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Cultural Characteristics Developed Through Chinese Literacy Instruction

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The purpose of this paper is to locate the cultural characteristics developed through Chinese literacy instruction, compare them with American cultural traits in education, evaluate how cultural traits influence teaching and learning, and shed light on what literacy teachers can do to sustain or modify the values that are transmitted through the classrooms. This study analyzes the nature of the Chinese written-language, assesses Chinese academic habits, and compares Chinese and American cultural beliefs about teaching and learning. The research concludes that Chinese cultural traits have much to do with literacy instruction, and that teachers need to be consciously aware of the values that are embedded in their instruction so they can modify and direct the education toward the intended goal.

Keywords: comparative education, cultural beliefs, cultural characteristics, literacy instruction, language teaching

Introduction

Every country has endeavored to improve its education. In order to understand the changes that are needed, it is essential for a country to know itself better. According to Hall (1981), a cross cultural perspective begins with “the notion that what is known least well and is therefore in the poorest position to be studied is what is closest to oneself”, the “unconscious patterns that control us” (p. 45). Culture, as defined by Hall (1990), is behavior that is taken for granted and “functions outside conscious awareness” (p. vii), and people can only achieve awareness of it by interacting with different cultures (Hall, 1981). Without direct exposure to another culture, people rely on cross-cultural comparisons to bring the unconscious into conscious, to understand their own culture. Comparative educational studies, therefore, intend to help educators or policy makers see the unconscious in their own educational systems. Through cross-cultural comparisons we might be able to recognize certain characteristics within our own cultures, and thus develop ways to improve the education system (e.g., teaching and learning).

Previous comparative studies (e.g., Stevenson & Stigler, 1992) have shown that the educational system and learning in the United States is very different from those in Asian countries. Bringing an American perspective into the discussion can uncover the unconscious aspect of Chinese cultural characteristics. The

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purpose of this paper is to locate the cultural characteristics that are developed through Chinese literacy instruction, compare them with American cultural traits in education, evaluate how cultural traits influence teaching and learning, and shed light on what literacy teachers can do to sustain or modify the values they transmit through classrooms.

Although cultural characteristics can be observed through various perspectives, this paper focuses on the perspective of language. As Sapir (1929) suggested, distinctive cultural behavior and thoughts are built on the language habits of individual cultural group. Also, Whorf (1956) proposed that cultural experience of the world is determined "largely by the linguistic systems in our minds" (p. 213). Based on their statements, later known as the Sapir-Whorf hypothesis (Kay & Kempton, 1984), thoughts and behaviors are determined, or at least partially influenced, by language. Both Sapir (1929) and Whorf (1956) agreed that language determines the way we categorize thoughts and experiences about the world. In a broad sense, the hypothesis explains how people who employ different languages think and behave differently, and thus develop different cultures. However, it is impossible to examine all aspects of language acquisition in a brief paper. Therefore, focusing on only one aspect of language, this paper discusses the possible influences of the initial Chinese literacy instruction, examines how the Chinese writing system influences learning styles, develops distinctive cultural traits, and forms academic habits. In addition, this paper also compares each identified Chinese cultural trait with a corresponding American cultural belief to further illustrate about how different writing systems form different cultural traits, beliefs, and habits.

Research Questions

Through an analysis of the Chinese written-language, the methods used in its instruction, and a comparison of cultural beliefs about teaching and learning, this paper atempts to answer the following questions:

(1) What cultural characteristics are embedded in Chinese literacy instruction?

(2) How are the characteristics different from American cultural beliefs about teaching and learning?

(3) How does knowledge about cultural traits help reform education?

The Nature of the Chinese Written-Language

Chinese language as a logographic writing system is distinct from the alphabetic English language system. The fundamental differences between the two writing systems make their literacy instruction methods completely different. In order to understand the distinctive Chinese language instruction at the primary level, it is thus necessary to understand the nature of Chinese written-language.

