

# ***Different Ways That Preschool Teachers Taught Children to Write Chinese Characters in Hong Kong Classrooms***

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*This study aimed to explore how preschool teachers teach children to write Chinese characters. The method used in this study was inspired by phenomenography. Specifically, the author videotaped and analyzed the ways that three preschool teachers taught their children to write the same set of eleven Chinese characters. The analysis focused on how the teachers enacted the same object of learning (i.e., the writing of the 11 characters) differently in the classrooms. Pre- and post-tests were administered to determine how well the children learned to write the characters after the teaching of their teachers. Seven teaching strategies that the three teachers used to teach their children to write the characters were identified. Interestingly, an inconsistency was found among the three teachers' understandings of the correct ways to write the characters. This study expands the understanding about possible ways for teaching preschool*

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*children to write Chinese characters, which are practically useful for the professional development of preschool teachers.*

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The investigation into the teaching of Chinese characters to children is certainly not new. Various methods to teach characters were proposed in the literature (Kwan, 2000; Lam, 2011; Tong & Zhang, 1999; Tse, 2002). These teaching methods fall along a continuum of two opposite views (Lam, 2011). One view assumes that children have to learn a large number of characters before they can read and write texts, and thus beginning instruction should focus on the teaching of characters in an intensive manner (referred to as the character-centered approach). Writing characters is considered difficult and children are often taught to write characters with fewer strokes as compared to those that they are taught to read.

The other view stresses the importance of reading and writing for meaning. It is assumed that as children read and write meaningful texts, they will naturally pick up the characters in the texts (referred to as the meaning-centered approach). In this case, children are taught to read and write characters at the same time because expressing their own meanings and understanding the meanings of others (i.e., to communicate in print) are of equal importance. Lam (2011) presented a more thorough review of a variety of methods for teaching characters. Studies (e.g., Guo & Zhang, 1991; Li, 1985; Si, 1978) were conducted to implement and evaluate these teaching methods in schools.

The ways that evaluations were conducted in these studies, however, fall into the same pitfall that the one who evaluated the teaching method was also the one who, with vested interest, enthusiastically promoted the use of such a teaching method. As such, unsurprisingly, the results of these studies were that the evaluated teaching methods were effective and statistical significance in favor of the use of the teaching methods

was obtained. Nevertheless, it is not necessary for every study to confirm that a particular teaching method is better than the others. Exploring how teachers actually teach differently in their classrooms is another research direction.

The present study is an attempt in this direction. In Hong Kong, preschool children, especially those at K3 level (i.e., age 5–6), are commonly taught to write Chinese characters (Curriculum Development Council, 2006). This study aimed to investigate how preschool teachers teach children to write characters in classrooms and how the children learn to write the characters as a result of the teaching of the teachers. The method used in this study was inspired by the phenomenographic studies of teaching and learning as developed by Professor Ference Marton and his colleagues (Bowden & Marton, 1998; Marton & Booth, 1997).

Phenomenography is often used as a theoretical framework for analyzing teaching in a lesson. More specifically, it is used for identifying what students can possibly learn in a lesson and what not (Lo, 2009; Marton & Lo, 2007; Marton & Pang, 2006; Marton, Runesson, & Tsui, 2004). In the analysis of a lesson, special emphasis is placed on the object of learning; that is, what content children have to learn, rather than the general arrangement in teaching such as the use of play, information technology, and so on. In other words, the focus is not on whether play or information technology is used in the lesson. Rather, it is put on what aspects of the object of learning are drawn to the attention of the children during the lesson. Only when the children attend to certain aspects of the object of learning is it possible for them to learn those aspects in the lesson. Previous studies adopting this framework have also pointed out that, with regard to explaining the differences in the learning outcomes of students from a lesson, it is not the general teaching arrangement but the way the object of learning is enacted in the lesson that makes a difference (Marton & Morris, 2002). The object of learning that the teachers originally intend to teach, the object of learning that is actually enacted during the lesson, and the object of learning that the children indeed live through may all be different. The

enacted object of learning is believed to be the determining factor of what the children can possibly learn from the lesson.

It is the aim of phenomenography to fully reveal the original nature of the experience of a phenomenon. Researchers have to “bracket out” their own pre-understandings or prejudices toward the phenomenon prior to the examination of the experiences of the phenomenon of other people (Marton, 1981, 1988a, 1988b). As such, in this study, when I analyzed how teachers taught, I did not fit each of the observed teaching strategies into some predetermined categories of teaching strategies (as compared to Flanders, 1970). Instead, I began with viewing all of the observed teaching strategies several times to fully comprehend them in their own contexts. After that, I shifted the attention from the individual to the whole to determine what categories of teaching strategies emerged out of my observation and how they differ from each other.

