Chapter 3
'I Believe, Therefore I Practice': Teachers' Beliefs on Literacy Acquisition and Their Classroom Practices

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Introduction

The Relationship Between Beliefs and Practices

The expanding literature on teachers' beliefs and perceptions relating to their classroom practices suggests that teachers' pedagogical beliefs are a major determinant of the choices they make in the classroom concerning curriculum, pedagogy, classroom management and relating to students (Orton 1996; Pajares 1992; Vartuli 1999). It thus follows that a deeper understanding of teachers' beliefs will be helpful in developing and implementing new programmes and effective in-service education (Richardson et al. 1991). Towards that end, the focus of this chapter is on the relationship between teacher beliefs and classroom practices in two Singapore kindergarten schools, with a particular focus on early literacy education.

Theoretical Issues and Objectives

The research shows strong support for a connection between teachers' beliefs and what they do in the classroom. Richardson et al. (1991) asserted that teachers are knowing beings and their knowledge influences their actions. They reported that teachers who regard reading as rules for decoding and interpreting text focus on developing decoding skills like mastering the phonic rules and knowing how to turn printed symbols into sounds. However, those who employ the whole language approach believe that learning to read is achieved by reading authentic texts from which the children construct

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meaning. Ernest (1989) similarly found beliefs to be a dominant determinant of pedagogical practices. He investigated the effect of the knowledge teachers have on their pedagogy and found that even though two mathematics teachers had similar knowledge and mastery of the subject matter, they taught in different ways. He concluded that while teachers' knowledge has significant impact on their teaching, it is their set of beliefs that is a better predictor of the classroom decisions they make. According to Fang (1996), the impact that beliefs have on teacher practice can take many forms. They can be embodied in teachers' expectations of students' learning performance or in teachers' theories about a particular subject area's learning and teaching. Other studies relate teacher beliefs with instructional practice and classroom strategy in specific curricula or programmes (Eisenhart et al. 1988; Frerichs 1993; McMahon 1996; Smith and Shepard 1988). Frerichs, for example, looked at the relationship between teachers' beliefs and practices in reading and language arts based on the work of Marie Clay (1991) and found that, with regard to materials to be read and who should have access to them (teacher and/or children), teachers' beliefs matched their practices. The common thread in these earlier studies is the notion that teachers' beliefs are an important component of their thought processes and general knowledge through which they perceive, process and make decisions in the classroom.

However, the relationship between beliefs and practice is not always transparent. According to Kagan (1992), while the connection between teacher belief and teacher behaviour and actions may seem self-evident, teacher beliefs are sometimes difficult to capture. This is especially true when teachers' beliefs can be both consistent and inconsistent with their classroom practices. Fang's (1996) study suggested that while many teachers' beliefs shape the nature of their classroom interactions and have an impact on literacy strategies, there are others who have reported that the relationship between beliefs and instructional practices can be very inconsistent. Fang suggested that the consistency versus inconsistency relationship between teachers' beliefs and their instructional practices could be due to contextual factors that drive the teachers' decision-making processes in the classroom. McMullen (1999) reported that teachers attributed the discrepancy or inconsistency between their beliefs and actual classroom practices to a variety of reasons, including parental expectations, environmental, work-related stress or institutional barriers.

In this chapter, the complexities of the relationship between teachers' beliefs and their classroom practices will be examined in two Singapore kindergartens. While preschool education is not compulsory in Singapore, the government has nonetheless laid out a framework for kindergarten education. This framework establishes an important part of the environmental context within which kindergarten teachers conduct their practice.

Early Childhood Curriculum in Singapore

While preschool education is not compulsory, according to a press release by Ministry of Education (MOE) on 7 March 2007, 95% of children have received some preschool education. Early childhood centres in Singapore are offered by public and private

institutions (MOE 2007). These include (1) PAP Community Foundation (PCF) kindergartens which are government-funded centres and also the major player in the kindergarten scene, (2) private kindergartens which are managed by commercial bodies, (3) religious-based kindergartens run by churches or mosques and (4) kindergartens administered by community organizations. The range of programmes offered by these centres varies a great deal, catering for children of different social strata and cultural groups. The cohort at PCF kindergartens is generally multi-ethnic, and the programme is affordable for most families. Quality preschools tend to be expensive, and admission is subject to availability. A number of centres cater to the needs of a particular ethnic group by not only offering academic instruction, but also religious literacy. Early childhood centres (including kindergartens) have the autonomy to stipulate their own goals and the liberty of designing their own unique curriculum.

