A stylized, light-colored illustration of a plant with several leaves and a cluster of small, round buds or flowers, positioned on the left side of the slide against a dark brown background.

TEACHING FOR LEARNING: HOW ARE KINDERGARTEN TEACHERS' BELIEFS REFLECTED IN THEIR PRACTICES?

ECDA EARLY CHILDHOOD CONFERENCE

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Tan Ching Ting, PhD
Ministry of Education

Outline of Presentation

- 1) Understanding teacher beliefs
- 2) Survey of kindergarten teacher beliefs and practices
- 3) Relationship between teacher beliefs and practices
- 4) Factors affecting relationship between teacher beliefs and practices
- 5) Recommendations for rethinking practice

Why Teacher Beliefs Matter

- Teaching is made up of **teachers' thinking and teachers' actions** (Clark & Peterson, 1986).
- Teacher **beliefs shape classroom decisions and practices** which ultimately have an impact on children's learning (Pajares, 1992; Spodek, 1988).

Quality Domains of ECE

Structural

- Teacher qualifications & professional development
- Class size/Teacher-children-ratio

Process

- Developmentally appropriate curriculum and learning activities
- Quantity and quality of daily classroom interactions for social and instructional purposes

Orientalional

- Educational & pedagogical beliefs and values
- Educational priorities and goals

(Wall, Litjens, & Taguma, 2015)

Core Characteristics of Teacher Beliefs

Teachers' beliefs:

- 1) are based on judgment, evaluation, and values and do not require evidence to back them up
- 2) guide their thinking, meaning-making, decision-making, and behaviour in the classroom
- 3) may be unconscious such that the holder of beliefs is unaware of the ways in which they inform behaviour
- 4) cross between their personal and professional lives, reflecting both personal and cultural sources of knowledge
- 5) become more personalised and richer as classroom experience grows
- 6) may impede efforts to change classroom practice
- 7) are value-laden

(Rimm-Kaufman et al., 2006, p. 143)

Sources of Teacher Beliefs

- Personal experiences
- Education
- Training
- Values

(Spodek, 1988; Vartuli, 2005)

I Am A Teacher Who Believes That ...



Survey of Kindergarten Teacher Beliefs and Practices

- Questionnaire administered to 167 K1 teachers from 115 kindergartens (AOPs, NFPs, MKs)
 - All females
 - Age ranged from 21 to >60 years old, with about half between 21 and 30 years old
 - Teaching experience ranged from less than a year to 24 years ($M = 6.5$ years, $SD = 5.78$)
 - 75% had a diploma in ECE, 22.2% had a university degree in ECE and the rest were trained at certificate level or untrained

Reference: Tan, C. T., & Rao, N. (2017). How do children learn? Beliefs and practices reported by kindergarten teachers in Singapore. *Asia-Pacific Journal of Research in Early Childhood Education*, 11(3), 81-112.

Nature of Teacher Beliefs

5 most important items	M (SD)
Curriculum should emphasise positive attitudes toward learning	4.51 (.68)
Develop literacy and numeracy skills through interactive activities	4.42 (.72)
Learn through exploration and experimentation	4.39 (.68)
Set up learning centres for learning through play	4.33 (.76)
Provide daily opportunities to develop social skills	4.31 (.76)

5 least important items	M (SD)
Children should complete the same task at the same time	2.00 (.83)
Plan activities for fun without any learning goals	2.01 (.99)
Follow a prescribed curriculum without considering children's interest and needs	2.03 (.90)
Children should do an activity according to teacher's plan all the time	2.08 (.80)
Curriculum should consist mainly of teacher-led whole class activities	2.37 (.83)

Nature of Teacher Beliefs

- Teachers believed in the importance of both child-centred and teacher-centred approaches.
- Teachers believed that child-centred practices are more important than teacher-centred practices.

