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Pakistani Teachers' Perceptions of Kindergarten Children's Learning: An Exploration of Understanding and Practice

Abstract This paper considers perceptions of children's learning and classroom practice to support learning in the Pakistani early years educational context. In Pakistan, there is a growing focus on quality provision of early childhood education and building early childhood education teacher capacity. Over the course of one academic year, data were collected from kindergarten teachers in a Pakistani urban school through interviews and classroom observations as part of a larger study. Findings presented in this paper are based on the interview data of two teachers in the sample, a novice and an experienced teacher. Data analysis examined their perceptions of kindergarten children's learning and of their practice to support kindergarten children's learning, taking into consideration the gender perspective. The results showed tensions in the teachers' perceptions which contrasted between a constructivist approach and a teacher-directed skills approach. Perceptions of their practice reflected a formal, teacher-directed approach rather than a constructivist approach and a teacher-directed skills approach to teaching. Several factors, including deep-rooted perceptions as well as curriculum structure, time, number of staff and resources, contributed to this.

Keywords Pakistani teachers' perceptions, kindergarten teacher classroom practice, kindergarten children's learning, gender perspectives

Introduction

Currently, the Pakistan education system is experiencing reforms in early childhood education¹. With the introduction of the Pakistan National Curriculum

¹ In this paper, the terms "early childhood education," "pre-primary education," "*katchi*" and "early years" are used interchangeably.

in Early Childhood Education in 2002 (revised in 2007), a shift in emphasis is evidence of promoting constructivist learning practices that involve active learning, problem solving, critical thinking, play as well as cooperative learning and independent discovery. There are also a variety of early childhood education resource development initiatives. In the few in-service teacher education institutions in Pakistan which have recently begun to address the issue of capacity development of early childhood teachers, teachers are being encouraged to use teaching strategies and resources to bring change into their practice to provide young learners with meaningful and better learning opportunities. Therefore, a key aim is for teachers to shift their current teaching which emphasizes knowledge acquisition, drill and practice and to engage young learners in constructivist learning experiences that involve direct experience, exploration, discovery, and social interaction. For such goals to be realized, how early years teachers understand children's learning is important to consider (Brownlee & Chak, 2007) because teachers' beliefs about how young children learn influence their classroom practice and curriculum decisions (MacNaughton, 2003). However, in Pakistan and elsewhere, early childhood teachers' understanding of learning, particularly their understanding about children's learning and how this influences their classroom practice has received little attention (Brownlee & Chak, 2007). There is thus an urgent need to consider how teachers' perceptions influence their teaching and practice with young children to inform the reform process in Pakistan. This paper, therefore, addresses this gap by reporting on findings from a larger groundbreaking piece of research with seven Pakistani kindergarten teachers, in which one of the study aims was to examine their perceptions² of children's learning, including gendered perceptions, and their support of children's learning in the classroom. This paper specifically focuses on the experiences of two teachers in the study sample.

Context of Early Childhood Education Provision in Pakistan

Efforts to ensure appropriate and effective early childhood education provision have gained increasing prominence. In Pakistan, this emphasis has grown from the government's commitment to achieving the early childhood care and education goal set out during the 1990 World Conference on Education for All (EFA) (Ministry of Education, 2003). This goal led to the re-formalization of *katchi* (pre-primary) classes in public sector primary schools as part of the National Education Policy (1998–2010). This has been an important step towards meeting the educational needs of one of the world's largest population of

² In this paper, the terms "perceptions," "perspectives," "views" and "beliefs" are used interchangeably.

pre-primary children who have thus far been neglected. Until the 1970s, early childhood education was formally organized with *katchi* classes being held regularly in public sector primary schools (Ministry of Education, 2003). The enrollment rate in these formal, didactic *katchi* classes is uncertain although it seems that nearly one-third of children attended them (Ministry of Education, 2003). Early childhood education within the private sector operated largely on a commercial basis, primarily in urban centers, and catering mainly to a minority of children from socio-economically advantaged families. During this period, however, public policy was largely unreceptive to early childhood education provision, with little investment being made in the recruitment or training of early childhood education teachers, in curriculum development, or in developing early childhood education learning material (Children's Resources International, 2008). Moreover, the formally organized *katchi* classes in the public sector were officially almost discontinued during the 1980s. Nevertheless, *katchi* classes continued to operate informally, albeit in dismal condition (Ministry of Education, 2003). Early childhood education provision in the private sector continued primarily on a commercial basis.

In 2000, Pakistan committed to achieve the EFA goals and targets set out during the World Education Forum in Dakar. The first EFA goal relates to improving early childhood care and education (Ministry of Education, 2003). Early childhood education was identified by the National Plan of Action for EFA (2001–2015) as a priority area to improve primary access and retention of all young children, and provide opportunities for their future success. Within the public sector, early childhood education has been formalized with the re-establishment of *katchi* classes. Pakistan's initiative to introduce the National Curriculum in Early Childhood Education in 2002 is indication of its commitment. A number of early childhood education programmes have been implemented in the public and private sectors, including through public-private partnerships. The private sector is also engaged in enhancing the quality of early childhood education through teacher training programmes and resource development. Moreover, various international donors and financial institutions also support gender and education programmes, including teacher education for women, in Pakistan.

Although identified as a priority area, the provision of appropriate learning opportunities for young children remains a critical issue in Pakistan. Early childhood education is given little importance in the hierarchy of education and the least priority in funding. Early childhood education classes in the public and private sectors generally operate without trained teachers, with the least experienced teachers often being assigned to teach the youngest children. *Katchi* classes in the public sector, and to some extent pre-primary classes in poorly resourced private sector schools, are further disadvantaged with limited resources

and overcrowding and often operate without a curriculum, syllabus or proper physical facilities. Within the public sector, multigrade classrooms with *katchi*, Class 1, and Class 2 students being taught by a primary teacher is also common (UNESCO, 2006). Much of the teaching-learning process is didactic through “chalk and talk” methods (Pardhan, 2011) with harsh discipline strategies (Dean, Faria, Amin, & Furqan, 2009). Awareness of the importance of early childhood education still remains a concern. There are approximately 7.8 million children between three to four years old in Pakistan (Ministry of Education, 2008, p. 13), with the gross enrollment rate in 2009 of 47% for females and 46% for males (UNESCO Institute for Statistics, 2009). However, there is broad variance in enrollment among the provinces, with Sindh having the poorest figures, about 20% enrollment in 1999/2000 (Ministry of Education, 2003, p. 61).³

Practitioner Training and Early Childhood Education

Increasing global investment in early childhood education provision has created many new challenges for teachers working in early childhood education settings today, including in Pakistan. A number of influential reports have identified the need for high quality training to respond to this changing scenario (see Aubrey, Anning, Calder, & David, 2003). Nevertheless, the growth of professionalism in this field has been limited due to low status, low pay and poor employment conditions of early childhood education teachers (Kim, 2004; Miller & Paige-Smith, 2004; Pardhan, 2011; Warwick & Reimers, 1995; Woodhead & Moss, 2007). Links between qualified teachers, better quality environment for children and developmentally appropriate interpretations of curriculum to support children’s learning have by now become well-established (Brock, 2002, March; Howes, 1997; Jowett & Sylva 1986; Shorrocks, 1993; Sylva, Sammons, Melhuish, Siraj-Blatchford, & Taggart, 1999). Nevertheless, some practitioners view a “natural aptitude” for working with children as important training (Penn, 2000), and, in this predominantly female-dominated field, early childhood education is also perceived as a natural extension of women’s “nurturing” qualities and “mothering” roles (Ailwood, 2007; Pardhan, 2009; New & Cochrane, 2008) requiring no prior training.