While kindergarten education is not part of compulsory education in Singapore, the government has nonetheless established a framework to guide the curriculum and objectives of kindergarten programmes. The 'Framework for a Kindergarten Curriculum in Singapore' was introduced by the MOE in 2003 in an effort to instil "good and effective practice in early years setting" (MOE 2003, p. 12). The critical features of the framework are:

- A holistic approach to development and learning
- Integrated learning
- Children as active learners
- Adults as interested supporters in learning
- Interactive learning
- Play as a medium for learning

The framework, with its underpinning philosophy of child-centredness, further recommends the provision of an environment rich in print and of opportunities to engage in a variety of language and literacy experiences. These child-centred practices help develop young children's intellectual abilities through problem solving via concrete objects and experiences. Teachers become resources for children's self-initiated activities by providing open-ended opportunities for children to explore materials and interact with one another.

However, as Ang has noted, the framework actually offers little guidance for teachers concerning curriculum development and implementation:

> Yet, ironically, while the new kindergarten framework advocates the cultivation of a child-centred, active-learning environment, there does not seem to be any acknowledgment of the social and cultural issues that are unique to this environment. There is no mention of the multiculturalism composition that pervades the Singapore context, and there is no discussion of the impact of this multiculturalism on the delivery of the curriculum… The implementation of the curriculum is therefore very much left to the experience and interpretation of preschool practitioners. (2006, p. 207)

Hence, even though a number of years have passed since the Ministry's framework was put in place, without clearly articulated guidelines on curriculum development, many educational philosophies abound in Singapore's early childhood landscape – ranging from Montessori to play-based to more traditional instruction. There are early childhood centres that continue to emphasize a skills-oriented

academic programme which includes a highly structured and teacher-directed instruction with sequenced tasks and repetitions, even though the government's framework clearly envisions a child-centred programme. A number of studies suggest that it is parental expectations and the broader learning culture that have influenced the programmes' philosophies and teacher beliefs. Tan-Niam (2000) and Sharpe (2002) argued that a highly structured system which places a lot of emphasis and value on academic skills is favoured by parents of Singapore preschoolers because it is seen as a conduit for academic excellence. Some preschool teachers also employ this highly structured, basic-skills-oriented approach in their classrooms because of its perceived benefits in helping children transition smoothly to primary school. Their beliefs on what are considered developmentally appropriate classroom practices tend to cohere with their beliefs on what is considered useful in equipping children with the necessary skills to cope with the demands of primary school education. Such perceptions are not necessarily ungrounded since children beginning Primary 1 are expected to demonstrate some ability to read and write and some basic mathematical knowledge.

In their study involving preschool and first-grade teachers in the United States, Stipek and Byler (1997) and Stipek et al. (1992) found 'parental pressure' to be one of the factors influencing teachers' beliefs and practices. However, in a survey of 79 Singapore preschool teachers, Lim and Torr (2007) found that the major determinants of teachers' beliefs include their professional training and experiences as a teacher and, to a lesser extent, parents' expectations. Teachers were asked to rank factors that influenced their beliefs about literacy. Only 3 out of the 79 preschool teachers ranked pressure from parents and school authorities as important factors in shaping their beliefs. The others nominated their teaching experience and knowledge as major forces in influencing beliefs.

This background on the broader context of early childhood education in Singapore sets the stage for the focus of this chapter: two kindergartens, with a focus on literacy education.

Research Questions

The data presented in this chapter have been drawn from a research study which attempted to provide an account of the range of instructional practices in the teaching and learning of English and Malay in early childhood programmes in Singapore. The research questions addressed in this chapter include:

1. What is the nature of Singapore kindergarten teachers' beliefs about young children's literacy development, especially those from centres that serve the Malay community?
2. What is the relationship between teachers' beliefs, their self-report data on perceived classroom practices and their observed classroom practices, specifically,

the extent of consistency or inconsistency between beliefs and instructional practices?

Because kindergartens are seen to play a key role in helping children transition to primary school – which also impacts both teacher beliefs and the degree to which they can practice their beliefs – the question of the (seamless) transition from kindergarten to primary school will also be discussed.

In the first part of this study, kindergarten teachers' beliefs with regard to literacy acquisition and development and early learning were elicited through administration of a questionnaire. Subsequently classroom observations showed discernible patterns that relate these teachers' beliefs to observed classroom practices. Student artefacts and classroom materials were also gathered and then matched to the teachers' beliefs and their own self-report practices in facilitating and supporting children's literacy acquisition and development in the classroom.