Child-centred and Teacher-centred approaches

Area	Child-centred approach	Teacher-centred approach
Theory of learning	Constructivism Social constructivism	Behaviourism
Nature of learning	Active Children construct knowledge through hands-on experiences and interactions Children given autonomy to select and complete tasks	Passive Children acquire concepts and skills through drill and practice Children complete set tasks according to teacher's plan
Curriculum goals	Holistic and developmental Social and emotional skills, positive dispositions, problem-solving skills, sense of wonder and curiosity, creativity	Academic and performance-oriented Academic skills (e.g. reading, writing and arithmetic)
Expectations	Diversity in children's needs, abilities and interests	Homogeneity in the classroom and the way children learn
Curriculum and learning materials	Based on children's interest Contextualised and integrated across content areas Authentic materials, story books, songs and rhymes, manipulatives, concrete objects	Prescriptive Isolated and subject-based Textbooks, worksheets, workbooks
Teaching approach	Child-initiated and directed Learning through play, exploration and experimentation Mixture of large and small group activities Free choice activities or play at learning centres	Teacher-directed Explicit and didactic teaching with a focus on correct procedure and answers Mainly whole class or large group activities Worksheets and written tasks
Assessment mode	Ongoing observations and documentation to monitor progress of learning	Testing using written tasks to assess mastery of concepts and skills

Nature of Reported Practices

3 most frequent activities	M (SD)
Teacher-led whole class activities	4.08 (.89)
Structured activities to teach literacy skills	3.87 (.89)
Interactive activities to teach literacy skills	3.75 (.92)

3 least frequent activities	M (SD)
Outdoor activities	2.86 (.82)
Play without teacher involvement	2.93 (1.07)
Child-initiated, teacher-supported play	3.05 (1.02)

1 = never, 2 = seldom, 3 = sometimes, 4 = frequently, 5 = very frequently

Factors Associated with Reported Belief and Practice

- As teachers' age and teaching experience increase, the level of importance they placed on child-centred practices decreases.
- As teachers' professional training increases, the level of importance they placed on child-centred beliefs increases.
- Teachers tended to conduct teacher-led activities more frequently as teaching experience and class size increases.

Let's Turn & Talk

I believe in... and my teaching practices include:

Classroom Observation

- 10 teachers purposively selected to represent diversity of kindergarten types from survey sample for observation over 2 days

Teacher	Age group (years)	Professional qualification	Kindergarten teaching experience (years)	Class enrolment	Programme duration (hours)
T1	21 - 30	Advanced Diploma in Kindergarten- Teaching	4	18	4
T2	31 - 40	Diploma in Teaching	3	15	4
T3	21 - 30	Bachelor's degree in ECE	2	16	4
T4	41 - 50	Diploma in ECCE – Teaching and Leadership	2.7	17	3
T5	41 - 50	Diploma in ECCE - Teaching	10	23	3
T6	51 - 60	Bachelor's degree in ECE	14	20	3
T7	21 - 30	Bachelor's degree in ECE	6	19	4
T8	41 - 50	Advanced Diploma in Kindergarten - Teaching	4.5	15	4
T9	31 - 40	Diploma in ECCE - Teaching	5.2	19	4
T10	41 - 50	Diploma in ECCE - Teaching	8	18	4