Pakistan is faced with an urgent need for qualified early childhood education teachers to support children’s learning in appropriate, effective ways. Presently, teacher training is not a pre-requisite for public and private sector early

³ In 1999/2000, the highest participation rate in early years education was in the Federally Administered Tribal Areas (FATA) and the lowest in Sindh. In 1999/2000, the highest percentage of female enrollment in pre-primary was in Punjab and the lowest in FATA (Ministry of Education, 2003, p. 61).

childhood education teachers. Teachers, usually women, with little or no higher education training, are generally hired to teach young children. High quality training in developing contexts like Pakistan is also of great concern. As such, those who teach young children have limited theoretical knowledge about child development and children's learning. Similar issues with quality, availability and effectiveness are also found in teacher training at primary and post primary levels. Teacher training is considered to be ineffective with practicing teachers rarely having opportunity for systematic, continuous and quality in-service professional development (Hussain & Ali, 2007). Existing professional development opportunities including the Primary Teaching Certification (PTC)⁴ and the Certificate in Teaching (CT)⁵ within the public system are often of poor quality (Warwick & Reimers, 1995). While public sector teachers are required to hold a PTC or a CT, this is not a pre-requisite for private sector teachers, especially those at the pre-primary and primary levels. Hence, while many practicing primary and post-primary teachers are considered to be professionally qualified by the Ministry of Education, they have limited understanding of both subject content and pedagogy. Attempts to address this issue are being made by reputable private organizations through their in-service teacher education programmes, including early childhood education, in collaboration with the government. While progress has been made, significant effort is still required.

Significance of Teachers' Beliefs about Children's Learning

Teachers' understanding of how children acquire an awareness and knowledge of their world is an important precursor to how practice unfolds in the classroom. Teachers' beliefs have been identified as key influences on teaching practice in terms of how teachers' perceive, process, and make decisions in classroom planning, teaching and assessment (Fang, 1996; Nelson, 2000; Pajares, 1992). Teachers' beliefs greatly depend upon the socio-cultural context, personal and professional experiences, and teachers' training (Anning & Edwards, 1999; MacNaughton, 2003; Nespor, 1987; Vartuli, 1999). Nelson's study found that personal factors such as teachers' beliefs and training as well as prior experiences and personality types effect teaching practice more than environmental factors such as school resources and moral support from colleagues. Thus it is also important to understand teachers' beliefs as a foundation upon which teacher

⁴ A Primary Teaching Certificate (PTC) is a one-year teacher training course in primary education. The PTC can be taken after completion of Class 10 in the public sector school matriculation system.

⁵ The Certificate of Teaching (CT) is a one-year teacher training course. The CT can be taken after attaining a higher secondary school certificate following completion of Class 12 in the public sector school matriculation system.

educators can develop appropriate teacher training and professional development programmes (Breffni, 2011; Nelson, 2000).

Early childhood teachers' beliefs have been consistently found to provide an understanding of their teaching practice (Lara-Cinisomo, Fuligni, Daugherty, Howes, & Karoly, 2009; Vartuli, 1999), including in relation to literacy (Foote, Smith & Ellis, 2004; McLachlan-Smith & St. George, 2000; Miller & Paige-Smith, 2004); numeracy (Lee & Ginsburg, 2007); play (Howard, 2010; Logue & Harvey, 2009); developmentally appropriate practice (Hedge & Cassidy, 2009); teacher-child interactions (Sakellariou & Rentzou, 2011); children's social competence (Han, 2009); and developmental skills and abilities (Kowalski, Pretti-Frontczak, & Johnson, 2009). Early childhood teachers' perceptions about how children learn, irrespective of whether they are derived from child development theorists or personal experience, influence how they work with young children. MacNaughton (2003) notes, that "early childhood educators act in particular ways with young children and develop curriculum for them based on their understandings of how children learn, how they make sense of their surroundings and how they form relationships" (p. 9).

While teacher decisions have been found to be based upon personal and practical knowledge rather than technical knowledge of child development and learning (Vartuli, 1999), teachers with early childhood education training are more likely to engage in developmentally appropriate practice (Breffni, 2011; File & Gullo, 2002; Han, 2009; Vartuli, 1999; Wilcox-Herzog, 2002). Teachers need specialized knowledge and qualifications to teach young children. Without this, teachers are likely to rely on informal knowledge derived from their personal or other teachers' understandings and folk theories (Carr & Kemmis, 1986; Vartuli, 1999), and knowledge developed through their own practice (Gholami & Husu, 2010; Vartuli, 1999). Nevertheless, teachers' beliefs have been found to have greater influence in determining their decisions and behavior than their knowledge, as new information is often filtered through personal beliefs enacted in their pedagogy (Ethell, 1998; Rimm-Kaufman, Storm, Sawyer, Pianta & La Paro, 2006; Stipek & Byler, 1997; Vartuli, 1999). Beliefs often create barriers to change because of the complex and interdependent relationship between personal experience, identity and socio-cultural context (Raffo & Hall, 2006). Brownlee and Chak's (2007) explored student teachers' beliefs about children's learning before and after a two-week practicum experience. They found that, over the two weeks, there was an increase in beliefs about children's learning from acquisition of knowledge and facts to an active understanding of children's learning as a process of making meaning of various learning experiences. They concluded that it is, therefore, important to focus on early childhood student teachers' beliefs about children's learning because these may influence effective professional practice. As such, for teacher training and professional development to influence beliefs and shift teaching practice to effectively mediate children's

learning, clear links between essential knowledge and skills and classroom practice as well as opportunities to guide teachers to reflect upon how their beliefs inform classroom practice and to re-negotiate their beliefs about learning have been suggested (Breffni, 2011; Brownlee & Chak, 2007; Hascher, Cocard & Moser, 2004; Han, 2009). From a social constructionist and poststructuralist perspective, critical reflection of beliefs is crucial to the repositioning of teachers' understanding of appropriate learning experiences for children within diverse socio-cultural contexts (MacNaughton, 2003).