Research Methodology

Participants

Data collected from two kindergartens, be known as *Fairfield* and *Ivy*, will be reported in this chapter. The two kindergartens, or 'centres', cater to children from predominantly middle-class families and charge comparable fees. Fairfield is a centre affiliated with a community organization, while Ivy is a private kindergarten. Even though Fairfield is affiliated with a social/welfare organization, it has a long-standing relationship with the people in the community. Many families who have had children attend the programme at the centre give positive referrals and send younger siblings to the centre. Fairfield caters predominantly to middle-class families, while Ivy serves both low- and middle-income groups. The educational philosophies in the two centres differ significantly. The philosophy at Fairfield is that children should learn via structured play, while at Ivy, the philosophy reflects an emphasis on preparing children for primary school. Class sizes at both kindergartens ranged from 15 to 25 children, meeting MOE's requirement that kindergarten grade 1 (K1) classes should have no more than 20 children to one teacher, while kindergarten grade 2 (K2) classes should have a maximum of 25 children to one teacher.

As both centres cater exclusively to the Malay community, they offer instruction in both English and Malay. However, the pedagogical approaches to bilingual education at both centres differ significantly. Fairfield sets aside 1 day of the week as 'Malay day' where teaching and learning are conducted entirely in Malay. On the other days of the week, lessons are conducted in English only. The lessons and activities on 'Malay day' are closely matched to the overall theme and learning objectives for the given week. At Ivy, a four hour school day is structured into periods, with 2–3

periods a week set aside for Malay language instruction. The teaching and learning during the rest of the school week is conducted entirely in English.

A total of 17 teachers from both centres, all female, filled out the teachers' survey: 9 teachers from Fairfield and 8 teachers from Ivy. The profile of the teachers is given in Table 3.1. The mean age of teachers at Fairfield was 35 years, and just over half of them had some early childhood training, with the highest level being a Diploma in Preschool Education. They generally had more teaching experience than teachers at Ivy with mean of 5 years. The profile of teachers at Ivy on the other hand included a mean age of 24.8 years, with less teaching experience than teachers at Fairfield (mean = 3.7 years), and half of them did not have any training in early childhood. The highest certification in early childhood received by two of the teachers at Ivy was a Certificate in Preschool Teaching. However, Ivy's teachers had higher levels of formal education than those at Fairfield.

The reason why teachers' expertise, educational level and training in early childhood matter is because these factors are so much intertwined with the development of teacher beliefs and effective classroom practices. Using the Early Childhood Environment Rating Scale, Retas and Kwan (2000) found that in mediocre and high-quality centres in Singapore, more than 70% of the teachers have 'A' level/diploma/degree certification and 90% received training in early childhood and more than half possessed a diploma/degree in early childhood. On the other hand, most teachers in the low-quality centres were found to have only some secondary school education with the majority having only basic and intermediate certification in early childhood. More than a quarter of the teachers did not have any early childhood training. Relating these findings to the teacher profile in Table 3.1, it is evident that they tend to pattern with the low-quality centres identified by Retas and Kwan.

Table 3.1 Profile of teachers at the two centres, Fairfield and Ivy

Profile	Teachers at	
	Fairfield ($n=9$)	Ivy ($n=8$)
Experience		
Less than 1 year	2	1
1–5 years	3	5
6 years and more	4	2
Academic qualification		
GCE 'O' level	5	4
GCE 'A' level	3	1
Diploma	1	2
Bachelor's degree	–	1
Highest level of early childhood training		
None	4	4
Certificate in Preschool Teaching (CPT)	2	3
Diploma in Preschool Education	2	–
Bachelor's Degree in Early Childhood Education	–	–
Others	1	1

Instruments and Procedures

Three types of research instruments were used to collect and triangulate the data for the study. These included teacher survey, classroom observation and classroom artefacts.

Teacher Survey

The teachers were asked to fill out two questionnaires. The first was distributed and collected at the start of the observations. To ensure anonymity, the two centres helped distribute and collate the questionnaires. Questions on their commitment to teaching and to the centre, sense of efficacy for classroom management and instructional strategies, their knowledge of specific early childhood domains and pedagogy and issues on school preparedness were posed to the teachers.