According to an ancient Chinese document, *Method of Teaching Children* (教童子法) in the Ching Dynasty (1644-1912), the top priority for learning Chinese was recognizing Chinese characters, and only after acquiring at least 2,000 basic characters could a person start to read (Luo, 2002). This tradition was followed until recent decades (Luo, 2002). As described in the current research (e.g., Lee, Ichikawa, & Stevenson, 1987; Pine, P. Huang, & R. S. Huang, 2003; Stevenson & Lee, 1990), Chinese characters are complex logographs and the acquisition of at least 3,000 characters is necessary for basic literacy. A single Chinese character usually does not have a fixed meaning, nor does it represent one complete word in English (Stevenson & Lee, 1990). It

consists of multiple strokes with a fixed order and method of writing, and can be pronounced differently in different contexts or in different Chinese dialects (Pine et al., 2003).

According to I. Taylor and M. M. Taylor (1995), Chinese vocabulary is represented by a large amount of visually complex characters, approximately 50,000. However, with 3,000 basic characters, one is able to read a newspaper, which means different combinations of 3,000 characters can build up a vocabulary of more than 10 thousands words (Luo, 2002). For example, as Luo (2002) demonstrated, when the character *Niu* (牛, cattle) is learned, one would be able to add another character in front of the character *Niu* and acquire additional vocabulary such as *Shui Niu* (水牛, water cattle: buffalo), *Mu Niu* (母牛, female cattle: cow), *Gong Niu* (公牛, male cattle: bull), and *Xiao Niu* (小牛, little cattle: calf). Adding another character at the end of *Niu* can form *Niu Ru* (牛乳, cow's milk: milk), *Niu You* (牛油, cattle fat: butter), *Niu Pai* (牛排, cattle steak: beefsteak), and *Niu Zai* (牛仔, cattle person: cowboy). Therefore, when another character *Yang* (羊, goat) is taught, children can quickly combine the above characters and acquire words such as *Mu Yang* (母羊, ewe), *Gong Yang* (公羊, ram), *Xiao Yang* (小羊, lamb), and *Yang Pai* (羊排, mutton chop).

As Shu and Anderson (1999) pointed out, an important feature of Chinese is that many of its characters directly represent meanings. Children first learn the most frequent Chinese characters, usually the least regular, and then use them as bases to acquire compound characters (Shu & Anderson, 1999). Shu and Anderson (1999) show that 82% of modern Chinese characters are compound characters. Standard compound characters are usually composed of two parts, a semantic radical (or a radical) and a phonological component (or a phonetic); the former carries information about meaning, and the latter information about pronunciation (Pine et al., 2003; I. Taylor & M. M. Taylor, 1995; Tsai & Nunes, 2003). As Shu and Anderson (1999) observed, in most cases the radical indicates "the conceptual category of the character" (p. 3). As examples they illustrated, *Jie* (姊, sister) and *Yi* (姨, aunt) contain the female radical *Nv* (女, female) (Shu & Anderson, 1999). Since each component of a character may have different meanings, the position and balance of characters are also important. As Pine et al. (2003) described, learning Chinese characters requires attention to the shape, balance, and position of each stroke.

Chinese characters are generally considered difficult to master (e.g., Luo, 2002; Pine et al., 2003; Shen, 2005). Apart from the above features, according to Luo (2002), there are four reasons: (1) a discrepancy between characters and sounds; (2) more than one pronunciation of certain characters; (3) the complexity of shapes and strokes; and (4) confusing similarities between some characters. As Luo (2002) explained, characters with the same components are often pronounced differently, and the same character in Mandarin Chinese can have different pronunciations. In addition, Chinese language is the significantly large amount of homophones (same sounds, but different characters). This feature, combined with the arbitrariness of character-sound, makes learning Chinese particularly difficult, compared with English. As for complexity, more than 200 important index components (radicals) are listed in a general dictionary, and many characters are composed of more than two components (Luo, 2002). Also, minor differences in a character create a different character (such as, 土 and 士), and this can cause confusion. This is why recognizing and writing Chinese characters require heavy rote memorization in early stage of learning. Examples are shown in Table 1.