Significance of Teachers' Beliefs about Experiential and Academic Learning in the Early Years

The importance of effective child-centered pedagogy through which children have opportunities to learn through developmentally appropriate practices (i.e., meet the cognitive and age-specific needs of children) which include direct experience, play, exploration, and discovery, has been acknowledged in many western countries (Bredenkamp & Copple, 1997) and is being embraced by governments in non-western countries and areas such as India, Pakistan, Hong Kong, South Korea and Taiwan (see Hedge & Cassidy, 2009; Juma, 2004; Kim, 2004; Lim & Torr, 2008; Lin, Gorrell & Silvern, 2001). In the Pakistani context, the National Curriculum in Early Childhood Education draws greatly upon the High/Scope⁶ philosophy of active learning, including through play during the "plan-work-recall"⁷ component of the daily routine (Hohmann & Weikart, 2002). The Piagetian based High/Scope philosophy of active learning is associated with a child-centered approach of children learning through manipulating material, choice, language and adult support. However, early childhood educators have diverse understandings of academic and non-academic early learning. Researchers, particularly in Asian contexts, have found that teachers believe in a teacher-centered approach which emphasizes paper and pencil work and the transmission of knowledge of reading, writing, and mathematics (Hedge & Cassidy, 2009; Li, 2004; Ling-Yin, 2006). As Farrell (2004) noted, in northern

⁶ The High/Scope Perry Preschool project, initiated in the 1960s by David Weikart as a research and curriculum development early intervention project, was aimed to help "at risk" young children from poor neighborhoods in Ypsilanti, Michigan. Today, the High/Scope approach is used in both urban and rural settings worldwide. Pakistan's National Curriculum for Early Childhood Education implemented in 2002 and revised in 2007 draws on components of the High Scope approach.

⁷ During the "plan-work-recall" component of the High/Scope approach, children plan which learning areas they would go to and the work/play in which they would be engaged. During the "work time" children engage in child-directed play in various learning areas with adult support. Following this, children participate in "recall time" where they reflect upon what they have accomplished during the "work time."

China, children are viewed as learners only when teachers are directing and scripting; play in kindergartens was reported as something children do when teachers are busy. Visible outcomes that emerge from passive learning, for example, children being able to memorize numbers and the alphabet and, therefore, seen as having learnt them seem to influence teachers' understanding about learning rather than children's acquisition of abstract ideas and concepts through play and exploration which are harder to demonstrate overtly (Farrell, 2004). Other researchers have observed that teachers' beliefs are more developmentally appropriate than their practices (Charlesworth, Hart, Burts, & Hernandez, 1991; Hedge & Cassidy, 2009; Li, 2004) and that various factors other than their beliefs influence their teaching. Some of these factors include large class-size, not feeling in control over planning and implementing instruction, exam-oriented assessment systems, preparing children to transition to formal academic primary class, parental pressure to focus on academic skills, administrators influenced by public demand for more stringent educational standards, limited resources and space for play and exploration (Charlesworth, Hart, Burts, & Hernandez, 1991; Gestwicki, 2007; Hedge & Cassidy, 2009; Lam, Ho, & Wong, 2002; Li, 2004).

Teachers' Perceptions of Gender and Learning in the Early Years

The importance of investigating teachers' perceptions about gender and learning has been highlighted to better understand their classroom practice (Browne, 2004; Liu, 2006; Renold, 2006; Skeleton & Francis, 2003). Browne (2004) has noted that teachers' understanding of the nature of gender differences has implications for how they make curriculum decisions, evaluate their practice, and evaluate girls' and boys' abilities and potential. Findings from diverse contexts, though primarily developed world contexts, in this respect reflect assumptions among teachers that boys are more intelligent; have greater academic potential in general and, more specifically, in math and science; are naturally more able; are naturally stronger in the face of challenges; and have a natural tendency to be better decision-makers (Drudy & Chathain, 2002; Halai, 2007; She, 2000; Skelton & Francis, 2003; Zainulabidin, 2007). While early years teachers' perceptions of gender have been highlighted to better understand their curriculum decisions and classroom practice, only a few studies have specifically investigated this (Browne, 2004; Hyun & Tyler, 2000; Robinson & Jones Díaz, 2006). Teachers in these studies generally had no formal training in gender equity issues and personal experience highly influenced their understandings and perceptions of gender. Teachers mentioned observable differences related to children's gender. Teachers' differential views of boys and girls reflected a gender binary divide in their descriptions. Boys' behavior was generally

understood as the “norm” against which girls’ behavior was judged. The differences in gender descriptions reflected constructivist, active learner, and deviating characteristics of boys. For example, boys were perceived as “active,” “rough,” “competitive,” “mathematical and logical,” “risk-takers,” “problem-solvers,” “builders,” “reluctant to sit at tables and do teacher-directed activities,” “and “less teachable.” In contrast, girls were viewed to have more passive, compliant and socio-culturally controlled characteristics. For example, they were perceived as “quiet,” “attentive,” “well-mannered,” “organized,” “artistic,” “literate,” “academic,” “motherly,” “more responsive to intervention,” and “more teachable.” In Hyun and Tyler’s (2000) study, teachers perceived that teacher-directed learning was required, given girls’ passive nature.

Methodology

Research Site and Sample

This study was conducted in the urban city of Karachi, Pakistan, in the kindergarten section of a private, coeducation, English-medium school, Rainbow School⁸. The kindergarten section had four regular class teachers and three assistant teachers. Each kindergarten class had approximately 30 students. In most respects, the pre-primary section in Rainbow School is typical of Pakistani pre-primary schools described earlier, with women teachers both predominant and having received little training. Moreover, like most private schools in Pakistan, Rainbow School followed its own kindergarten syllabus rather than the Pakistan National Curriculum for Early Childhood Education. A number of considerations went into selecting this school for the study. The researcher is professionally situated in Karachi as an early years teacher educator and researcher at a university that supports local schools with educational reform and school improvement largely informed by contemporary research. During the study period, the researcher had limited fluency in Urdu, the language most commonly used in Karachi and the national language of Pakistan⁹. The country’s unpredictable political situation was also a factor as the researcher was concerned about moving between multiple research sites. The research culture in this context is also in its infancy and, as such, entry into schools is largely negotiated via acquaintances. Thus, access to the research setting was facilitated through the researcher’s previous work there as an early years teacher educator in the school’s partnership with the university’s early childhood education teacher

⁸ Pseudonym.

⁹ The official language of the government is English.

development programme.

Procedures

The broad aim of the study was to explore how women kindergarten teachers' understand the concept of gender as evident from their reflections and teaching practice with girls and boys. Over a period of one academic year, the experiences of seven teachers were studied in-depth. Data collection methods included life history interviews and classroom observations. Each teacher was interviewed three to four times and classroom observations of daily classroom routine activities began after the first interview with each teacher. These observations guided the development of questions for the second and third interviews such that connections could be established between the teachers' reflections about their understanding of gender and their gendered teaching practices.

Data Analysis

The data analysis process was on-going, open-ended, continuously iterative and happening with different data sets at different levels (Miles & Huberman, 1994). Interview and observation¹⁰ data were analyzed qualitatively and coded based on the research questions and literature as well as the data itself. The researcher engaged in a back and forth process, moving between interview data sets to refine the codes and categorize them into pattern codes from which themes were developed. These themes were considered with the observation data sets. Running records of observation data were analyzed qualitatively using the same process as with the interview data.