At the end of the observation phase, another questionnaire was given to the teachers. In the second questionnaire, they were asked to evaluate their literacy practices and their beliefs on literacy teaching and learning. In both questionnaires, a 5-point Likert scale rating was used. A total of 158 items, divided into 26 sections, were asked. Some of the questions were adapted from a survey instrument used by CRPP/NIE (Shun 2008) intended to investigate teachers' beliefs. The survey instrument also considered a few relevant items from the *Literacy Acquisition Perception Profile* (McMahon 1996) and *Teachers' Beliefs about Literacy Questionnaire* (Westwood et al. 1997) which were adapted to suit the local context and educational perspectives. This chapter will only report on a subset of the survey questions, specifically those that are related to (1) teacher beliefs on literacy acquisition and (2) teachers' literacy practices. It is not only necessary to discern teachers' beliefs, it is also important to obtain self-reported data on classroom pedagogical strategies to find out what the teachers believe they do in the classroom. Teachers' self-report of beliefs and teachers' self-report of practices were then matched to the observation of classroom practices.

Classroom Observation

Data which detailed the activity structures and types of instructional materials were collected. The principals of the centres were asked to select two classes for inclusion in the study – one kindergarten 1 (K1) and one kindergarten 2 (K2) class where the children were 5 and 6 years old, respectively. The duration of each classroom observation typically coincided with a start and end of a particular theme which generally averages 2 weeks. All the lessons were video-recorded, and all the classroom activities and instructional materials were noted in the coding instrument. At each centre, two researchers sat at the back of the class to observe and take copious notes of the classroom routines and series of activities. There was minimal

interaction between the researchers and the teachers or children. At the end of each observation, the two researchers discussed their observations to obtain agreement on the observed classroom practices.

A structured coding instrument was used to take note of the classroom pedagogy and practices employed by the teachers. The coding instrument was an adaptation of Luke et al. (2005). The original coding instrument by Luke et al. was created for use in primary and secondary school classrooms. A few changes were made to customize the instrument to make it more suitable for an early childhood environment. The items in the instrument included:

- The classroom spatial organization
- The activity structures (whole class teaching, teacher-led discussion, group work, individual seatwork, choral repetition/reading/reading, free play, etc.)
- Engagement and time on task
- Identifying types of teacher talk (curriculum, regulatory, informal, etc.)
- Identifying the sort of scaffolding provided by the teachers

The tools used by both teachers and children, such as visual aids (e.g., flashcards), audio-visual resources, textbooks and realia, were also identified. The instructional focus of the English and Malay lessons was also noted: whether the teacher's classroom instructions centred on developing the children's listening, speaking, reading or writing skills.

Classroom Artefacts

The instructional materials used by the teachers in the classroom, as well as samples of 'work' assigned to the children, were collected, scanned and saved as evidence of classroom materials.

Analysis of Data

A one-way analysis of variance was used to compute the means for the teachers' responses to questions on beliefs on literacy acquisition and classroom practices, and a between-groups analysis was carried out to compare the mean scores of the two centres on each item to determine if the differences were statistically significant ($p < .05$). With regard to the classroom observation data, the observed patterns of classroom routines, the pedagogical practices, as well as specific activities carried out during the observation period were noted and matched to questionnaire items of beliefs and practices. Classroom artefacts which functioned as documentary evidence of the classroom practices observed were used to further reinforce the findings from the questionnaire and classroom observations.

Findings

Teacher Survey

Included in the questionnaire was a set of questions intended to elicit teachers' basic beliefs on classroom instruction and pedagogical approaches. A high score indicated that their delivery and approach were more teacher centred and focused on developing basic skills through repetition and the assignment of a series of monotonous, unvaried tasks. The data in Table 3.2 reflect the substantial difference in the approach undertaken by teachers at the two centres.

At Fairfield, the low scores indicate that the teachers were generally averse to activities which involve completing worksheets or exercises in workbooks (in fact, based on observation data, they did not have any) or to repetitive activities. They claimed to almost never assign homework. Nonetheless they did encourage some knowledge recall, as shown in item 2a.

On the other hand, the teachers at Ivy rated the items in Table 3.2 very highly, pointing towards a more conventional teaching model. They placed a great deal of emphasis on developing basic skills through repetitive tasks and reinforcement through workbook activities and homework. In fact, it was later found that every semester, each child had to complete two workbooks for each 'subject' – English, Malay and Numbers. Data in Table 3.2 also suggest that when curriculum and teaching were driven by assessment and/or Primary 1 readiness, the teaching approach and classroom practices tended to emphasize developing basic literacy skills. Thus, higher scores for assessment/school preparation (2f and 2g) tended to align with higher scores for "features of conventional teaching model".