Phenomenography have widely been used in Sweden, Australia, and Hong Kong (Bowden & Green, 2005; Bowden & Walsh, 2000; Ki, Tse, & Shum, 2005; Lo, Pong, & Chik, 2005; Marton, Tse, & Cheung, 2010; Marton & Tsui, 2004). The teaching of various objects of learning, including demand and supply (Pang & Marton, 2005), the color of light (Lo, Chik, & Pang, 2006), orthographic structures of Chinese characters (Lam, 2010), and others have been examined. But, to the best of my knowledge, no attempt has been made to draw on this framework to investigate how children are taught to write characters.

Existing studies of writing characters aim merely at providing a variety of possible teaching activities that teachers can use (Chen, 2000; L. W. Lee, 2000). There is, however, no particular emphasis on finding out explicitly how the same object of learning is enacted differently by different teachers; that is, the different teaching strategies to teach children to write the same characters. The study of the variation in the teaching strategies has an instructional purpose: to contribute to the practical and professional knowledge for teacher education. The exposure of this variation to teachers, especially pre-service teachers, can help them learn how to teach children to write characters (this is called the variation theory). With this, not only are teachers less likely

to be indoctrinated into a certain way of teaching, they may also find a way of teaching that satisfies their specific situations. In other words, this study can contribute to the professional knowledge of preschool teachers. As Stigler and Hiebert (1999) puts it:

If you want to improve teaching, the most effective place to do so is in the context of a classroom lesson. If you start with lessons, the problem of how to apply research findings in the classroom disappears. The improvements are devised within the classroom in the first place. (p. 111)

## **The Present Study**

This study tried to investigate how the teaching of writing the same set of Chinese characters was enacted differently by different teachers. This study used observation to examine the teaching of the teachers in the classrooms. Pre- and post-tests were administered to measure how well the children had learned to write the characters as a result of the teaching of the teachers. Those lessons that taught the same set of characters were observed so that teachers' different teaching strategies could be compared. This study tried to answer the following two specific research questions:

1. What precisely are the teaching strategies that preschool teachers use to teach children to write Chinese characters?
2. How well do preschool children become able to write Chinese characters from the teaching of their teachers?

In the following, the method used in this study will be described in more detail. Next, the study results will be presented, followed by the discussion and the conclusion.

## **Method**

### ***Content***

There is no unified curriculum in the preschools in Hong Kong.

Different preschools may teach children to write different characters. As the purpose of this study was to find out how the teaching of the same characters was enacted differently, preschools that taught a similar set of characters were needed. As such, two kindergartens under the same governing body were invited to participate in this study. In the curricula of the two kindergartens, a total of 11 common characters were identified (see Table 1). These characters were intended to be taught during the time when this study was conducted. The number of strokes of these characters range from 5 to 15. According to the Curriculum Development Council (1990), these characters are mostly recommended to be taught at junior levels (7, 2, 1, and 1 of the characters at Primary One, Two, Three, and Four respectively).

**Table 1: The Eleven Chinese Characters Investigated in This Study**

Characters											
去	<i>heoi3</i>	"to go"	快	<i>faai3</i>	"quick"	明	<i>ming4</i>	"bright"	活	<i>wut6</i>	"life"
真	<i>zan1</i>	"real"	掃	<i>sou3</i>	"to sweep"	清	<i>cing1</i>	"clear"	復	<i>fuk6</i>	"to restore"
節	<i>zit3</i>	"festival"	墓	<i>mou6</i>	"grave"	樂	<i>lok6</i>	"happy"			

### *Participants*

The two kindergartens were both small in scale and were located in public rental housing estates, where the children were mostly from working-class families. The governing body of the two kindergartens was chosen by convenient sampling. The results of this study may not be generalized to the situations of other preschools (e.g., privately run kindergartens receiving no government voucher).

As discussed earlier, K3 level was the focus as K3 children are taught to write characters in most preschools. One of the two kindergartens had two K3 classes (called Classes A and B in this study), while the other kindergarten had only one K3 class (called Class C). A total of 80 children from the three classes were involved in this study (40 boys and 40 girls, aged 5.75 on average). The mother tongue of all these children is Cantonese, which was also the medium of instruction used in the two kindergartens.

This study was carried out in three steps: (a) pre-test, (b) observation of teaching, and (c) post-test.

### ***Observation of Teaching***

The observation of the teaching in the classrooms was made in April, when the characters investigated in this study (e.g., 復活節 “Easter” and 清明節 “Ching Ming Festival”) were taught. In the teaching schedules of Classes A, B, and C, a total of 3, 3, and 5 lessons respectively were involved in teaching all of the 11 characters (see Table 2). Each of the lessons was conducted on a separate day and lasted about 30 minutes in Classes A and B, and about 20 minutes in Class C. The lessons were all videotaped. The video was shot in a way that disturbance to the teachers was minimized.

