a majority of the teachers were either unable to answer the question correctly or left them empty. In the post-test, a majority of the teachers answered correctly, proving that through the professional development of teachers, a huge impact can be created on teaching practices.

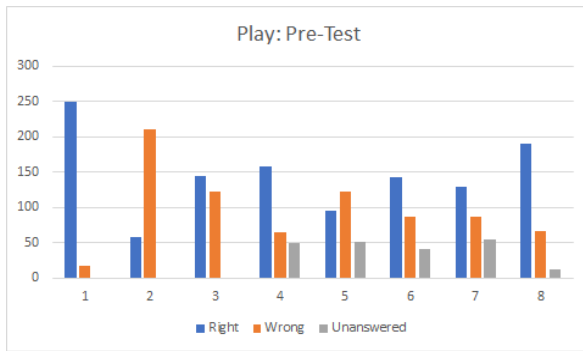


Figure 6. Play Pre-Test

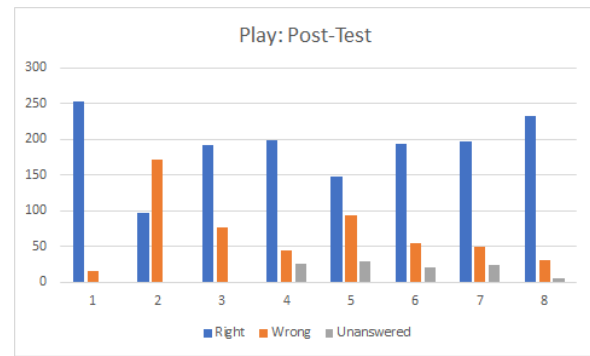


Figure 7. Play Post Test

The last section was attempting to understand the teacher's knowledge about play-based learning and whether they included it in their classrooms. A rise was observed in the teacher's knowledge about play as a natural process that allows students to develop holistically, excel academically, and gain transferable skills such as communication, cooperation, and courtesy in actions and speech.

Discussion

In six days, teachers were given knowledge about child development, creating a conducive learning environment and converting their classrooms into play-based ones. The data showed improvements in mostly all areas as it worked under the ambit of practice. Edgar Dale's Cone of experience (1960) reveals that 90% of retention is attainable when learners use perceptual learning styles which are sensory based. This is why the trainers designed activities simulating real-life experiences and helping teachers translate from theory to practice.

This was reflected not only by the quantitative data, but also the anecdotes collected from the qualitative data. Subhana, a teacher, writes about the importance of working in groups as children can learn from one another and it lends towards their overall development,

گروپ کے ذریعے کس طرح بچوں کی ذہنی، جسمانی اور حرکی نشوونما کو اجاگر کیا جاتا ہے یہ سیکھا
We can enable social, emotional, and cognitive development through group work

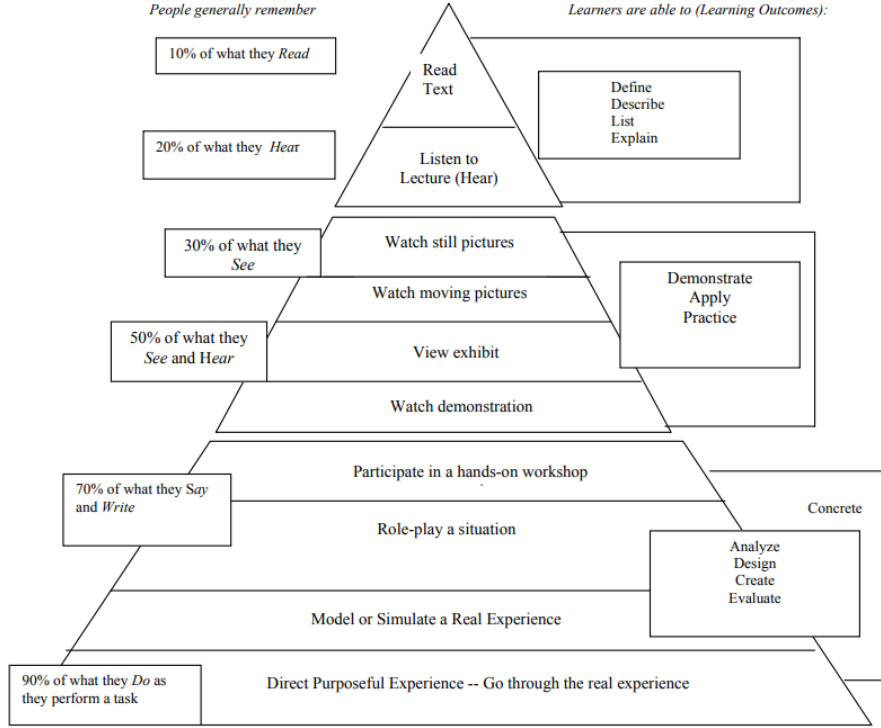
Teachers such as Maryam, Yasmeen Kauser, and Talat Ali learned how to create different learning corners, lesson plans, and individualized timetables that suited their own needs and their students. Shazia Sitar mentions how she learned about brain development while Rifat Jabeen writes about how she learned how to make toys for her students.