Table 3.2 Teachers' beliefs on classroom practices and pedagogical approaches

	Fairfield		Ivy		
Classroom practices	Mean	SD	Mean	SD	*p*
Features of a conventional teaching model					
2a. I encourage the children to recall what they have learnt	3.67	.500	5.00	.000	.000*
2b. I address the whole class when I teach	3.44	.882	5.00	.000	.000*
2c. I ask the children to do worksheets or workbooks	1.22	.441	4.88	.354	.000*
2d. I ask the children to do similar tasks/activities to understand a particular topic	2.67	1.00	4.25	.463	.001*
2e. I assign homework to the children	1.33	.707	4.50	.756	.000*
Assessment/school preparation					
2f. I emphasize studying for what will come out in the assessment	1.22	.833	4.00	1.39	.000*
2g. Nearly all of my teaching focuses on preparing for Primary 1	1.67	1.00	4.62	.518	.000*

Note: Likert scale: 1 never, 2 seldom, 3 sometimes, 4 often, 5 always
*difference is statistically significant ($p < .05$)

Table 3.3 Teachers' beliefs on the importance of correctness

Beliefs of correctness	Fairfield ($n=9$)		Ivy ($n=8$)		p
	Mean	SD	Mean	SD	
3a. Oral reading mistakes should be corrected immediately	3.67	.500	4.17	.753	.144
3b. Children should be encouraged to spell correctly	3.89	.601	4.33	.816	.245
3c. In order for children to remember new words, repetition is important	4.22	.441	4.33	.516	.662
3d. I encourage children to express themselves in complete sentences	3.67	.500	4.17	.753	.144

Note: Likert scale: 1 strongly disagree, 2 disagree, 3 neutral, 4 agree and 5 strongly agree

Data in Table 3.3 further support a picture of 'traditional pedagogy' in Ivy kindergarten. Repetition for the purpose of recall and correctness was valued in both centres but more strongly so at Ivy. However, the differences between the two groups on these items (3a–d) were not statistically significant. The more important question might be: How did these differences in beliefs as evidenced by the survey play out in classroom practice?

Linking Practices to Beliefs

Match Between Teachers' Beliefs and Practices

There is a strong connection between what teachers in the two kindergartens believed (their beliefs on literacy practices and what they believed they had been doing in the classroom) and what they actually practiced. Two major beliefs were indicated from the survey: a more child-centred approach to early childhood instruction and an orientation towards developing basic skills.

More Child Centred: Fairfield

In a class of 22 (K2) and 16 (K1) children, learning and play were generally carried out in small groups. A typical school day started with some singing or story reading, followed by whole class discussion. In the K1 class, these series of activities were followed by free independent activities where children could go to any learning corner, while a group of 4 would carry out some activities together with the teacher. For instance, in a lesson on 'comparisons', the teacher filled two pails with different amounts of water and other objects, and the children were asked to say out loud and label (using the word cards provided) which pail was 'heavier' or'lighter'. No formal written work was assigned. These classroom activities matched items in Table 3.2 (2c–e) where teachers indicated that they do not ask the children to

complete worksheets nor do they assign homework. In fact, when asked, the teachers shared that the educational thrust of their centre is in providing varied literacy experiences and an authentic pedagogy which encourages children to learn by engaging in their surroundings and through real-life experiences and not by completing worksheets or workbooks.

During the 2-week observation period, the K2 class covered the theme 'the weather', particularly focusing on 'rainy day', with 'water' as the subtheme. Activities during those 2 weeks included whole class discussions, reading books about the weather, talking about the water cycle and finally culminating in a field trip to the reservoir. The children were also given hand-outs on how to create their own mini water distillation system, and they were told they could carry it out at home with their parents. The only written work the children were asked to do was to write five sentences about 'the rainy weather' – one in English and a comparable one in Malay. They were told to draw on their experiences in and out of the classroom to write this short piece. These classroom observations further support the self-report data in Table 3.2.

Classroom practices at Fairfield reflected a child-centred orientation. Teachers allowed children to opt out of activities and allowed a child to leave an activity or task before finishing it. The children learnt through active exploration and manipulation of real objects. Homework was also not given. During 'free play', writing materials were always made available for the children to draw, scribble or 'write'. The children at Fairfield enjoyed the luxury of space to move around in the classroom and to engage in the different activities made available at the different learning corners. There were a number of learning centres in each classroom for the children to socialize and engage in individual or group play. These included the reading corner with its well-stocked library and posters of nursery rhymes, the maths and science corners with a number of manipulatives for exploratory learning, an art corner, a play corner with building blocks, puzzles and other toys, as well as a dress-up corner.