The teachers were told to teach in the way they normally did, with no suggestions or requirements from the author. However, it turned out that the three teachers arranged the lessons in a way which was typical

**Table 2: Words or Sentences That the Teachers Taught in Each of the Lessons**

Lesson	Class A	Class B	Class C
1	清明節我們去掃墓 “We go to sweep the grave in the Ching Ming Festival.”	清明節我們去掃墓 “We go to sweep the grave in the Ching Ming Festival.”	清明節 “Ching Ming Festival”
2	復活節 “Easter”	復活節 “Easter”	掃墓 “to sweep the grave”
3	復活節真快樂 “Easter, really happy.”	復活節真快樂 “Easter, really happy.”	復活節 “Easter” 清明節去掃墓 “to go to sweep the grave in the Ching Ming Festival”
4			真快樂 “really happy”
5			復活節真快樂 “Easter, really happy.”

in Hong Kong preschools. That is, the lessons began with the teacher demonstrating how to write a word (or a sentence) in front of the whole class; after that, the children went back to their own seats for practice. The teachers required the children to write the word a certain number of times on their own exercise books. The children usually completed the first few times during the lesson and then finished the rest at home. After all lessons had been completed, all of the exercise books of the children were collected and photocopied for analysis. The author informally talked to the teachers after their teaching so as to get a brief understanding of what led to their practice in the classrooms.<sup>1</sup>

### ***Pre- and Post-tests***

In the pre- and post-tests, the children in all three classes were asked to write the same 12 words at their teachers' dictation. As the teachers read out each of the 12 words one after another, the children wrote the words in the boxes printed on the test sheets (i.e., similar to a dictation lesson in primary schools). The children were arranged to sit not too close to each other and were told not to look at the works of others during the tests. If the children did not know how to write any characters in the words, the teachers were told only to encourage them without giving any hint. This was necessary as tests are not commonly administered in preschools and teachers and children may not be familiar with the expectation during a test.

The same 12 words were used in both the pre- and post-tests but the order of the words were randomized (see Table 3). The 12 words covered all of the 11 characters under investigation. Those characters other than the 11 characters, such as 一 (*jat1* "one") and 口 (*hau2* "mouth"), were simple and should not cause much difficulty to children of this age. These characters were just used to prevent the children from completely giving up if they had encountered too much difficulty. This happened especially during the pre-test when the children had to write characters that they had not yet been taught. The children's performance on these characters was not analyzed.

**Table 3: The Order of the Twelve Words That the Children Were Asked to Write in the Pre-test and the Post-test**

Test	The order of the twelve words dictated
Pre-test	一 “one”; 口 “mouth”; 清明節 “Ching Ming Festival”; 去 “to go”; 真快樂 “really happy”; 掃墓 “to sweep the grave”; 人 “man”; 十分 “very”; 大 “big”; 我們 “we”; 復活節 “Easter”; 小 “small”
Post-test	一 “one”; 人 “man”; 復活節 “Easter”; 清明節 “Ching Ming Festival”; 大 “big”; 十分 “very”; 掃墓 “to sweep the grave”; 我們 “we”; 小 “small”; 去 “to go”; 真快樂 “really happy”; 口 “mouth”

To determine whether the characters were written correctly, only what were produced on the test sheets were examined. In other words, whether or not the children had used the correct stroke orders in writing the characters was neglected.<sup>2</sup>

## Results

Seven of the children were absent either in the pre-test or the post-test. The data of these children were ignored during the analysis. The results of the remaining 73 children are reported below.

### *The Three Teachers*

To give readers a favor of the teaching that happened in the three classes, how each of the three teachers taught their children will be illustrated. At the risk of oversimplification, the teaching of each of the three teachers will be characterized one by one. Despite that the teaching of the three teachers actually shared a lot in common, the focus was on how each of the teachers differed from the others; that is, how they enacted the same object of learning differently.

### Teacher A

What Teacher A did could be characterized as giving the children possible explanations for why the characters were composed of their

components (see teaching strategy 1 in Table 4). The explanations served as ways to help the children remember what the characters were made up of and thus how they should be written. The following episode about the teaching of the word 掃墓 (*sou3mou6* “to sweep the grave”) well illustrates this:

Teacher: Okay. The character 墓 (*mou6* “grave”). Horizontal, vertical, falling leftwards, and horizontal [the names of the strokes]. We have learned this before. What is the name of this component?

Children: 草花頭 (*cou2faa1tau4*) [the name of the component 艹 “bush”].

Teacher: What are the other characters that share this component?