Themes emerged from the interview data which were related to teachers' perceptions about children's learning generally and specifically in relation to gender. Themes also emerged in relation to teachers' perceptions of their efforts to support children's learning generally as well as with regards to gender. This article draws on the interview data related to children's learning from two of the regular class teachers who participated in the study.

Findings

The intent of this paper is to present study results related to teachers' perceptions of children's learning and how these perceptions support children's learning in

¹⁰ Observation data were also analyzed quantitatively. However, a detailed description of this process is beyond the scope of this paper which only draws upon themes emerging from the analysis of interview data of two participant teachers.

the classroom, taking gender perspectives into account. Key findings reflect tensions in the two teachers' diverse understandings about learning in the early years, particularly in relation to experiential and academic learning, and their classroom practice to support this, including from a gender perspective. The key findings are presented in two broad themes. The first theme shows the teachers' perceptions of children's experiential and academic learning within which four sub-themes were identified: teachers' perceptions about children's learning through experience; classroom practice supporting children's learning through experience; teachers' perceptions about children learning through a formal academic approach; and classroom practice supporting children's academic learning. The second theme presents the teachers' perceptions about gender and learning and their gendered classroom practice. First, the educational and professional qualifications of the two teachers are presented.

Educational and Professional Qualifications of the Two Participating Teachers

The two teachers had quite different qualifications from each other. They both began teaching with no formal pre-service teacher education, reflecting the general trend in this context. Neither had any prior qualification in early childhood education before becoming early years teachers, although both had some opportunity for in-service early childhood education professional development within the school. The school emphasized upon teachers professional development to acquire contemporary notions of effective teaching and learning by sending them for training to reputable institutions¹¹ and through workshops at the school led by more experienced teachers with external professional training or external consultants. Teacher 1 had attended in-service training at a reputable educational institution in the city and had taken courses in psychology. Based on her educational background and early childhood work experience, Teacher 1 was looked upon to provide a mentorship role for her kindergarten colleagues during the collaborative planning encouraged by the school¹² where less experienced teachers benefitted in their practice from the more experienced teachers, particularly those with professional training. The two teachers' previous experience ranged, with Teacher 1 having more than five years and Teacher 2 having less than five years of early childhood education teaching

¹¹ Many of these teacher training institutions which offer early childhood education programmes have recently been established as a result of educational reforms in the country. Pre-primary teachers and management had participated in certificate level early childhood education programmes which emphasized child-centered, active learning experiences in line with the Pakistan National Curriculum for Early Childhood Education. Prior to the teachers' participation in these early childhood education programmes, an overseas consultant had introduced elements of the High/Scope philosophy into the school's pre-primary curriculum.

¹² Curriculum planning as a team is a general trend in this context in private schools.

experience. Both teachers had also previously taught pre-kindergarten children before becoming kindergarten teachers.

Teachers' Perceptions of Children's Experiential and Academic Learning

Teachers' Perceptions of Children's Experiential Learning

During the interviews teachers were asked to describe how they perceived that kindergarten children learn. Both teachers stated that kindergarten children learn through exploration, manipulation of material, play, and hands-on-experience as reflected by Teacher 2. "The practical where they [children] involve themselves, where they can manipulate things, where they can touch and make and do something, that really helps them to learn ..."

Teacher 1 also perceived that children learn through observation, interaction with others and scaffolding. Both teachers mentioned that for kindergarten children to learn concepts and construct knowledge, traditional emphasis on drilling and copying was not the most effective way. They said that kindergarten children need to have hands-on-experience with material to understand and learn concepts. Both teachers had noticed that children grasped concepts "quicker and faster" through experiential learning rather than by "memorizing and writing only."

Both teachers, particularly the novice teacher, attributed their views to the influence of more experienced colleagues who had participated in early childhood education professional development. Both teachers also said that their practice and observations of children learning through manipulating material has had an influence on their view that children require direct hands-on-experience with material in order to learn.

Classroom Practice Supporting Children's Experiential Learning

Teachers were also asked how they perceive that their practice supports kindergarten children's engagement with material. They both stated that children have such opportunities with classroom manipulatives during teacher-directed activities. For example, when a new academic concept or skill was introduced or when the objective was to reinforce a concept or skill, children could explore the manipulatives which were mainly based on the curriculum. The teachers mentioned that the material would be placed in the classroom for children to use only after they had demonstrated to the children how to use it to learn a particular concept or skill. According to the teachers, the children would not be able to understand how to use the material before it was presented to them and so it was more appropriate to first teach them how to use it and then make it accessible to

them. This is reflected in the following description by Teacher 2:

Our material is based on the syllabus. Like if we are introducing language, we have the alphabets and the words and the three letter words kit there. For sequencing the ABCD, we have those ABCD sequencing letters. Then for math, we have sequencing the numbers, so we have the numbers there. Then we have the puzzle games for adding and subtraction. So we don't [give] it before hand, because then the children don't tend to understand what it is. Gradually we are bringing them into [using the] material. We first give the skill on the board, then we give them the material. [We] make them learn how to use [the material] and how to calculate and then we bring them to the exercise books. So according to their needs and the concepts being taught, we [introduce] the material as needed.

The teachers also mentioned that children had practical, hands-on-experience during the period which was planned once a week for kindergarten students to engage in unstructured play in learning areas based on the High/Scope approach of plan-work-recall and which took place in a space set-up into learning areas for unstructured play close to the kindergarten section.

Their descriptions showed this to be predominantly child-guided time where activities were primarily initiated and directed by the children. For the most part, children could choose the learning areas in which they wanted to play and they had access to a range of material including blocks, books, pretend play clothes, kitchen-ware, and other material. Children could also access the classroom material after completing their academic, teacher-assigned work or their snack which they ate in the classroom. The teachers described that the children could take the material to which they had been introduced during an academic lesson to practice academic concepts and skills. Additional classroom material like books, blocks and counters which were in the classroom "right from their [the children's] first day" could also be used by the children. In order to allow children to equally access material, particularly the popular material like blocks and counters, the teachers had made a timetable for different groups of children to use certain material during a given week.

While both teachers were grateful for the school's role in their professional development, both of them expressed a great desire to attend professional early childhood education training programs. They both felt that this would give them first-hand knowledge about child development, how children learn, and effective pedagogy to support young children's learning. As Teacher 2 described:

I would really like to go into some training programs, it would just cater my needs and ... polish me, groom my teaching because basically I was not trained for it. I just started my job and I have just the working experience. I am learning through the

surroundings, that's it. That's how I became a teacher, but if I would be qualified, I think ... could do more things

Teachers' Perceptions of Children's Academic Learning

Although both teachers stated their perception that children learn best through direct experience and the use of real objects, they also revealed deeply espoused views that academic-oriented, teacher-directed tasks through writing, drill and practice were important learning methods. Both teachers felt that they have an important role in children's learning, particularly to prepare children academically to succeed at higher levels as well as to compete and avail themselves of further education and career opportunities in an increasingly technological society. They perceived that for children to succeed as they moved to higher levels of education, children needed to acquire academic knowledge as well as to read, write and do math well. Nevertheless, it was evident that their perceptions about children learning through academic teacher-directed learning varied.