Skills-Oriented: Ivy

In a class of 18 (K2) and 23 (K1) children, everyone did the same thing at the same time for the most part, except when the children had completed their work and were given 'free choice' to decide on which play corner they would like to engage in. During the undirected, free-choice activity, children decided on the play corner they would like to go to. The classrooms at Ivy were small, and due to the limited space, there were only a few play 'corners' that served as learning centres. These included a language centre which was sparsely furnished with posters and a few books, some of which were old and torn, a play corner with toys, a maths corner with some manipulatives and a mini science corner with a few posters.

A school day at centre Ivy typically started with whole class instruction, followed by individual seatwork where in most instances all the children completed the same task at the same time or occasionally took turns to work on the teacher-

assigned individual work, seated in small groups. These observed activities matched closely to the questionnaire items 2b and 2c in Table 3.2. In almost all cases, the preamble to completing individual written work (worksheets or workbooks) was the teacher going over the entire assignment, by eliciting responses and subsequently providing the 'correct' answers. These answers were written down on an enlarged version of the written piece/worksheet, which the children then reproduced in their own individual worksheets. This practice prevalent at Ivy was a corollary of their beliefs and emphasis on correctness, as shown in Table 3.3.

It was observed that lessons at Ivy were highly structured with carefully sequenced tasks and duplicated or repetitive practice and review processes in place. Instruction was also very teacher-directed, typically beginning with teacher-initiated questions, followed by children's response. These observations matched self-report data on beliefs and perceived practices found in Table 3.2. Teacher questions were almost always closed ended, requiring children to respond to 'who', 'what', 'where' and occasionally 'why' questions. The teacher then evaluated the response by saying 'good' or 'well, not really'. These cycles of teacher question, children respond and teacher evaluate reflect an IRE structure (initiate-respond-evaluate) (Cazden 1986), which recurred very frequently in the classroom. Another indication of the highly structured orientation was evident by the class timetable where curriculum time was divided by subject areas.

A basic skills orientation is linked to a learning theory in which cognitive competencies are assumed to be transmitted according to the principles of repetition and reinforcement. Learning occurs when children repeat appropriate responses to teacher-produced stimuli and is facilitated by breaking tasks and responses into discrete, carefully sequenced units (Stipek and Byler 1997). Overall, the classroom practices at Ivy indicated an orientation towards developing children's basic skills. Worksheets and workbooks were a way for children to master academic skills such as math and reading. The children were always expected to work silently and independently through repetition by duplicating 'teachers' answers'. The teachers emphasized the importance of quality in final products which were expected to be error-free, and hence they typically resorted to providing correct answers.

Teachers at Ivy gave high ratings for items (2e–f). They believed that the syllabus and their classroom instruction should be assessment-driven and should prepare the children for primary school. Observation data confirmed this belief. The nature of the tasks at Ivy was found to be repetitive with the intent of reinforcing children's understanding of the necessary, basic concepts. Each semester, a child had to complete six workbooks – two each for English, Math and Malay. The rationale for this practice, as shared by the principal, was parents' expectations. Parents perceived this type of curriculum with a 'high academic focus' that included a ritual of repeated tasks and drilling as a necessary and highly desirable practice in order to prepare their children for entry into primary school. What was shared by Ivy's principal seemed to be in contrast to the findings from Lim and Torr's (2007) study which found that Singapore teacher beliefs were influenced by professional training and experience instead of parents' expectations. Perhaps to some extent, teachers'

practices are influenced by parents' expectations. This finding matched those found by Tan-Niam (2000), Stipek and Byler (1997) and Stipek et al. (1992) where parents' expectations had the power to influence curriculum. When asked, teachers at Ivy shared that they believed in drill and repeated tasks because they helped ready the children for primary school education, alluding to a perceived smooth transition from kindergarten to primary school.

Thus far, it has been shown how classroom practices seemed to pattern closely with teachers' beliefs. In the next section, I show instances of how some practices appear not to match beliefs.

Apparent Mismatch between Teachers' Beliefs and Observed Practices

In the survey, teachers were asked to self-report the frequency of reading and writing practices in their instruction, as well as the frequency of written work they assign. The scale for this set of questions is 1, never; 2, seldom; 3, sometimes; 4, often; and 5, always. Teachers' responses are given in Table 3.4.