Observed Practices – Teaching and Learning Approaches

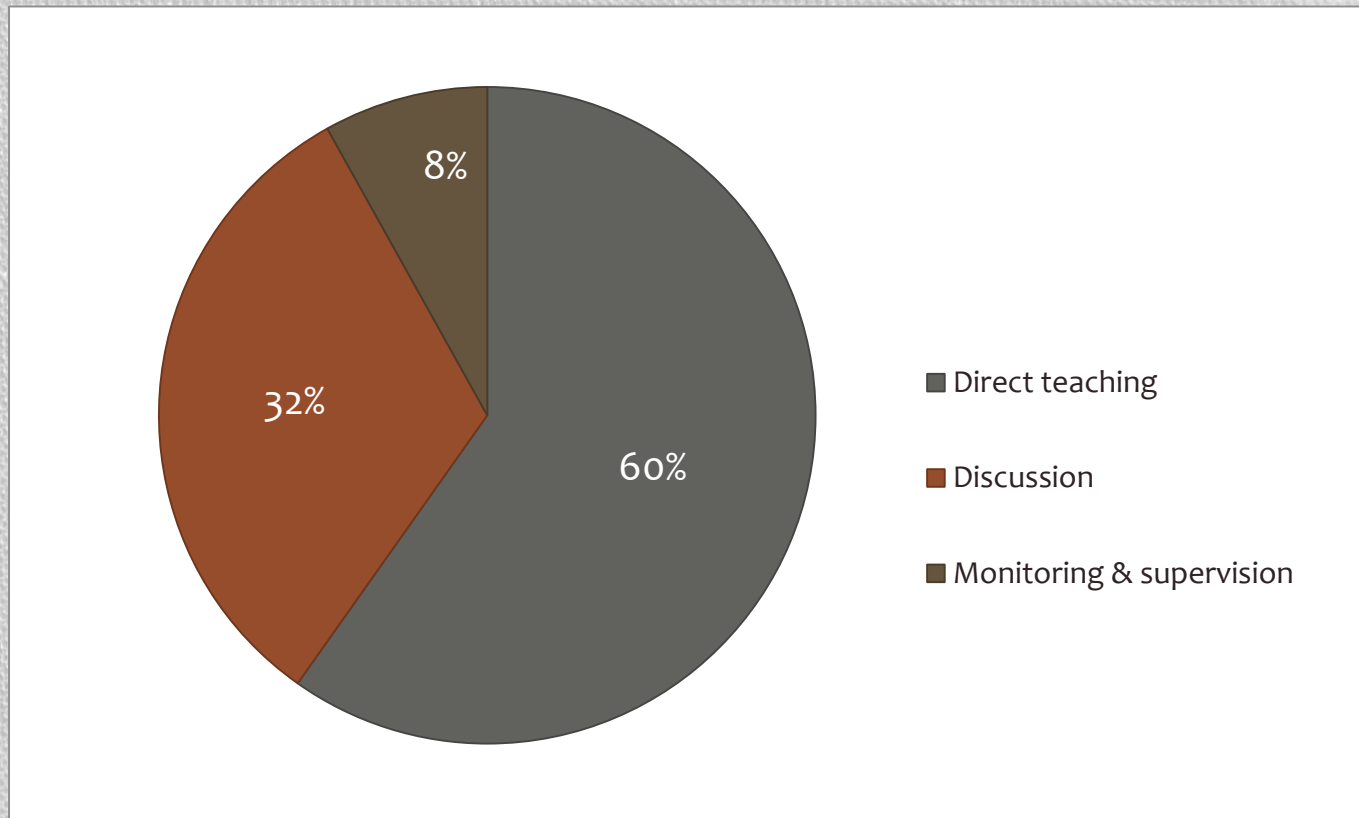


Figure 1 Distribution of classroom teaching and learning approaches

Observed Practices – Classroom Groupings

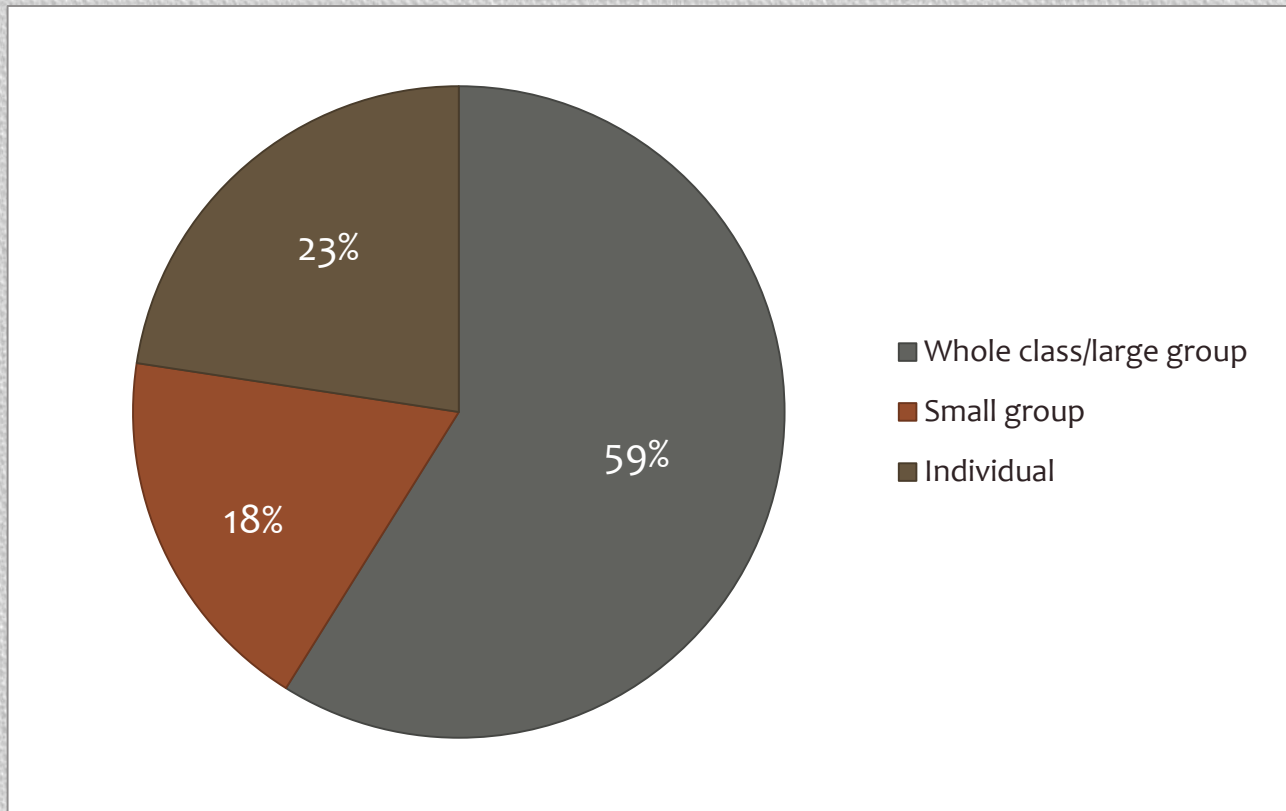


Figure 2 Distribution of classroom activity groupings

Observed Practices – Learning Activities

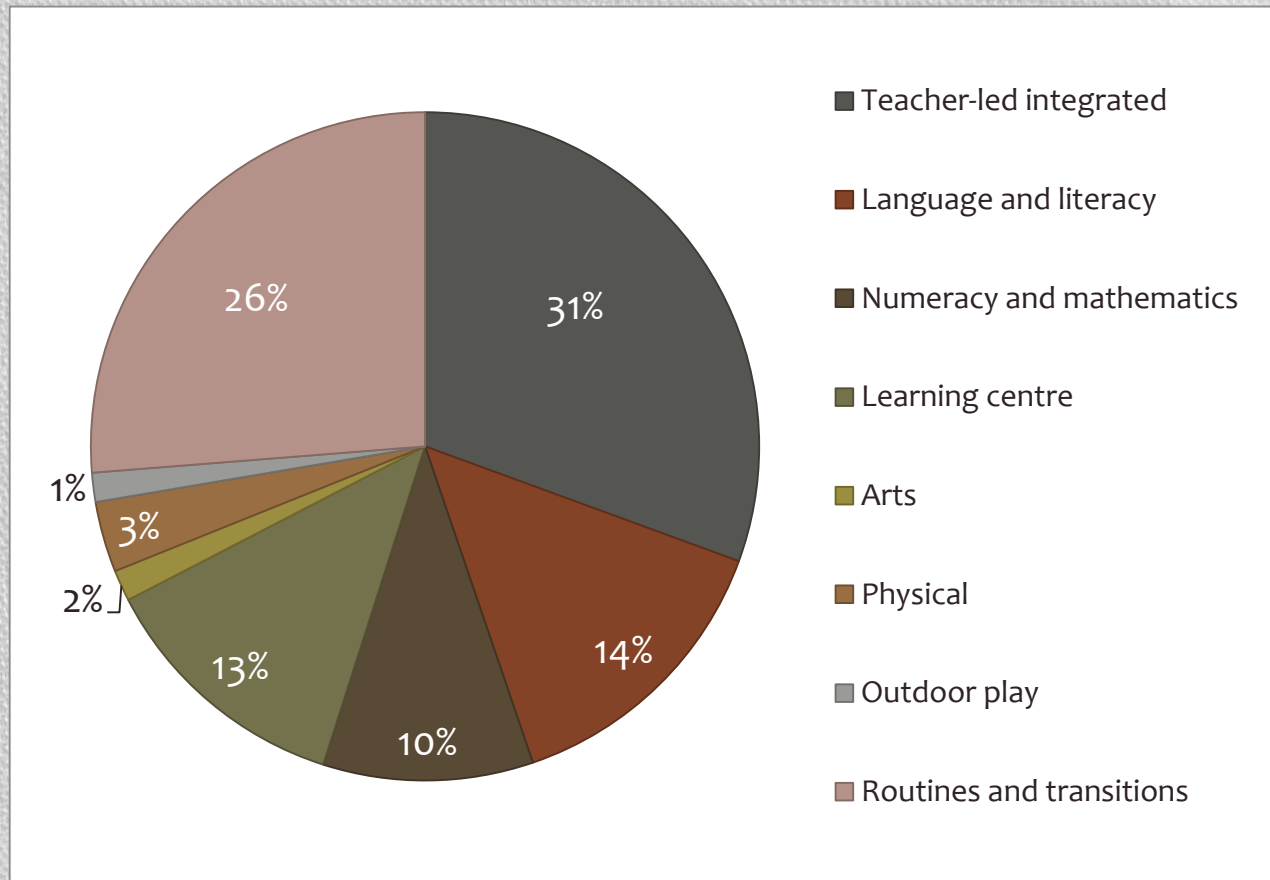


Figure 3 Distribution of time for various classroom activities

Observed Practices – Learning Areas

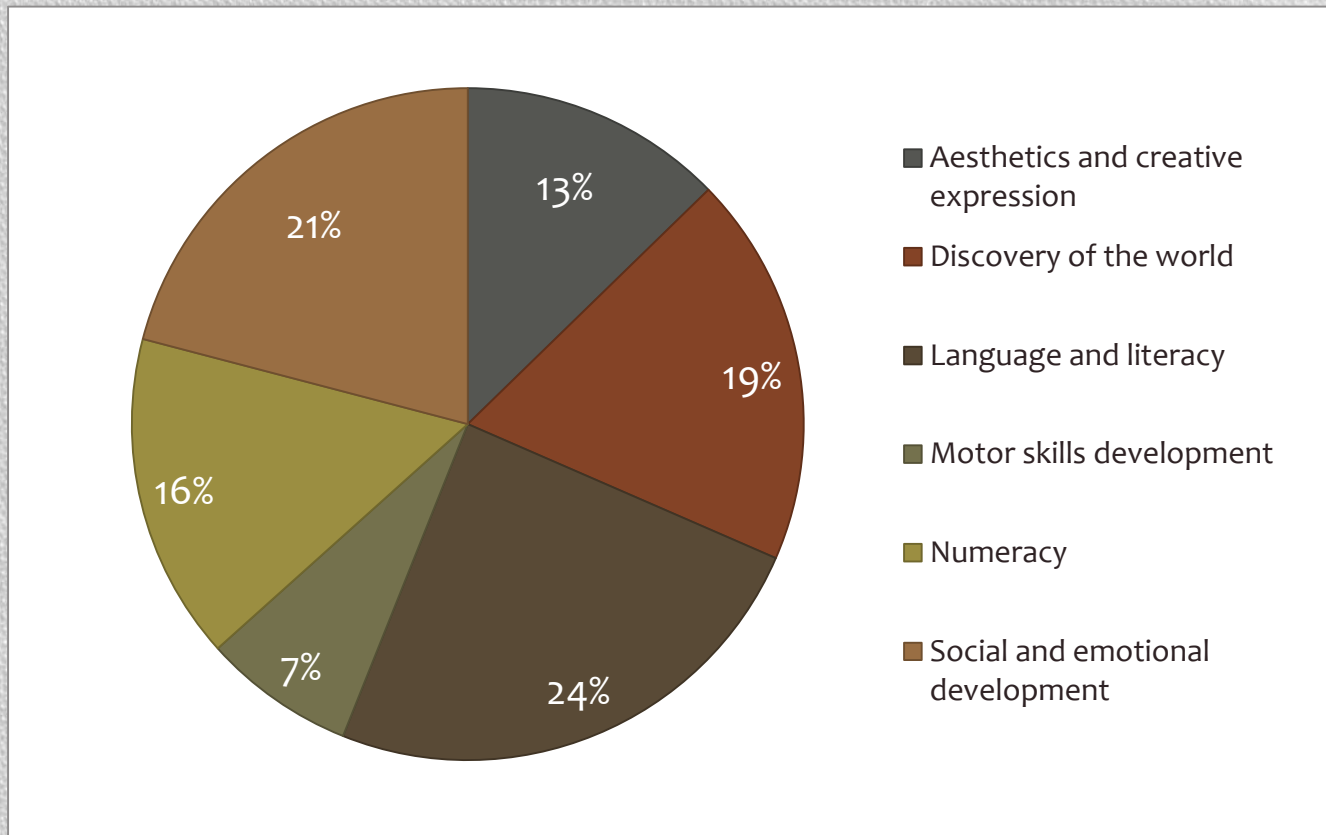


Figure 4 Distribution of time for different learning areas

Relationship between Teacher Beliefs and Practices

- 1) Beliefs not always reflected in actual practices
- 2) 60% of observed class time spent on whole class direct teaching activities
- 3) Nurturing children's social skills and learning dispositions generally not intentionally emphasised