Teacher 2 perceived that by the time children reach kindergarten they are ready to participate in academic activities. Kindergarten children understand more than pre-kindergarten children and are mature enough to do written work in kindergarten. She described:

This is a much more higher level class ... because the children, they understand everything and they want to learn ... as [they] are growing up, definitely everything is growing up, [their] mental level, [their] physical ... but there are things which they will carry with them throughout till their late age ... [In] the nurseries ... children hardly used to understand ... Our children [in kindergarten] have now started to copy from the board, previously [when they entered kindergarten] we were doing it for them, we were writing for them ... now they can do everything by themselves.

The dominant perception which emerged through her reflections was that of knowledge transmission through her own active teacher-directed strategies to make sure children learnt, that their knowledge was increased and that something was created out of them. Teacher 2 emphasized the importance of children "sitting on their chairs ... listening ... and showing good behavior ... if they want to learn something." She felt she had a great responsibility to be well-informed to meet their academic learning needs. She explained:

It's very difficult to be a kindergarten teacher ... it has a lot of responsibilities ... The teacher has to be very much informed. Some people usually say that, "Oh! Just a kindergarten teacher," but they don't know how much pressure we have ... teaching

them ... making them learn, creating things out of them ... shaping them

Teacher 2 felt that allowing children to use material once or twice a week during formal teaching-learning time, and after completing their work and snack was sufficient. She explained:

They get [enough] time ... I think we try to make it [plan for children to use material] every week, once a week that we have the activities and we see that the children learn more and more and gain something which we have tried to make them learn ... We decide the day when we have the working for the groups. Sorry not once, we have twice a week, then we have the [plan-work-recall], that's where learning goes on ... We give them more exposure to books ... because they are focusing on the words ... and materials, giving them papers ... Every day ... after having snacks, they have time, they pick up the books or papers and write or draw something.

She perceived that children had learned something when she saw evidence in their completed written tasks and in their ability to read. For example, she said, "Learning is anything like reading or eating or walking or anything. We have to learn." While she perceived that children learn through play, she had difficulty articulating what she thought children were able to learn when they played, "they [children] learn through play, I don't know how to explain it ... Just through play, they can just explore." When she described the decisions she made to organize her classroom and what classroom material to include, she indicated that she primarily considers material related to the syllabus. She explained that she and her colleagues do not have material like clothes for dressing up in the classroom because there is shortage of space. She also felt that if such material were in the classroom the children might enjoy themselves too much and focus less on academic work.

The material in the classroom, it's according to our syllabus. What is there, what is needed, we plan it ... according to [their] understanding, according to [what they need to] practice, how much they need it ... We don't have space ... I think that if we have a smaller [version] of the dress up area, the children would enjoy more in that after they finish their work. They can dress up and then sit and read a book, but ... they would disturb the others who are working ... so we never consider this [material in the class].

Although Teacher 1 felt that she had an important role in preparing children to succeed academically, her reflections of her practice indicated a struggle with what she understood to be appropriate methods to support kindergarten children's learning. Unlike Teacher 2, Teacher 1 felt that children in kindergarten are not ready for too much academic and written work. She thought that children needed

hands-on, practical experiences with material in both teacher-directed activities and through play, otherwise they become disinterested, fidgety and distract others. She described the following:

[Kindergarten] children obviously are burdened a lot [with writing and] the academics, then they become restless ... We are only teaching them write A and Z, write on lines, write numbers. It's a pressure ... In my class this happens that boys, when they get bored of something, then they start disturbing others, they are either pinching or whatever they are doing to other children ... girls, they put their heads down and they try to sleep

She mentioned that she was dissatisfied with the amount of time she gave children to explore and play with material, "we are giving them opportunities, but ... I am not satisfied with this thing. I think I should give them more opportunities." She described being reluctant to give children material because she was worried about classroom management. While she attempted alternate strategies in her practice which were not part of the collaborative planning by the kindergarten teachers, when it came to children working with material, she was hesitant to do this without additional adult support. She explained that she had also stopped allowing children to use classroom material after they had completed their work because the children rushed through their written work so that they could get to the material first, especially the popular blocks. She also mentioned that it was very hard to her to get them to tidy up and put the material away afterwards. She felt that only giving them a few minutes to play was unfair:

There is not much gap between the two periods and we have finished one work and we want to do another work. So there is not much time, so at that time, I think that is not the right time because when they start using the material, they want to do more and then telling them just sit with the material only for five minutes and their need is not fulfilled, so obviously this is also not correct. So I tell them that there is not much time, so you can sit on the mat or windows.

She was more prepared to deal with behavioral problems like running around the room, disturbing others, and fighting, that ensued while children waited for their peers to complete their work before beginning the next task.

Teacher 1 was also dissatisfied with the material and number of learning areas made available for children to play in during the unstructured activity period. Based on previous experience of the learning areas having plenty of material, she felt that less material reduced the complexity and creativity of the children's play together. Previously, she and her kindergarten colleagues had invested time, energy, money and their own material to stock the learning areas. She explained that much of the material was missing. They have since stopped bringing in

material:

There is not sufficient material [in the learning areas]. We have tried to bring a lot of material, but somehow the material gets lost ... Previously in the kitchen area, there was a lovely variety ... we had so many pots and glass stands, glasses, jugs, everything was there ... So now we are not bringing anything ... we were only wasting money out of it ... We have got very limited [learning] areas ... We are short of [resources] over there, that's why I am never, never, never satisfied with that.

She observed that the children tended to select those areas which were well-resourced and where they had access to material like blocks, dress-up clothes, kitchenware, and paint that was not usually available to them in the classroom. The library area was the least preferred choice for the children because the provisions in this area were usually for reading and writing.

Teacher 1 felt that kindergarten children also had insufficient time for plan-work-recall in a week. She thought that the transition from nursery where children had plenty of time in a week for plan-work-recall, to engage with material during teacher-directed activities and with less emphasis on writing was very abrupt for kindergarten children. Teacher 1 thought that the school management should also give equal attention to the transition from nursery to kindergarten as they did from kindergarten to Class 1. She explained:

When we compare nursery [children] to kindergarten [children], nursery [children], I think they are having plan-do-review every day. We are having it only once a week and that is ... not sufficient ... I try to make the connection between nurseries and kindergartens and I feel that there is no connection between them. In nursery, the children are not taught the [letter] formation ... they are only focusing on the sounds ... [and] worksheets. In kindergarten, [they] start writing ... So when I see these things, I think there is no connection between nurseries and kindergartens. They [the management] are making connections between kindergartens and ones, but first they have to make connection between nurseries and kindergartens. There is a lot of gap between this.

Classroom Practice Supporting Children's Academic Learning

In addition to the teachers' deeply espoused views about children learning best through an academic-oriented approach, their descriptions reflected that their "chalk and board" approach was greatly influenced by the curriculum structure, time, staff and availability of resources.