Teacher and children: 花 (*faa1* “flower”) and 草 (*cou2* “grass”).

Teacher: Do you remember what other things are there [the grave]? Remember Tintin [the name of a child] said we had to weed ... grass, which is this component 艹 (“bush”). The next one. Do we usually visit the grave during the day?

Children: Yes.

Teacher: So there is a component 日 (*jat6* “sun”). Vertical, horizontal, vertical, horizontal, and horizontal. When the sun comes out, we will go to visit the grave. Good. Then, like a grave. Horizontal, falling leftwards, and falling rightwards. Leave a space [between the second and the third strokes of the 艹] so that we can put a flower here. Mum may also put an incense stick or some fruits on the grave. Right. Good. Then we put a component 土 (*tou2* “soil”) down here. Ancestors were buried in the soil. Horizontal, vertical, and horizontal. This [last] stroke has to be long. 墓 (*mou6* “grave”).

Children: 墓 (*mou6* “grave”).

Teacher and children: 墓 (*mou6* “grave”).

In the above episode, Teacher A said, “When the sun comes out, we will go to visit the grave” and explained that the character 墓 (*mou6* “grave”) contained the component 日 (*jat6* “sun”) because we only visited the grave during the day. In fact such explanation did not conform to the formal linguistic analysis of the character. Formally, the character 墓 (*mou6* “grave”) should be analyzed into the components

莫 (*mok6* “not”) and 土 (*tou2* “soil”), which respectively give clues to the sound and the meaning of the character. However, it was not surprising that the teachers might not be aware of the formal linguistic analysis of the character 墓 (*mok6* “not”) since most preschool teachers have never received such linguistic training before.

## Teacher B

In comparison to Teacher A, Teacher B placed the emphasis on fully explaining the meanings of the characters (see teaching strategy 2 in Table 4). Teacher B did not draw the attention of her children to the written forms of the characters. Instead, she would make sure that the children understood what the characters referred to in reality:

Children: 清明節我們去掃墓 (*cing1ming4zit3 ngo5mun4 heoi3 sou3mou6* “We go to sweep the grave in the Ching Ming Festival”) [reading aloud the sentence on the board].

Teacher: This is a sentence. Which day of the week was the Ching Ming Festival?

Children: Saturday.

Teacher: The fourth of April was the Ching Ming Festival.

...

Teacher: Good. The word 掃墓 (*sou3mou6* “to sweep the grave”) ... Why do we need to sweep the grave?

Children: To show respect to our ancestors.

Teacher: How do we show respect to our ancestors?

Children: By cleaning up the place around the grave.

As can be seen in the above episode, Teacher B highly emphasized what the word 掃墓 (*sou3mou6* “to sweep the grave”) meant. She drew on the actual experience of the children in visiting the graves in the Ching Ming Festival the week before, and reminded the children the reason why we had to visit the graves. Thus understanding what the character 墓 (*mou6* “grave”) referred to in reality was what Teacher B considered to be important for the children to learn to write the character 墓 (*mou6* “grave”).

### Teacher C

Unlike Teachers A and B, Teacher C simply taught her children by demonstrating the writing of the characters and naming the strokes of the characters one after another (see teaching strategy 3 in Table 4). Instead of giving explanations, Teacher C stressed the importance of providing the children more practice of writing the characters. For example, consider the above example of the character 墓 (*mou6* “grave”). She first asked the children to write the word 掃墓 (*sou3mou6* “to sweep the grave”) 15 times, and on the next day to write the sentence 清明節我們去掃墓 (*cing1ming4zit3 ngo5mun4 heoi3 sou3mou6* “We go to sweep the grave in the Ching Ming Festival”) 5 times as a consolidation exercise of the words. As such, the children in total practiced writing the character 墓 (*mou6* “grave”) 20 times. As a comparison, Teachers A and B merely asked their children to write the sentence 清明節我們去掃墓 (*cing1ming4zit3 ngo5mun4 heoi3 sou3mou6* “We go to sweep the grave in the Ching Ming Festival”) 7 times, thus the character 墓 (*mou6* “grave”) was practiced only 7 times.

### *The Seven Teaching Strategies*

The above describes the different foci that the three teachers put on teaching their children to write the characters. Actually, all three teachers used a mix of various teaching strategies. All of the episodes videotaped were meticulously analyzed. Those episodes relevant to the teaching of the 11 characters of the three teachers were selected. In each of the episodes, the teachers used one teaching strategy. Eventually, a total of seven different types of teaching strategies were identified in the episodes (see Table 4).