Table 1

Examples of Chinese Characters

Pronunciation of characters with the same component			
沾 Zhan	站 Zhàn	拈 Nian	玷 Dian
Multiple pronunciation of a character			
说 Shui (to persuade)	说 Yue (to please)	说 Shuo (to say)	
Complexity of shapes and strokes			
郁 Yu	翼 Yi	钥 Yao	撇 Pie
Similarities between some characters			
戊 Wu	戌 Xu	戍 Shu	戎 Rong

In order to assist children in pronouncing characters, different phonetic spelling systems are taught in various countries, such as *pin yin* in China and *zhuyin fuhao* in Taiwan (Pine, P. Huang, R. S. Huang, & Zhang, 1999; Stevenson & Lee, 1990). Since Chinese written-language are relatively independent from the spoken language (Pine et al., 2003), there is usually no way to guess the pronunciation of a character without an authority source, a teacher, or a dictionary. In Taiwan, children usually learn how to use a dictionary in the second grade, and only start using it extensively after the third grade (Taiwan Grade 1-9 Curriculum Guidelines, 2013).

Chinese Academic Habits and Cultural Traits

Effort

Since Chinese characters have complex shapes and each character can often be confused with another (Luo, 2002; Pine et al., 2003), enormous time is needed to practice and memorize new characters (Pine et al., 1999). What teachers stress in teaching Chinese characters are the time and effort in analysis, memory, and practice (Pine et al., 1999). As long as students spend enough time and effort, they can master Chinese characters. The value of effort, therefore, is not only a cultural belief emphasized by many Chinese teachers and parents (Stevenson & Stigler, 1992), but is a necessary habit developed through Chinese literacy instruction.

The effort needed for initial Chinese literacy is vast, but no one would call it a waste of time. Both teachers and students contribute the time and effort because they know that an early effort at recognizing and memorizing characters makes it relatively easy to acquire high-level vocabulary (Hannas, 1997). In order to master Chinese, the time and effort to acquire characters is essential. Once the fundamental database of characters has been built, as Hannas (1997) reported, it gives Chinese language learners “an inside track to learning” (p. 126).

Pine et al. (1999) particularly indicated the huge amount of time it takes to acquire a certain number of characters. In addition to the time and effort in recognizing and practicing characters in class, students are required to do extra drills and homework after class. In China, around 160 characters must be mastered and understood in the first semester after spending four to six weeks on the phonetic system (Pine et al., 1999). Similarly, in Taiwan, around 1,200 characters must be acquired by the end of the third grade (Taiwan Grade 1-9 Curriculum Guidelines, 2013). Contributing to the difficulty, characters are irregular in shapes and sounds, and many times one little variance, even a dot or stroke, can have completely different meanings (Pine et al., 2003). With a large amount of irregular characters and pronunciations to memorize, students are required to spend extra time for practice and study. It is unavoidable, therefore, as Stevenson and Stigler (1992) indicated, Chinese and Taiwanese students have more homework and study longer hours than their English peers.

Collectivism

As mentioned above, learning Chinese starts with recognizing Chinese characters, and at least 2,000 to 3,000 basic characters are needed for reading Chinese (Luo, 2002). According to national curriculum outlines in both China and Taiwan, children spend the first three years learning in teacher-centered classrooms, uniformly acquiring the same most commonly used Chinese characters (Pine et al., 2003; Taiwan Grade 1-9 Curriculum Guidelines, 2013). As Biggs (1996) noted, the Chinese commonly believe that children should develop skills first and only after that can they start to create something. Elementary school Chinese literacy education prepares students with skills to master basic Chinese characters (Pine et al., 2003; Taiwan Grade 1-9 Curriculum Guidelines, 2013). Students are taught as a group (Pine et al., 1999, 2003), and every student is expected to acquire the same number of characters and achieve the same level of writing ability and reading comprehension (Taiwan Grade 1-9 Curriculum Guidelines, 2013).