At the kindergarten level the curriculum was primarily structured to support academic learning. Both teachers said that much of their planning focused on achieving syllabus objectives and helping the students meet the achievement

targets. Teacher 1 described, “we have achievement targets that are expected from the children towards the end of the term ... We have got the teachers’ notes for ...the curriculum...so we have to follow them....”

Each day was typically divided into four 40 minute periods with different subjects being taught during each period. The teachers’ accounts showed that most of the children had hands-on-experience with material during their academic lessons about once or twice a week. Their descriptions of the physical structure and layout of their kindergarten classrooms also showed them to be more suited to a teacher-directed, “chalk and board” kindergarten academic syllabus than to active learning and play. All the kindergarten classrooms were similar, with tables and chairs occupying much of the classroom space. Each classroom included: storage shelves for exercise and text books, stationary and material; a mat area for transitions, singing, storytelling, and reciting prayers; a small, low table and low chairs for teachers; a chalkboard; a reading corner with a small mat, shelves, and books; and soft boards with material related to the academic syllabus which was reviewed daily for children’s reinforcement of content.

Teacher 1 who had more teaching experience at the school said that children previously had had more time to use manipulatives during teacher-directed activities. She had observed increasing top-down pressure for the kindergarten curriculum to include a more academic focus and to emphasize writing, e.g., sentence structure and forming words legibly. As such, the management has placed emphasis on writing in kindergarten to prepare children to effectively transition into Class 1. Teacher 1 described:

Writing pressure is there ... According to the school management, they say that when there is a demand from the primary section and [higher levels] as well [and] if we are going to delay it [preparing children for writing and academics], then they [children] are going to suffer when they go into the higher classes ... So a lot of pressure is there.

Teacher 1 felt that this pressure reduced the amount of time teachers plan for the use of material during teacher-directed activities. They were uncertain how to fit in the written work and use of material together in a 40 minute period. She described that she felt tense about not effectively preparing her students for the demanding Class 1 written and academic work and how her colleagues who taught Class 1 would perceive her competency. Consequently, children were given a chance to use the material only after completing their written work.

Teacher 1 also explained that there has been a recent change in the staffing which has affected how often teachers planned for children’s use of material in their lessons. Previously, each class teacher had had an assistant; during data collection for this study, three assistant teachers rotated between all four

kindergarten classrooms in support of the regular class teacher. The class would be divided into two groups and one of the teachers, usually the assistant teacher, would be with one group of children demonstrating how to use the material and helping the children as they used it. The students would later demonstrate their understanding of the concept through a written activity. Having less adult support in the classroom posed a challenge. Teacher 1 explained, "this year, I faced all the problems ... because until last year we had continuous support of one more teacher, now this year we don't have it"

As mentioned earlier, Teacher 1 was reluctant to allow all the children to use material while she was alone during the lessons. She felt that the "class will get out of control" and she was worried about the "noise level." Teacher 1 felt that it was easier for her to handle the class by having children sit at their desks and work individually on worksheets or in their exercise books. Both teachers also said that the practice of planning curriculum and lessons as a team on a weekly, monthly and annual basis (a general trend in private schools in this context) also made it difficult to introduce anything new like using material when this had not been previously planned. Although Teacher 1 did mention that there have been times when she has attempted to try something innovative in her classroom which she felt was required for the specific needs of the students in her class, it was usually related to a writing task. She would then share these strategies with her colleagues to try. She explained:

It is our school policy that what one class does the other one also should do in the same way. But if the teacher thinks that the thing is not working out then she can change and she should tell the other team members also. The [teachers] who are more experienced ... they [can] say that, "No, you can't do this." So if they have said that, we can't do this then ... We had decided to do brainstorming on paper first ... I did it [my] way ... because I thought that [what was planned] was too much for the children ... I discussed with the other teachers ... we all have decided to do this [what Teacher 1 tried].

Both teachers also commented that at times they had insufficient material for all the children to use at once. While a common practice was for teachers to share material amongst classes, the material was limited and not always available. While they have considered acquiring new material for their classrooms, they are reluctant to do so. Teacher 1 mentioned the expense and her experience of material getting lost or misplaced. Teacher 2 who was less established at the school and had less teaching experience was concerned because of the school's preferred practice of uniformity in classroom pedagogy. She noted, "we work in a group and it's better if you work in a group, I mean just going apart [doing something on your own], it's not a good thing."

Both teachers mentioned that children used material about once or twice a

week and that it was usually when the assistant teacher was scheduled to be in the class to support the regular class teacher. The assistant teacher normally took a group of children to another room where they worked with the material. When the regular class teachers had no assistant teacher support and used material in a lesson it was usually to provide a visual representation of a concept like addition, using pencils to demonstrate. A few children may have been called up to be part of the demonstration. Then the material was placed on the shelf for children to use generally if they had time after their snack or work. Children who took time to complete their written work or their snack had less opportunity to use the material.

As mentioned earlier, there was an attempt by the school at the kindergarten level to break the mould of the existing teacher-directed, “chalk and board” academic syllabus by including one period a week for unstructured play in learning areas. Nevertheless, if there was any disruption to the weekly plan either due to a co-curricular activity, like sports day preparation, or school closure because of the unpredictable law and order situation in the country, the unstructured play period was usually cancelled to cover the academic syllabus objectives. Teacher 1 mentioned that the learning areas were also insufficiently resourced and conflicts often arose amongst children. Moreover, children preferred to choose those learning areas in which there was more material with which they could play.

Teachers’ Perceptions about Gender and Learning and Their Gendered Classroom Practice

The two teachers had varied perceptions about learning in relation to gender. Interestingly, neither of the two teachers talked about exploration and manipulation of objects in their descriptions of how they perceived girls and boys learn. Teacher 1’s initial response to the question about how girls and boys learned was, “they all learn in the same way or same manner.” As she continued to share her views, it was evident that she perceived girls and boys to learn differently. She felt that there are gender differences in academic ability with boys being more mathematically and spatially oriented and girls being more linguistically and artistically able. For example:

... I have noticed that most of the girls ... have problem in mathematics; they take time to grasp ... concepts. Otherwise language, Mashallah¹³, they are alright in it and they have a lot of creativity ... But boys grasp ... mathematical concepts ... faster than girls do ... I have noticed that their creativity towards the arts through drawing ... is not that good as

¹³ Mashallah means “with God’s praise.”

compared to the girls ... normally I consider arts subject as the girls subject and math as a boys subject.

Her reflections on her daughter's, her female students' and her own difficulty with math have led her to believe that it was "natural for girls to find math more difficult. She explained:

There are some things which are naturally in [girls and boys]. Like for mathematics, I have experience for myself as well, for my daughter as well and now for the children in the class as well that I have observed ... This mathematical sense, it's naturally in [boys].

She shared her observation that girls are beginning to enter into fields like accounting, banking and commerce which "normally boys go into," though it is still less compared to boys. Nevertheless, she perceived that boys are "naturally" able to perform well in these fields and that girls face difficulty. Teacher 1 felt that because girls have greater difficulty with math, she spends more time helping them in class than she spends with boys.