- 4) Mostly concerned about conducting and completing activities according to plan
- 5) Curriculum content and integrated learning activities typically organised and planned according to themes and topics
- 6) Time for learning centre activities not provided on a daily basis

Let's Turn & Talk

I believe in...but my challenges include:

Teacher Interview

- Face-to-face interview conducted with 10 teachers
- Semi-structured interview protocol used
- Audio recordings transcribed and coded

Factors Affecting Relationship Between Beliefs and Practices

1. Structural constraints (e.g. shortage of time and manpower, curriculum package adopted, programme structure)

*Due to **time** constraint, the children barely have time to visit the learning centres set up as the teacher rushes to complete the curriculum. (T1)*

*I think we are not giving the **time** for children to explore. Not enough time because we have so many things at the back of our minds we want to finish. (T6)*

*You (the child) are so interested in playing and then teacher said **time**, you need to go and do something else. I know and I can understand the child's feeling but then because of our setting, our structure, we have to stop the child. (T6)*

*A lot of things are based on the teacher's **lesson plans**. What I put in is what I have to deliver. (T4)*

*I think it's very challenging when you are **alone**. You have to manage all like almost 18 kids on your own, and when all have various learning needs. (T2)*

Factors Affecting Relationship Between Beliefs and Practices

2. Learning vs playing dichotomy

*Normally I have my session first. I do my **teaching first**. If they have time, I always allow them to play because when they go to K2, they will not have the chance to play. (T4)*

*You (the children) must try all corners I say. One week you must try all corners. Then that's how I know they manage to try all the activities. If not, everyday they are doing the same things. Girls are drawing and boys are doing their constructing. What would they **learn**? Even if I put more things at other corners, they are not using it. (T2)*

Factors Affecting Relationship Between Beliefs and Practices

3. Perception of how children learn

*Of course we still need some structure, we still need some routine work which I find that now the kids are lacking sometimes. Routine is there because after a while when they think play is everything, **they do not sit, they do not calm down and become more... just playing.** The routine is there. We have to go through the routine. (T5)*