In addition, when learning Chinese characters, most children share a common classroom experience: learning as a whole group (Luo, 2002; Pine et al., 2003). In the classroom, when teachers introduce a new character, they ask children to observe, explain the components of the character, and demonstrate the order and the position of each stroke within the character (Luo, 2002; Pine et al., 2003). Every child is expected to repeat after the teacher, and then practice writing the whole character on worksheets (Pine et al., 2003). The teacher guides the whole class in paying attention to detailed correctness, and students help each other with identifying possible errors (Pine et al., 1999, 2003). Also, the teacher needs to check and make sure that every student knows how to write the characters correctly, and only after that the teacher can continue the next teaching task. A child experiencing such group instruction tends to see himself/herself as one in a group rather than as an independent individual.

Furthermore, one feature of the Chinese language also shows a tendency toward mutual dependence. According to Sims (1997), compared with the American individual-centered emphasis, the Chinese value of collectivism tends to develop a social system based on mutual dependence. Apparently, the Chinese language also reflects the characteristics of mutual dependence. Because each Chinese character does not represent a complete English word and does not have a fixed meaning (Stevenson & Lee, 1990), each character usually needs to be combined and understood with other characters (Luo, 2002). Whenever students learn a new character, they usually combine the character with other characters they have learned and make a group of words and phrases (Luo, 2002). This feature of interdependence and a multi-combination of characters may not directly affect the way Chinese students learn, but it appears to influence how they think. As Sims (1997) noted, the Chinese tend to look at an individual as one in relation to a group, but not as an independent being.

Respect for Teachers

Teachers in Taiwan, Japan, and China are respected as professionals (Stevenson & Stigler, 1992). Respect for teachers has been known as an important cultural value that is influenced by Confucian tradition (On, 1996). However, respect for teachers may come not only from the Confucian influence but also from the way that Chinese characters are taught.

Chinese characters have a feature of absoluteness (Luo, 2002). As Shu and Anderson (1999) indicated, there are no grapheme-phoneme correspondence rules in Chinese as there are in alphabetic languages. Without

the grapheme-phoneme correspondence rules or any other rules to consider how a character is pronounced, there is no way to question the pronunciation of a character in a specific context. Chinese language learners simply memorize the pronunciation of each character in different contexts. Since there are no rules for students to consider or question the way a character is pronounced, they learn the pronunciation of each character through a dictionary or a teacher. Before they learn how to use a Chinese dictionary, the teacher is the only source for them to know how a character is pronounced. With this feature, the teacher becomes the only authority in the classroom for learning Chinese characters.

Accordingly, the pedagogy in Chinese literacy instruction in the first, second, and third grades, as Pine et al. (2003) observed, is "very much teacher-centered" (p. 782). Chinese characters cannot be learned without a teacher showing students the order of strokes and the pronunciation of characters (Pine et al., 2003). The teacher in the initial literacy classroom is the only information provider. According to Pine et al. (1999), simply recognizing a Chinese character does not mean that one has learned the character and knows how to write it. Without learning the pronunciation and the order of strokes of a character from the teacher, students have not fully learned the meaning of the character or how to write it (Pine et al., 1999). As Hanley, Tzeng, and H. S. Huang (1999) pointed out, printing, word processing, and the use of dictionaries are "much more convenient in an alphabetic system" (p. 176) than in the Chinese writing system. If a student does not know how many strokes there are in a character, or how to decipher the components (or radicals) of a character, the student will be unable to find the character in a dictionary. Therefore, beginning learners of Chinese rely extensively on the teacher as an authority, creating a teacher-centered pedagogy where teachers are highly respected.

Precision and Correctness

An emphasis on precision and correctness is an important characteristic of the Chinese language, both in pronouncing and writing Chinese characters (Luo, 2002). Looking only at how Chinese characters are taught, Pine et al. (2003) found that learning Chinese characters requires learners to pay attention to precision and perfection because a small variation in shape or space can produce completely different meanings. As Pine et al. (1999) observed, what teachers stress in the writing of characters is usually accurate stroke writing and correct stroke sequence. With attention directed constantly to precision and correctness, children tend to acquire "the ability to notice highly detailed, small nuances" of dense structures or confusing symbols and sounds (Pine et al., 2003, p. 805).