Like when I talked about the girls subject and the boys subject, so I know that most of the girls, they take time to grasp in mathematical concepts. So at that time normally when I am doing maths with them ... I normally tend to go towards girls, because ... I feel that they need my help

Like Teacher 1, Teacher 2 also felt that girls are more "creative" and express "lovely ideas." She attributed this to girls ability to concentrate more which helps them to think of "new ideas" and the "nature of girls" to be expressive. She described:

Actually boys, they don't concentrate ... they have a concentration problem ... The girls, they keep on thinking, thinking and they want to come up with new ideas ... The boys, they just think and speak it out suddenly, whereas I feel the girls, they are more perfect in whatever they are thinking and whatever they are giving.

Unlike Teacher 1, however, Teacher 2's initial response was that girls and boys learn in different ways. She perceived girls to learn through verbal instructions and boys to require information presented to them on the board.

Girls really learn through verbal instructions and they follow up [manage] very easily ... Boys, at times, are not ready to accept the verbal instructions and don't like to follow these. They need the presentation on the board for them to understand

Both teachers perceived girls' orientation to academics to have changed overtime. Within this visibly patriarchal context with deep rooted gender norms, the teachers felt that young girls today are good at everything. They are taking up the challenge to compete against boys and they are "doing the same things" as boys. Both teachers attributed this largely to the increasingly technological environment in which both boys and girls are getting access to different "opportunities" and "circumstances" as well as to "parent support" which was previously not there. Nonetheless, both teachers felt that boys had an advantage over girls in their learning because of their greater freedom and opportunity to go outside and explore their environment within the gender norms of a context whereby men primarily occupy public spaces and women predominantly occupy the private household domain.

Generally, the two teachers perceived boys to be naturally more able than girls, but less academically successful because they lacked concentration and rushed through their work. Teacher 1 felt that boys wanted to complete their work quickly so that they could play with the material. Girls were viewed to take "longer to grasp concepts," but to do better academically because they concentrated more, were hard-working and took time to think.

The two teachers also had varied views of their role in girls' and boys' learning. They felt that they had a responsibility to provide equal opportunities for both girls and boys to learn. Nevertheless, both teachers mentioned that they spent more time helping boys than girls because boys were careless and rushed through their work. Furthermore, when both teachers spoke about decisions for selecting material, it was evident that gender was a strong consideration. They generally mentioned blocks and vehicles for boys and clothes and kitchen-ware for girls. When children transgressed gender norms, particularly in their play, this caused greater concern for Teacher 2. She described sharing her alarm with the school management when one of the girls dressed up like her father and pretended to go to the office and mentioned her worry about a girl who continually selected the block area where mostly boys played. Teacher 1, however, talked about encouraging boys who wanted to dress-up in frocks or play in the kitchen area but were reluctant because of what their female teachers and peers might say.

Both teachers noted that gender in early childhood education has not been discussed in any of their professional training.

Discussion

The results from the study showed tensions in teachers' perceptions about how children learn and of their classroom practice to support children's learning. Their perceptions mapped on to theoretical frameworks evident in early

childhood education literature and which tend to contrast between a more child-centered, constructivist approach with a more teacher-directed skills approach associated with traditional learning theory (Stipek & Byler, 1997).

The two teachers' seemed to have constructivist ideas about how children learn and perceived that their active engagement with material and opportunities for such experiences were essential. Attempts to provide for this seemed evident in their practice. Both teachers appeared to feel that a predominantly didactic classroom with little or no scope for experiential learning is not effective for learning. In the Pakistan context where there is traditionally less emphasis on constructive learning experiences including in early childhood education, the teachers' views reflected the influences of their school's attempt to disrupt traditional, didactic approaches and to include learning experiences for young children through direct experience with real objects. The school has demonstrated commitment to enhancing teachers' practice in contemporary ways largely based on western standards of developmentally appropriate practice of young children's active learning and construction of knowledge (Bredenkamp & Copple, 1997) which has been influenced the High/Scope approach (Hohmann & Weikart, 2002) that the school draws upon in its pre-primary curriculum. On-going professional development of teachers in contemporary notions of early childhood teaching and learning that promote constructivist learning experiences through workshops facilitated by external consultants and trained teachers from the school itself as well as mentoring through collaborative curriculum planning were promoted by the school. This and, to an extent, the two teachers' own classroom teaching and education experiences appeared to have contributed to their constructivist understanding of how children learn and their pedagogy reflecting this.

However, tensions were also evident in the two teachers' perceptions which also reflected espoused views of children learning through traditional, teacher-directed methods. Their classroom practice also appeared to be more formal and didactic than child-centered. This understanding of young children's learning amongst teachers seems to be congruent with findings from other Asian contexts where teacher-directed, formal methods are valued (Hedge & Cassidy, 2009; Li, 2004; Ling-Yin, 2006). Their views and practice within this traditional learning framework seemed to also be influenced by the school's emphasis on a formal, academic curriculum in the kindergarten years and pressure from their colleagues teaching at higher class levels to prepare children for writing and academic work in Class 1. Interestingly, similarities are also apparent in western contexts with tensions around government initiatives that have led to a focus in kindergarten on basic skills and knowledge through teacher-directed instruction for school-readiness (Fisher, 2011; Gestwicki, 2007; Lara-Cinisomo et al., 2009). A study by Sylva et al. (2004) found that effective settings tend to achieve an

equal balance between adult-led and child-initiated interactions and activities.

The teachers' own experiences as learners in this context which was likely teacher-directed and their lack of formal training in early childhood education also seem to have contributed to their understanding of children learning through "talk and chalk" methods. Researchers have noted that teachers with early childhood education training are more likely to engage in developmentally appropriate practice (Breffini, 2011; Vartuli, 1999). Cultural norms in this context where good teachers are viewed as those who can transmit knowledge and maintain discipline with children listening and working quietly also appear to have influenced their ideas about children's learning (Pardhan, 2010).

Tensions were also evident in their gendered views of children's learning. Their perceptions about children as a collective, and separately as girls and boys reflected discrepancies. They did not refer to constructivist approaches in how girls and boys learned though they considered this when they talked about children's learning in general. Their predominantly academic practice seemed more in line with their perceptions of how girls learn best which raises questions about the kindergarten boys learning experiences. Nonetheless, they seemed to spend more time helping boys than girls and imparted both verbal and non-verbal messages to children which seemed to privilege boys. Their gendered perceptions and practices raise questions in terms of how teachers think about their students, for example as a group of learners or sub-groups of learners with similar or diverse ways of learning, and how this influences the decisions they make daily in their practice. It also raises questions about the constructive learning experiences children have, particularly through exploration and discovery, when their actions may be incongruent with teachers' perceptions of how they should be, for example going against gender norms, and teachers' responses to this. Moreover, the teachers' gender perceptions and practices raises questions about the classroom as a space where existing cultural traditions within a society which privilege boys are transmitted or critically addressed, challenged and transformed through teachers' practice (Pardhan, 2011). Both teachers' experiences showed that their gender perceptions of learning seemed to influence their gendered practice (Browne, 2004).