*I think I'm more to teacher-directed rather than child-directed. Why? It also depends on situation because sometimes children can know what they are doing. They direct it well. That one is ok. Otherwise it's like more things... make it **more messy, more chaotic** and then I have to come in, that sort of thing or maybe I'm so used to teacher-directed. (T10)*

Factors Affecting Relationship Between Beliefs and Practices

4. Academic rigour of primary school

*But at the end of K2, at least I think [the children] must be able to write the letters and be able to know the counting; can count one on one and all that. At least when they (the children) go to primary school they won't be so lost. Because definitely things have changed. **Primary One is not going to be that easy** anyway. I don't want them (the children) to feel like the **gap** is really a lot from K2 to Primary One. (T2)*

*We know where the standard of our primary school is. So we cannot say totally just play. I mean, it's not fair to them (the children). They won't be learning if it's totally just play. So we go into a bit more... They might learn [from playing games] but when you come to really, to our Singapore, you know, to be fair, exactly, you need to have a little bit more. You cannot say when they go to Primary One, they don't know anything about writing. They may know the alphabet but they can't write it. It's going to be a **big problem** for them. (T5)*

Factors Affecting Relationship Between Beliefs and Practices

4. Academic expectation of parents

*Actually the society, when we talk about the parents they are not very clear of learning through play and some still have the doubts. I mean they are saying why is my child, my K2 child **not prepared for Primary One?** (T8)*

So there are parents who feedback to me saying that ‘Hey, exactly what do they (the children) learn in school?’ because they said that we have been playing, we have been doing this activity in school and they (the parents) said they are not too sure what exactly the children have learnt. (T1)

*Some of my Mynah (pseudonym for class) parents requested if they could have **homework** for a week. Since the parents are the ones asking, so we are giving that. (T7)*

In Summary

*Time is there. But because we are not giving them (the children) enough time to continue to do the exploration and teachers are not trained or they don't believe that children are learning this way. They (the teachers) follow the lesson plan materials and then they end the lesson according to the plan. They **don't let the children deepen their understanding.** (T6)*

Rethinking Our Practice

Current Practice/Thinking	Challenges Posed	Suggestions for Improvement
<ul style="list-style-type: none">• Typical kindergarten day comprising a series of activities organised within 20 to 40 min time slots• Organisation of time as a production schedule	<ul style="list-style-type: none">• Lack of sustained periods for children's valued activities or play time• Limits connection and continuity of learning experiences for children	<ul style="list-style-type: none">• Adopt a more fluid and flexible conceptualisation of time• Adapt planned learning activities to increase their curricular and pedagogical options and ultimately choices for the children

Rethinking Our Practice

Current Practice/Thinking	Challenges Posed	Suggestions for Improvement
<ul style="list-style-type: none">• Treat playing and learning as separate entities• Regard real learning taking place during teacher-initiated and directed activities	<ul style="list-style-type: none">• Learning centres regarded as the only or main platforms for children to learn through play• Children allowed to play at learning centres after teaching activity or completing a task	<ul style="list-style-type: none">• Attend training on integrating play and learning in classroom activities• Seek and explore ways to encourage child-initiated activities and increase the quantity and quality of interactions to guide learning within child-initiated activities

Rethinking Our Practice



Current Practice/Thinking	Challenges Posed	Suggestions for Improvement
<p>Perceived conflict between playful learning in pre-school and realities of primary school</p>	<p>Emphasis on structured teaching and practice of knowledge and skills in literacy and numeracy at pre-school level</p>	<ul style="list-style-type: none">• Create opportunities for open discussions and learning between pre-school and primary school teachers• Foster mutual understanding of each other's curriculum and teaching practices, and clarify the notion of 'school readiness' as speculated by parents and teachers

Let's Reflect...

*Reflecting on my teaching beliefs and practices,
I realise...*

I want to be a teacher who...

ACKNOWLEDGEMENTS

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