After identifying the seven teaching strategies, all of the episodes were analyzed again and the frequencies of the seven teaching strategies as used by each of the three teachers were counted (see Table 5). Besides, the number of times that each of the three teachers required the

**Table 4: Seven Teaching Strategies That the Teachers Used in Teaching the Children to Write Characters**

Teaching strategy
1. Provide a possible explanation of why the character being taught is composed of its components. For example, the character 墓 ( <i>mou6</i> "grave") contains the component 日 ( <i>jat6</i> "sun") because we visit the grave during the day.
2. Explain fully the meaning of the character being taught (or component, or word, or sentence). For example, what do people do when they go to 掃墓 ( <i>sou3mou6</i> "to sweep the grave")?
3. Demonstrate the writing of the character being taught (or component) by simultaneously writing and naming each of the strokes. For example, let us write the component 艹 ("bush") of 墓 ( <i>mou6</i> "grave"). Horizontal, vertical, horizontal, and vertical.
4. Read aloud the character being taught (or component, or word, or sentence). For example, say the character 墓 ( <i>mou6</i> "grave") of the word 掃墓 ( <i>sou3mou6</i> "to sweep the grave").
5. Point out special features in the written form of the character being taught (or stroke). For example, we must leave some space between the two falling strokes of the 冫 in 墓 ( <i>mou6</i> "grave")
6. Compare the similarities and differences between the character being taught and some other characters (or components, or strokes). For example, what are the other characters you have learned that share the same component 艹 ("bush") as 墓 ( <i>mou6</i> "grave")?
7. Count the number of strokes (or components, or characters) in the character being taught (or component, or word, or sentence). For example, how many strokes are there in the component 艹 ("bush")? One, two, three, and four.

**Table 5: The Frequency of Using Each of the Seven Strategies by the Teachers**

Teaching strategy	Teacher A	Teacher B	Teacher C
1. Providing an explanation for the composition of the character	42	15	1
2. Explaining fully the meaning of the character	3	14	2
3. Demonstrating the writing of the character stroke by stroke	67	51	30
4. Reading aloud the character	69	79	40
5. Pointing out special features in the written form of the character	22	32	12
6. Comparing the character with other characters	7	7	0
7. Counting the number of strokes in the character	2	4	1

**Table 6: Number of Times That the Teachers Required the Children to Practice Writing the Eleven Characters in and after Class**

	Teacher A	Teacher B	Teacher C
Number of times in total	126	126	180
Average number of times per character	11.45	11.45	16.36

children to practice writing the 11 characters in and after class was also counted (see Table 6).

In brief, Teachers A and B used a wider mix of different teaching strategies, while the teaching strategies used by Teacher C were more limited. For example, as shown in Table 5, Teacher B was found to have used 14 times the teaching strategy of fully explaining the meaning of the character (i.e., teaching strategy 2), while Teachers A and C had used this teaching strategy for only 3 and 2 times respectively. It was also more often for Teachers A and B (42 and 15 times respectively) than Teacher C (only 1 time) to use the teaching strategy of providing an explanation for the composition of the character (i.e., teaching strategy 1). Furthermore, as shown in Table 6, Teacher C asked the children to write on average 16.36 times of each of the 11 characters, while Teachers A and B required the children to write only 11.45 times of each character. In other words, the teaching strategies used by Teachers A and B were far more diverse, while Teacher C mainly concentrated on asking the children to practice writing the characters.

Informal conversations with the teachers before or after their teaching revealed that they were all experienced teachers with Early Childhood Education certificate training. With regard to how they learned to teach the children in the ways they did, they mostly picked up their practice from work. Moreover, as co-teaching was common in preschools, they often worked with other teachers to teach children together. The practices of the other teachers thus had an influence on their own ways of teaching. This echoes with the findings of other studies that the teaching practices of teachers were not only influenced by their own beliefs but also by a complex set of contextual factors (Duffy & Anderson, 1984; Fang, 1996).

### ***Children's Performance***

Regarding how well the children of the three classes became able to write the characters as a result of the teaching of their teachers, Table 7 shows the mean number of characters that the children from each of the three classes correctly produced in the pre- and post-tests. The gains of the children were calculated by subtracting the pre-test results from those of the post-test.

**Table 7: Mean (and Standard Deviation) of the Number of Characters That the Children Correctly Wrote**

	Class A <i>n</i> = 26	Class B <i>n</i> = 25	Class C <i>n</i> = 22
Pre-test	1.88 (1.71)	1.96 (1.77)	0.05 (0.21)
Post-test	6.04 (3.36)	6.12 (3.00)	3.64 (3.19)
Gain	4.15 (2.29)	4.16 (2.25)	3.59 (3.11)

As can be seen, the children in all three classes made remarkable improvement after the teaching of their teachers. For each of the three classes, paired-samples *t*-test was used to determine whether the difference between the pre- and post-test results was significant. Statistical significance was obtained in all three classes ( $p = .000$ ).