Although tensions in the two teachers' understanding of and their practice to support children's learning were apparent, differences were apparent in how the two teachers' responded to these tensions. Teacher 2's perceptions of kindergarten children's development reflected discrepancies. She considered them to be mature enough to write and do academic work, yet she felt that they could not understand how to use the material without instructions. Nevertheless, her practice reflected that both for writing and using material, children were largely expected to follow her lead. While Teacher 2 incorporated strategies for children's constructive learning, she seemed more comfortable with the formal,

teacher-directed approach. This approach seemed congruent with her deeply espoused perceptions of children as passive learners and her responsibility to provide them with knowledge to be academically successful. Teacher 2 appeared constrained by an approach which did not encourage autonomous thinking and discovery and which gave her more control over directing how and what children learned. Including opportunity for children to work extensively with material was not a priority for Teacher 2. She felt that once or twice a week for this was sufficient. Moreover, the use of this material primarily for teacher-directed activities seemed to align with her perceptions of children's learning. Teacher 2 seemed to place more importance on material to enhance children's academic knowledge and skills which she could use in her teacher-directed practice than material for play. Though she felt play contributed to children's learning, her difficulty articulating and understanding why was likely due to her limited knowledge about the process of play and the ways in which it works to support children's learning and development (Howard, 2010). Howard (2010) has argued that a thorough grounding in the developmental potential of play and reflection on the position of early years teachers as play professionals may be a key determinant in ensuring the success of play-based curricula. Perhaps Teacher 2's limited awareness about the process of learning also made her focus on tangible evidence like the ability to read and write.

Teacher 1's perceptions of children learning through traditional methods seemed to be of a lesser degree. Her greater experience as an early childhood teacher, her education qualifications and her established position at the school appeared to create a struggle for her in the decisions she made about her formal, didactic practice, particularly in terms of what she felt she was able to and unable to control. Unlike Teacher 2, she did not seem to perceive kindergarten children to be mature enough for a rigorous academic curriculum. Reflections of her past experience as a nursery and kindergarten teacher appeared to have influenced her view of kindergarten children requiring and preferring more opportunities for active engagement, including through play. She perceived academic knowledge and writing skills to be important for kindergarten children, but thought that their transition from a more child-centered nursery class to a predominantly teacher-directed kindergarten class was too abrupt. The tension she experienced with the school's greater consideration on children's transition from kindergarten to Class 1 and limited attention towards supporting children's transition from nursery to kindergarten has also been mentioned by Lara-Cinisomo et al. (2009) who have highlighted the need for more research to better understand the transition from pre-kindergarten to kindergarten; this topic has received less attention than the transition from kindergarten to primary school as part of school readiness. If more emphasis were given to understanding the transition from nursery to kindergarten at Rainbow School, it would be interesting to see if the

pressure for academics and writing at higher levels that has permeated into the kindergarten level would find its way to the nursery level or whether focusing on the nursery level might create a move towards a more child-centered approach in kindergarten and possibly Class 1. As a teacher who provided mentorship support to her colleagues, Teacher 1 seemed to have greater leeway to test out innovative strategies in her practice. However, her perceptions of not having the skills and knowledge to support more constructivist approaches to learning appeared to create apprehensions for her to plan for this. Furthermore, the scrutiny of her own practice by her colleagues and management in terms of how well she could prepare her students for Class 1 academic work also seemed to create barriers for her.

Implications

Important implications can be drawn from this study which has provided insight into teachers' perceptions of young children's learning and their practice in Pakistan. The study results suggest that teachers' understanding of children's learning and how to promote early learning effectively in classroom environments where children have access to meaningful experiences for successful learning outcomes is critical to reforming current early childhood education practice. In Pakistan, quality training of early childhood teachers is a grave concern. Therefore, improving the quality of early childhood education depends greatly upon designing and instituting on-going, evidence-based professional development closely linked to classroom practice and which explicitly and intentionally equips teachers with the knowledge and skills necessary to effectively support children's learning (Breffni, 2011) through critical reflection. Instructional content needs to be carefully designed to consider contemporary notions of children's learning as well as the diversity of children's experiences in the cultural context of Pakistan. Careful consideration is also required for the provision of adequate and meaningful classroom resources for children and teachers to support children's learning. This is critical to ensure young children's learning needs are appropriately and effectively met and for them to acquire important school-related academic knowledge and skills related to literacy and numeracy. Presently, a key challenge is to minimize or reduce the highly structured, teacher-directed practices at the pre-primary level, in this case kindergarten, and move towards effective settings which provide both teacher-initiated group work and freely chosen yet potentially instructive play activities (Sylva et al., 1999). The study also raises implications for consistent school policies and practices to promote and support effective and appropriate pedagogy for children's learning outcomes. Inconsistencies between teachers'

perceptions and school policies and practices need to be carefully considered to avoid creating barriers for teachers' to implement effective pedagogy.

Improving the quality of education in a context like Pakistan is a complex endeavor. Government commitment has ensured that attention is being focused on improving the educational experiences and developmental outcomes of early years children in Pakistan. Nevertheless, such reforms depend largely upon individual teachers shifting their approaches to early childhood education. Unless teachers' deeply held beliefs about early childhood education change, teaching reforms will be a challenge (Breffni, 2011; Vartuli, 1999). As such, increased attention is required by policy makers towards recognizing professional development initiatives as a viable way to improve the quality of early childhood education. With many untrained or poorly qualified teachers working with young children in classrooms, focused in-service professional development, which focus on understanding teachers' perceptions about early childhood education to challenge them and support them to shift their practice, is critical. Moreover, courses in these programs need to emphasize diverse perspectives, for example in relation to gender, in early childhood education. A systematic evaluation of early childhood education professional development programmes is also necessary to monitor their effectiveness in improving the quality of education (Breffni, 2011).

The results from this study from a sample of two teachers from the same urban school in Pakistan have raised a few questions which could be taken up for further research. How would findings from observations of the teachers' classroom practice which were beyond the scope of this paper corroborate with their perceptions from the interview data? How do the teachers' views about children's learning and their classroom practice to support children's learning, including from a gender perspective, in this study compare with public sector, single-sex, or rural schools in Pakistan? What contribution are current in-service professional development programmes making to improve early childhood teachers' practices? What results might be gleaned if the study were to focus on the impact of professional development training about developmentally appropriate curriculum which explored teachers' beliefs about best practice and which included observed classroom instructional performance? Would findings show that professional development programmes in this context matter? What results might be gleaned from large scale studies of teachers' perceptions about children's learning which adapted existing belief measures (e.g., Stipek & Byler, 1997) to the cultural context of Pakistan? Additional studies exploring teachers' perceptions about children's learning would have great potential to inform early childhood teacher development and policies for improving the quality of early childhood education in Pakistan and other similar contexts. Shaping teachers' perceptions to ensure that their practice is appropriate and effective and considers children's diverse experiences is a critical element of

Pakistan's efforts in early childhood education reform.

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