Such insistence on precision and correctness reflects two cultural tendencies: first, an attitude oriented toward correcting errors; and second, the student response to questions. As Pine et al. (2003) remarked, a constantly heard comment from Chinese teachers was that "[m]istakes had to be corrected immediately because eventually the students must write the characters perfectly" (p. 806). Teachers and students both agree that it is necessary to correct mistakes immediately in order to write perfect characters (Pine et al., 2003). According to many Chinese teachers, corrective feedback means helping students learn to write a character, and has nothing to do with criticism, student ability, intelligence, or self-esteem. Like Pine et al. (2003) indicated: "[t]here is no such thing as invented spelling or approximations in Chinese"; children "either know the characters or they do not" (p. 808). Every Chinese language teacher believes that every learner can achieve perfection by carefully attending to details and precision (Pine et al., 2003), which mirrors the Confucian belief that everyone is educable

and perfectible (On, 1996). Chinese literacy instruction places a great deal of stress on the effort to achieve precision and perfection, also, teachers and students both believe that errors are part of learning (Stevenson & Stigler, 1992). Correcting mistakes is considered helping students learn and achieve perfection, and becomes a common teaching approach shared by many Chinese teachers (Pine et al., 2003).

Secondly, the emphasis on correctness can influence the way students respond to questions. When teachers ask students to compare characters and identify the differences and/or mistakes, they expect a close and careful observation, a correct answer (Pine et al., 2003). An instant but incorrect answer is not encouraged. As Confucius (1980) valued a person who thought and acted before he spoke, Chinese literacy instruction that attaches importance to correctness seems to reinforce this cultural value.

Nonverbal

Verbal expressive ability is usually seen as important in many educational settings; interestingly, however, verbal ability is not encouraged in Chinese tradition (Confucius, 1980) and not emphasized in Chinese literacy instruction. Confucius (1980), one of the most influential figures in Chinese tradition, has valued careful observation instead of expressive ability. Similarly, Chinese literacy instruction attaches significant importance on paying careful visual attention and observation to the structures of characters instead of on the verbal communication of ideas (Hanley et al., 1999; Luo, 2002; Pine et al., 1999, 2003). With literacy instruction that attends to the precision and correctness of shapes and space, students are directed to focus constantly on detailed nuances and variations of the spatial placement of segments (Pine et al., 2003). As Pine et al. (2003) pointed out, Chinese children learn to "recognize signs as useful for gaining information, discriminate among the various signs… and derive meaning from them" (p. 783). Such perceptual learning, as Pine et al. (2003) suggested, is integral to reading Chinese.

Moreover, from the research results of Pine et al. (2003), there are four categories of learning strategies for learning Chinese characters: (1) structural analysis; (2) kinesthetic; (3) imaginative; and (4) non-alphabetic fields. According to Pine et al. (2003), the first category, structural analysis, refers to the ability of dividing the whole into parts. The second, kinesthetic, illustrates how learners use hand motions to memorize and recognize characters, and the third, imaginative, describes how learners relate shapes to meanings (Pine et al., 2003). The fourth category, non-alphabetic fields, simply refers to strategies not easily named, such as valuing the appearance of a character, the beauty of the appearance, or other observant ways to memorize characters (Pine et al., 2003). None of these is related to verbal abilities. This corresponds to Vernon's finding (1982) that visuospatial abilities develop more than verbal abilities with people in Japan, Hong Kong, Taiwan, and China.

Like the research that Pine et al. (1999) revealed eliciting responses from students who are accustomed to a highly teacher-centered environment can be challenging. According to the observations of Pine et al. (2003) and Cheng (1993), the most common verbal activities in Chinese literacy classrooms are locating mistakes in writing characters, describing pictures, choral reading, story telling, and recitation of a text. Verbal abilities such as expressing opinions, questioning, disputing, debating, and reasoning have not been observed in initial Chinese literacy classrooms. The enormous effort and time devoted to the precision and correctness of Chinese characters appears to develop the nonverbal rather than verbal abilities of children.