It is worthy to note that the teaching of the three teachers in this study was not rigorously controlled as in a designed experiment. There were indeed factors (e.g., the unequal performance of the children in the pre-test) other than the teaching strategies used by the teachers that might explain the observed difference in the gains of the children in the three classes. As such, the above improvement of the children was merely provided here as descriptive data of what happened to the children after the teaching. Direct comparison among the effectiveness of the teaching of the three teachers might not be appropriate.

### ***Inconsistency Among the Three Teachers***

One unexpected result obtained in this study is that the three teachers were actually found to teach their children to write the characters

slightly differently. This means that there was subtle difference in what the three teachers considered to be the correct ways to write the characters.

For example, in Chinese, there is a certain order in which the strokes of a character have to be written. But the three teachers were found to teach their children to write the strokes in the component 忄 (*sam1* “heart”) of the character 快 (*faai3* “quick”) in two different orders. The following three episodes show how the three teachers demonstrated the writing of the component 忄 (*sam1* “heart”). For each of the strokes in the component, the teachers wrote the stroke on the board and at the same time verbally named the stroke (i.e., teaching strategy 3 in Table 4):

Teacher A: Ok. The character 快 (*faai3* “quick”). [The first stroke] falling leftwards, [the second stroke] vertical, and then [the third stroke] here a falling-rightwards dot. This is called 豎心邊 (*syu6sam1bin1*) [the name of the component 忄 (*sam1* “heart”).]

Teacher B: The component on the left is called 豎心邊 (*syu6sam1bin1*) [the name of the component 忄 (*sam1* “heart”).]

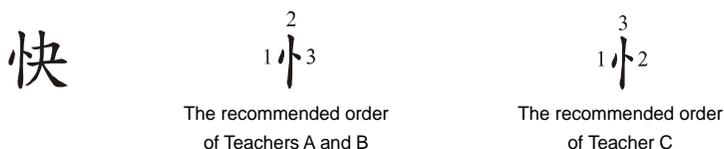
Children: 豎心邊 (*syu6sam1bin1*) [the name of the component 忄 (*sam1* “heart”).]

Teacher B: Ok. Pay attention to the stroke order. [The first stroke] falling leftwards. But this falling-leftwards is small. And then [the second stroke] vertical. And then, [the third stroke] right here, touching [the second stroke], a dot. Is this okay?

Teacher C: How do we write the character 快 (*faai3* “quick”)? Look at this. How to write? [The first stroke] a vertical. And then [the second stroke] a vertical? No. A dot first [on the right]. Then followed by [the third stroke] a vertical [in the middle].

In short, Teachers A and B wrote the three strokes from left to right, while Teacher C wrote the two short strokes first and the long vertical stroke in the middle last (see Figure 1). The order in which Teachers A and B wrote the strokes in the component 忄 (*sam1* “heart”) was consistent with what the Education Bureau in Hong Kong

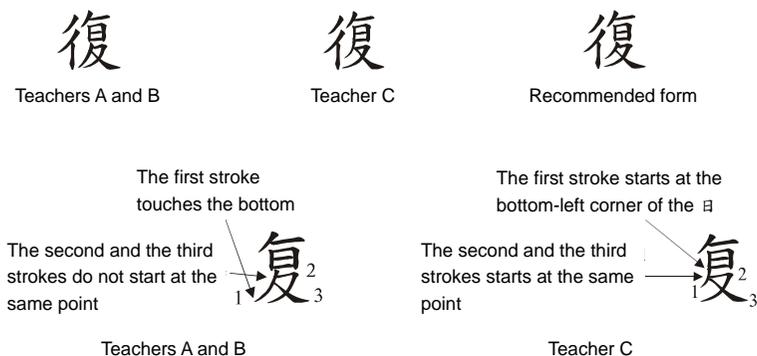
**Figure 1: The Orders in Which the Three Teachers Wrote the Component 忄 (sam1 “heart”) of the Character 快 (faai3 “quick”)**



recommended, while that of Teacher C was not (Curriculum Development Institute, 2007).

Apart from the order of strokes, the ways that the three teachers wrote the characters were sometime slightly different as well. One example is the last component 攵 (“left foot”) of the character 復 (*fuk6* “to restore”). In the three episodes below, the three teachers deliberately pointed out to the children certain special features that had to be written in specific ways (i.e., teaching strategy 5 in Table 4). Figure 2 shows how the component 攵 (in the context of the component 復 [*fuk6* “to restore”]) was actually produced by the three teachers. Figure 2 also includes the recommended form of the character 復. These recommended forms were adopted by the Education Bureau from H. M. Lee (2000) and were determined according to three principles: (a) being commonly used, (b) conforming to the linguistic analysis, and (c) being consistent across characters.