The idea of play also became important where teachers mentioned its need to build the cognitive abilities of a child. Arifa Arif writes,

کھیل کھیل میں بچوں کی ذہنی نشوونما کو اجاگر کرنا
A child experiences cognitive development through play.

While Sanam Begum mentions the use of play in enabling social and emotional learning in a child. She writes,

گیم کے ذریعے سماجی، جذباتی کے بارے میں سیکھنا
We can develop socially and emotionally through play.



Source: Taken from Anderson, H.M. Dale's Cone of Experience. Kentucky: University of Kentucky

However, it was observed that teachers held weak language skills in English and Urdu, as their mother tongue is Balochi. Anam Ahmed wrote the entire reflection in English. She writes, “Learn about pedagogy which is much needed for teachers in Pakistan and particularly in Balochistan.” She mentions that due to the “lack of pedagogical understanding” the learning process of children is hindered. Therefore, such a training must be conducted more frequently in order to “deliver the knowledge effectively in the classroom.” This indicates how teachers hold poor language skills and may require language-oriented training in order to effectively teach.

This was also true for Urdu. Yasmeen's comment further suggested that teacher's required training in Urdu. She writes,

اس ٹریننگ میں ہمیں مارننگ میٹنگ کے بارے میں بتایا گیا۔۔۔ اس سے پہلے مجھے اس بارے میں کوئی علم نہیں تھا

Today I learnt about something I didn't know. We learnt about morning meetings.

Conclusion

The training on the professional development of 300 teachers in Balochistan was short but effective as highlighted by Edgar Dale's Cone of experience. By employing a “theory to practice” approach we were able to develop the knowledge and skills of teachers in early childhood development, learning environments and play-based theories and techniques. Teachers were familiarized with theories and made to practice activities in order to learn and understand how to deliver lessons by being cognizant of the themes of the training.

The reflections of teachers substantiated what was found in the quantitative data, and the training kit and manual ensures sustainability in practices. On the basis of the findings of the training, the following recommendations are suggested on how to improve early years education in Pakistan

Give Curriculum-based Training

- Teachers should be taught how to teach the government endorsed curriculum. They need to understand pedagogy, and have content knowledge in order to teach the material.
- Training can be in 4 cycles spread out over a year. Each training will be related to core subjects (English, Math, Urdu and General Knowledge) for 7 days each.
- Teachers should be provided with follow-up support to ensure that they are comfortable with the material they are teaching and are able to deliver lessons effectively.
- Teachers from Balochistan are comfortable with their home language. It was observed that their English and Urdu language skills are weak. It is necessary to give teachers language-based training.

Involve the Stakeholders

- The school administration should also be included in the training. They need to be informed about the recommended methodologies. This will ensure that the training material is being effectively implemented.
- This will also allow administrators to observe teachers and give feedback on how to improve.
- The training will also emphasize the need to keep teachers who received ECE training to remain teaching the primary classes for at least 2 years. This will provide the teachers a chance to effectively deliver lessons while gaining a firm grounding as an ECE teacher.

Conduct Follow-Up Training

- There should be another training after 3 months to follow up on their learnings, refresh their knowledge and evaluate what worked.
- This will provide a chance to develop solution-oriented approaches and create culturally relevant material.
- Just as students are observed and assessed, a follow-up training will provide the chance to give feedback to teachers in a positive light. Not only will they view the importance of constant professional development, but teachers will also learn how to give and take feedback.

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