A Comparison and Evaluation of Different Cultural Beliefs

Effort vs. Ability

In contrast to the time-consuming effort required for Chinese literacy, as Hanley et al. (1999) indicated, the English alphabetic system "uses only a small amount of abstract elements (letters) to represent the phonemic structure of the language in writing" (p. 171). Thus, as Hannas (1997) pointed out that unlike Chinese students who spend an enormous amount of time and effort learning about language, American students start using language to read and acquire new knowledge as soon as they master the alphabetic system of 26 letters. Like Stevenson and Lee (1990) suggested, learning the alphabetic writing system requires the ability to segment words into their component phonemes. Individual differences in ability inevitably create differences in the pace of learning. Therefore, they observed that American teachers do not require a uniform learning schedule for each student, and usually divide children into slow and fast learner groups. As Shoho (1996) reported, many students in the United States are "ability grouped very early in their academic careers" (p. 579).

As Stevenson and Stigler (1992), and Shoho (1996) pointed out, Asians value effort much more than ability, whereas Americans appear to value ability beyond everything else. According to Stevenson and Lee (1990), all students in Taiwan and China adhere to a standard rate of learning progress in spite of how well or how poorly they read. As Shaw (1991) suggested, "differences among students were not viewed as the cause for failure when success was seen as the norm for all students" (p. 118). This belief in effort and group success pushes Taiwanese students to achieve at least the average academic performance required by schools, teachers, and parents (Stevenson & Stigler, 1992). In a positive way, children believe that as long as they make an effort, they can achieve the same standard as those who are quick and smart. Then, they will not easily give up making an effort to achieve higher academic performance. According to my previous experience with Taiwanese students, if they had the belief that learning is a result of innate ability rather than effort, they soon give up meeting the rigorous standard by simply admitting that they are not smart enough. From a positive perspective, as Stevenson and Stigler (1992) suggested, if a teacher believes in making an effort, this belief motivates students to actually make an effort and many of them therefore learn more effectively.

However, from a negative perspective, the belief in effort may neglect the differences of some children with special needs. Like Stevenson, Stigler, Lucker, and Lee (1982) observed that teachers in Chinese classrooms do not notice the serious reading problems of some students because the teachers consider inadequate performance "a matter of not trying hard enough or not being taught effectively rather than possessing a disability" (p. 1178). On the contrary, valuing innate ability, American teachers usually do not regard underachievement as not trying hard enough (Stevenson & Stigler, 1992). Instead, they think different performances come from different abilities. Thus, American schools develop gifted and talented programs and programs of special education to meet the needs of different children (Wu, 1996). As Lin and Miller (2003) reported, special education in Taiwan has generally been neglected. To a certain degree, the belief that everyone can achieve perfection with effort does not distinguish different abilities among students, and thus may neglect special students, inhibit fast learners, and even extinguish the creativity of some talented students.

Collectivism vs. Individualism

The belief in effort or ability influences the cultural value of either collectivism or individualism. The

belief in effort treats all students as one group that learns the same things at the same time and achieves the same goal, while the belief in ability treats students as individual learners with different abilities who learn at a different pace with different objectives. The different beliefs form respective values on collectivism or individualism. This prominent cultural difference has been extensively discussed from many different perspectives (e.g., Bennett, 1998; Hofstede, 1980). In literacy instruction, teaching with an emphasis on collectivism or individualism poses the same dilemma as an emphasis on effort or ability: Does it attend to individual needs or promote collective academic success?

From the classroom descriptions of Pine et al. (1999, 2003) and Cheng (1993), Chinese and Taiwanese students are usually taught collectively as a group, while in the observations of Stevenson and Stigler (1992), American students spend most of their class-time working on their own. Such decisions to have students work as a group or individually may not rely entirely on the teachers. Based on the nature of Chinese characters, Chinese teachers teach as a whole group because they need to ensure that every child acquires basic characters to start reading. As aforementioned, there are no approximations in Chinese characters (Pine et al., 2003), and learning a character from a Chinese dictionary is not as convenient as learning an English word from an English dictionary (Hanley et al., 1999). Especially on the initial literacy level, before knowing the pronunciation or the number of strokes or the decipherment of a character, children need help from others such as a teacher, parent, or someone who has learned the character. In order to learn more necessary characters within a limited class time, teaching the class as a whole becomes a necessity because it is the most efficient method when everyone needs to learn the same thing at the same time. Therefore, it is unlikely that children will learn characters beyond their own grade level, and if this does happen, it only occurs outside the classroom (Stevenson & Lee, 1990).