**Figure 2: The Ways That the Three Teachers Wrote the Component 攵 (“left foot”) of the Character 復 (*fuk6* “to restore”)**



Teacher A: What's next? [The first stroke] touch the 日 (*jat6* "sun")<sup>3</sup> at here [the bottom]. Falling leftwards, touch the ground. [The second stroke] horizontal and falling leftwards. Touch the ground. Look like the character 愛 (*oi3* "love") of 愛心 (*oi3sam1* "loving heart"). Remember the character 愛 (*oi3* "love") of 愛心 (*oi3sam1* "loving heart")? [The third stroke] lower a little bit here [below the start of the second stroke]. Falling rightwards. Touch the ground. 復 (*fuk6* "to restore").

Teacher B: Remember. What's next? [The first stroke] here, touch [the bottom of] the 日 (*jat6* "sun"). Falling leftwards. [The second stroke] somewhere below here [the start of the first stroke]. Horizontal and falling leftwards. The same [parallel to the first stroke]. Touch the ground. [For the third stroke] we do a falling-rightwards. Don't touch here [the start of the second stroke]. What is this?

Children: 復 (*fuk6* "to restore").

Teacher C: What's next? [The first stroke] start here [the bottom-left corner of the 日 (*jat6* "sun")]. A falling leftwards. [The second stroke] a horizontal and a falling leftwards. [The third stroke] start here [the start of the second stroke], touching the intersection here [between the first and the second strokes]. A falling rightwards.

As can be seen, Teachers A and B emphasized to the children that the third stroke in the component 夂 ("left foot") must not start at where the second stroke began, while conflictingly Teacher C emphasized that the third stroke must start at the same point as that of the second stroke. Here the way that Teachers A and B wrote the character was consistent with the recommended form of the Education Bureau, while that of Teacher C was not. On the other hand, Teachers A and B stated that the first stroke must be long enough to touch the "ground" or the bottom, which was inconsistent with the recommended form. Moreover, Teacher C stated that the first stroke in the component 夂 ("left foot") started at the bottom-left corner of the 日, which was inconsistent with the recommended form. Informal conversation with the teachers revealed

that some of them did not even know the existence of the recommended forms of the Education Bureau.

Apart from how the three teachers taught, how the children in the three classes learned to produce the component 攵 (“left foot”) in the post-test after receiving the teaching of their teachers was also examined. Table 8 shows the number of the children in each of the three classes who (a) did not start the second and the third stroke at the same point, (b) had the first stroke long enough to touch the bottom, and (c) start the first stroke at the bottom-left corner of the 日. Here (a) was consistent with the recommended form, while (b) and (c) were not.<sup>4</sup>

**Table 8: How the Children in the Three Classes Produced the Component 攵**

	Class A	Class B	Class C
<i>(a) Not starting the second and the third strokes at the same point</i>			
Did the teacher emphasize this?	Yes	Yes	No
No. of children who wrote the character in this way	13	15	2
No. of children who did not write the character in this way	3	4	13
<i>(b) Having the first stroke long enough to touch the bottom</i>			
Did the teacher emphasize this?	Yes	Yes	No
No. of children who wrote the character in this way	9	13	0
No. of children who did not write the character in this way	7	6	15
<i>(c) Starting the first stroke at the bottom-left corner of the 日</i>			
Did the teacher emphasize this?	No	No	Yes
No. of children who wrote the character in this way	1	1	8
No. of children who did not write the character in this way	15	18	7

Note: Counting only the children who successfully produced the component 攵 (“left foot”).

It can be seen from Table 8 that the children basically followed the way that their teachers taught them to write. For example, the children in Classes A and B, who were taught not to start the second and the third stroke at the same point, were inclined to have the third stroke start at a point different from that of the second stroke (i.e., 13:3 and 15:4 respectively). The children in Class C were taught to have the third stroke start at the same point as that of the second stroke. Consequently,

they tended to start the two strokes at the same point (i.e., 2:13). This was reasonable as the children practiced writing the characters in such a way that they copied from what their teachers wrote on the board in front of the classrooms. The children in their own practice did not follow the characters printed on any textbook. Thus the writings of the children reflected how they were taught by their teachers.

The character 復 (*fuk6* “to restore”) was not the only character that the three teachers taught their children to write slightly differently. The other characters that the writing of the three teachers slightly differed are shown in Table 9.

**Table 9: Characters That the Three Teachers Taught the Children to Write Differently**

	The ways that the characters were taught to write				
Recommended form	快	真	掃	節	墓
Teacher A	快	真	掃	節←	墓
Teacher B	快	真	掃	節←	墓
Teacher C	快	真	掃↗	節←	墓

Note: The arrows point at where the characters were written in a way different from the recommended forms.