Teachers at Fairfield indicated they often got the children involved in reading and writing activities daily. A daily routine in which the K1 teacher would carry out shared book reading in both English and Malay was witnessed. While the children were read to daily, they were rarely involved in the reading process, and there was no overt attempt to teach them how to read. The K2 teacher was also observed reading to the children albeit not on a daily basis.

During the 2-week observation period, there was hardly any writing in the K1 class. The teacher later shared that she believed the development of writing skills was not a priority for children at this level and that it was the centre's practice to focus on developing this skill only at K2. She further elaborated that only in the later part of the K1 year would writing be introduced into the curriculum. Perhaps the difference in the teacher-reported data on writing in Table 3.4 and the observed data can be explained by the fact that the classroom observations were made in the early part of the academic year when the instructional focus was more on developing the children's oral skills and to help build a positive attitude towards engagement with print. In the K2 class, there was some writing using a modified language experience

Table 3.4 Teachers' perceptions of their practices

	Fairfield ($n=9$)		Ivy ($n=8$)		
Classroom practices	Mean	SD	Mean	SD	p
4a. I involve the children in reading experiences every day	3.78	.441	4.25	.886	.177
4b. I involve the children in writing experiences every day	3.78	.667	4.75	.707	.011*

*difference is statistically significant ($p<.05$)

approach. According to Wong (2010), the language experience approach, a strategy proposed by Stauffer (1970), makes use of the students' "prior knowledge and real-life experiences (experience) to engage them in writing (language)" (p. 157). Unlike the original language experience approach, the modified approach involves some negotiation of the input for spelling and grammatical correctness. This was observed taking place about twice a week on a topic related to the theme – one in English and the other in Malay. The Modified Language Experience Approach practiced at this centre used the children's own/shared experiences, vocabulary and language patterns to scaffold the writing process. In one instance, the teacher provided content scaffolding by leading a discussion on the pertinent points related to the theme at the start of the lesson. Children were then encouraged to offer their views, and the teacher wrote these down on a blank piece of paper to create a big mind map: after which, some of the words were selected to serve as 'helping words' for the writing activity. The children's input formed the basis for the individual writing task.

When a few of the children asked for help with the individual writing assignment (to write five sentences on the topic just discussed as a whole group), both teacher and assistant teacher resorted to spelling out the words and even writing down entire sentences for the children on small pieces of paper for the latter to reproduce in their notebooks. This practice could possibly be linked to item (3b) in Table 3.3 where the teachers gave a high rating for the item on correctness – 'Children should be encouraged to spell correctly'. In fact, no encouragement of creative spelling was observed. The teacher also rarely exemplified behaviours in which they helped the children get at the spelling of a word through phonemic awareness.

Based on the self-report survey data, teachers at Ivy claimed they involved the children in reading and writing exercises daily, in fact more frequently than teachers at Fairfield. Classroom observations showed that while the children were indeed exposed to some reading and writing activities daily, these were usually targeted at developing rudimentary literacy skills and were almost always limited to reproduction of teacher-dictated answers. The teachers relied heavily on workbooks and worksheets, and reading was largely limited to reading aloud the instructions and text on the worksheets. Writing activities were generally repetitive and usually involved reproductions of teachers' answers. The typical practice was one which involved teachers reading the instructions aloud, soliciting responses and writing down the correct single word or short answers on an enlarged printout for the children to reproduce in their own copies. Crucially this shows the teachers' differing perceptions of what counts as reading and writing experiences. Normally, one would not consider these types of activities at Ivy kindergarten as instances of reading and writing because they did not involve authentic and meaningful interactions with print. However, to these teachers, activities like copying teachers' answers are instances of writing and a means of developing children's literacy skills. Hence, what may seem like a mismatch between beliefs and practices is in fact not, at least from the perspective of the mostly untrained teachers at Ivy.

Discussion and Possible Implications

Because of the small sample size, these findings should be interpreted cautiously. There are, nonetheless, some interesting correlations between beliefs and practices of teachers from the two centres. Teachers who emphasized developing basic skills were found to focus their teaching on 'preparing' children for the rigours of primary schooling. This was probably done to ensure that children mastered the basic skills the teachers perceived the children would need in primary school. On the other hand, teachers who were more child-centred in their instructional practices demonstrated that they were also concerned with developing children's non-academic abilities which included their social and communication skills, self-confidence and positive attitudes towards learning.

Another possible reason for the different orientations adopted by the centres may be the level of early childhood training the teachers had received. Where a skill-centred approach was favoured at Ivy, teachers had little or no training and, as a corollary, may not have been aware of developmentally appropriate classroom practices or had limited knowledge to guide them in planning a curriculum which would expand children's learning, development, skills and strategies.

What have been presented thus far are instances in which teachers' beliefs appeared to be stronger than practices. In other words, the score for some self-report data on practices was higher than actual, observed practices. This difference could be attributed to the teachers' differing views and understanding of certain concepts and practices. For instance, when teachers at Ivy claimed in the survey that they involved children in reading and writing activities daily (Table 3.4) but observation data showed otherwise, this does not necessarily mean a mismatch between beliefs and practices. For this group of teachers, the concept of reading and writing may be very broad and inclusive – it may include all instances of engagement with any text types. As such, even repeating after the teachers' reading may be perceived as an instance of 'reading'. Perhaps this too could be attributed to the lack of early childhood training. A question for future research is to determine whether teachers who engage in didactic instruction do so simply because they lack early childhood training in other options or because they do not think that children are capable of self-directed learning. It will also be interesting to find out whether children in highly structured, teacher-directed classrooms do eventually develop an ability to direct their own learning.

The Transition from Kindergarten to Primary School

Another point worth discussing is the transition from kindergarten to primary school. Based on data shown in Table 3.2, teachers at Ivy indicated that they believed it was important to ensure that their classroom instruction was aligned to assessment

and primary school readiness. Their observed practices seemed to have borne out of this belief. A number of studies have shown that a smooth transition (from home) to school is able to contribute positively to a child's academic achievement and social competence (Dockett and Perry 2003; Ramey et al. 1998).

In 2006, STELLAR (Strategies for English Language Learning and Reading) was introduced as a programme to develop literacy in the English classroom at primary level. The three strategies that underpin STELLAR include (1) the Shared Book Approach, (2) the modified language experience approach, and (3) the use of learning centres in the classroom. The Shared Book Approach is used in lower primary classrooms to introduce and share a Big Book with the students and to teach "language items, structures and skills explicitly, including concepts of print, phonics and grammar" (MOE n.d.). The modified language experience approach is used as a follow-up to the Shared Book Approach which provides the shared context and content. Children's input which is transcribed by the teacher forms the basis for group and individual writing. Because the input is negotiated for grammatical accuracy, this approach is termed 'modified' language experience approach in Singapore. Finally, language skills learnt using both shared book and modified language experience approaches are reinforced in the learning centres where activities for students of different abilities are made available for self-directed exploratory learning.

Based on the classroom observations made at both kindergartens, it is evident that the literacy practices present at Fairfield kindergarten are similar to the strategies outlined in the STELLAR curriculum. This strong connection in terms of similar pedagogical approaches to develop literacy should facilitate a smoother and, possibly, a more successful transition to Primary 1 for children from Fairfield compared to their peers from Ivy. This is the case even though teachers at Fairfield indicated in the survey that primary school readiness was not their main priority when they planned their lessons, as shown in Table 3.2. Perhaps it is useful for kindergartens like Ivy to review their classroom practices and considering aligning them to those implemented at the lower primary level, especially since they believe that what they have been doing prepares the children for Primary 1. Studies could be conducted to look into this area of transition to school.

A Customized Pedagogical Approach for the Singapore Malays?

Another point worth exploring in future research is identifying which pedagogical approach best suits the needs of Malay children and yields more positive student outcomes. Barr and Low (2005) suggested that Malay families favour a curriculum structure that places some importance on developing children's social skills, in tandem with the stereotypical perception of the Malays as a group which places "high value on family, motherhood, social skills, inter-personal relations and personal virtues like generosity" (p. 90). The authors noted that one of the main reasons some Malay families were reluctant to send their children to the mainstream PCF kindergartens was because of their academic and exam-oriented system. However, whether

a curriculum that offers an orientation towards developing children's social skills translates into better educational achievement for Malays in the long run is still unclear. This can only be verified by future long-term studies that look at the relationship between different academic orientations and student outcomes.

Overall, the findings from the two centres show relationships between teacher beliefs and practices. The survey data revealed two distinct beliefs: an orientation towards developing basic skills and a more child-centred approach. Teachers who employed a more conventional teaching model which emphasized developing rudimentary literacy skills did so to prepare the children for primary school. Teachers who employed more child-centred practices did so to develop the children's literacy skills as well as their social and communicative competence. The findings from the study also revealed instances in which teachers' self-report of beliefs and practices appeared to be stronger than actual, observed practices.

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