## Discussion

In this study, seven teaching strategies that the three teachers used to teach their children to write Chinese characters were identified. Teachers A and B were found to use a far more diverse mix of these teaching strategies as compared to Teacher C. To equip teachers with a wide range of teaching strategies is one of the goals of the professional development of teachers. It is perhaps common for teachers to consider their everyday practice of teaching as the only routine way to teach their

children. However, as espoused by the variation theory, if teachers are exposed to variation in teaching strategies, even though the variation may not include all of the most effective ones, it becomes possible for teachers to realize the existence of other possibilities in teaching their children. Thus the exposure of the seven teaching strategies to preschool teachers in professional development courses is recommended. The teachers can then try out these various teaching strategies in their own preschools and identify those that fit the specific needs of their own situations. Thus their menus of possibilities of how to teach their children to write can be enhanced.

It is also observed that most of the seven teaching strategies identified in this study were related to the written forms of characters. Only two strategies focused on the meanings (teaching strategy 2) or the sounds (teaching strategy 4) of characters. As such, the ways that the preschool teachers taught the children to write characters were actually highly inclined toward the use of the character-centered approach as discussed at the beginning of this article. Perhaps the teachers just followed the practice that they had been using but the children were rarely given the chance to learn to write for meaning. Because of this, it is suggested that preschool teachers should consider increasing the use of the meaning-centered approach to teach their children to write. For instance, as reported in other studies (e.g., Lam, 2012), some preschool teachers provide children the experience (e.g., planting seeds together in the classroom) before teaching them how to write those characters for expressing their experience (e.g., writing a plant log book). In this way, the children are taught to write characters that they need to use. In contrast, in this study, it was the teacher, not the children, who decided which characters (e.g., 掃墓 [*sou3mou6* “to sweep the grave”]) that the children had to write.

Another point to make is related to the conflicting ways that the three teachers taught their children to write the characters. Teachers A and B were from the same kindergarten and a better consensus had been reached in their practices of teaching the children to write the characters. In contrast, the practice of Teacher C, from a different kindergarten

under the same governing body, was rather different from those of Teachers A and B. This reflected an inconsistency among the three teachers' understandings of the correct way to write the characters. More generally, there was a gap between the practices of teachers in preschools and the recommendation of the Education Bureau. As discussed earlier, teachers might not even know the existence of the recommended forms. In this regard, educators should place greater emphasis on disciplinary knowledge such as Chinese linguistic knowledge in professional development courses for preschool teachers. The recommended forms should be introduced more widely to preschool teachers such that the disciplinary knowledge of preschool teachers can be strengthened.

Finally, the method used in this study of teaching in classrooms was inspired by phenomenography. A special emphasis was placed on investigating how the same object of learning was enacted differently by the preschool teachers. As such, studying the teaching of the same 11 characters was deliberately chosen. Because of this, slight and subtle differences that the teachers taught the children to write the characters were captured unexpectedly. As far as I know, little was written in the literature about such observation. If the characters under investigation were not the same across different teachers, it would not be possible to have this observation. Perhaps this serves as an example to illustrate the potential power of phenomenography to fully unfold the phenomenon of teaching in classrooms.

## **Conclusion**

This article reports the results of a study on how three teachers taught their children differently to write the same Chinese characters in the preschools in Hong Kong. Seven teaching strategies that the three teachers used to teach their children to write the characters were identified. More interestingly, the ways that the three teachers taught their children to write the characters, in terms of the stroke orders as well as the written forms, were found to be different, reflecting an

inconsistency among their understandings of the correct way to write the characters. These results shed light on understanding the practices of preschool teachers in Hong Kong in teaching children to write characters, which should be helpful to the professional development of preschool teachers. It is also evident in this study that phenomenography provides useful inspirations on how teaching in preschools can be investigated and, more importantly, improved.

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## Notes

1. It is a limitation of this study that no in-depth interview with the teachers was conducted to examine more thoroughly their beliefs.
2. It should be noted that the teachers regarded using the correct stroke orders as important. The teachers not only emphasized them during their teaching, but also helped out the children individually during the time when the children practiced writing the characters on their own exercise books. However, the performance on the stroke orders of individual children was not formally assessed. This was the normal practice of the teachers.
3. Though the 日 in the component 复 (*fuk6* “to restore”) looks like the component 日 (*jat6* “sun”), the component 复 should actually be linguistically divided into only the two components 文 (“left foot”) and 冫, where the 冫 as a whole is the simplified form of the component 甗 (“a bottle full of wine”).

4. These subtle differences were not counted as errors in the analysis of the children's performance since the understandings of the three teachers did not agree with each other.

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