Although group-oriented instruction sounds reasonable for a Chinese literacy classroom, such a teaching approach goes beyond language lessons, and this is what educators in Taiwan need to pay attention to. When children learn as a collective group, the teacher usually pays attention to the collective learning objective instead of to individual needs (Lin & Miller, 2003), and the difference is seldom appreciated. Again, special education is neglected (Lin & Miller, 2003), and children may often feel uncomfortable about being different. As Shoho (1996) observed, schools in Taiwan aim for “the collective success of all learners and stress conformity to group performance rather than individual performance” (p. 579). In a positive way, the stress on conformity develops a sense of empathy: knowing that there are differences and it takes effort and help to achieve the same level of success. In a negative way, this causes students to become conformable, value the group norm, and belittle personal differences. Self-esteem, self-expression, and individuality may not be encouraged. This corresponds to what Shoho (1996) reported: Concepts such as self-expression and individuality are suppressed among Chinese and Taiwanese students.

Furthermore, similar to the idea of learning necessary, basic, correct Chinese characters, children in Taiwan are required to learn certain core knowledge with a standard schedule (Stevenson & Stigler, 1992). It is believed that only after acquiring the “necessary” core knowledge at a certain level, are children then able to explore individual differences. With only limited special or gifted programs at the elementary and high school levels (Wu, 1996), all students learn basically the same subjects until the age of sixteen (Taiwan Grade 1-9 Curriculum

Guidelines, 2013). As Biggs (1996) depicted, only when Chinese students are able to master the same skills and forms are they encouraged to develop individual creativity. Likewise, in the author's experience with university students in Taiwan, many of them do not even know if their majors really correspond with their interests because they have never explored their personal interests while in high school. With the influence of the Chinese literacy convention that all students should learn the same core knowledge as a group, education in Taiwan weighs heavily on collectivism and treats all students as the same in a group which can sacrifice individual needs and delay the opportunity for students to achieve personal realizations.

As for the learning environment in the United States, Stevenson and Lee (1990) found that American teachers divide fast learners and slower learners into different reading groups. The way that American teachers encourage children to learn according to their own reading pace sounds alien and unbelievable to Taiwanese teachers because it seems to encourage fast learners to learn faster and slow ones to learn even slower. This may be the reason why the learning gap has developed (Stevenson & Stigler, 1992); however, this is also the way in which individual differences are encouraged and appreciated. Shoho (1996) showed that many children in the United States are diagnosed or put into special tracks when they are at the preschool level, and individual differences and interests are carefully observed and tracked when children are still very young. Consequently, children in the United States never feel uncomfortable being regarded as different, and develop higher self-esteem and self-expressive concepts than their Chinese or Taiwanese peers (Shoho, 1996).

Respect for Teachers vs. Ability to Question

Again, similar to valuing collectivism or individualism, stressing respect toward an authority figure or appreciating individual opinion is distinct between the two different cultures. The distinction comes from a choice made by teachers because of the different roles they believe they should play in class. The role a teacher plays in the classroom can determine the way students respond and learn. Stevenson and Stigler (1992) observed that teachers are highly respected and that students are disciplined in Taiwan, while American classrooms are disturbed or interrupted many times by different events.

As mentioned earlier, there is the feature of absoluteness in Chinese characters (Luo, 2002) because there are no grapheme-phoneme correspondence rules. Students learn Chinese characters from a teacher or parent without the need to question why. Students rely entirely on the teacher to learn and never need to challenge the teacher. As one who knows the "correct" way of writing Chinese characters, a teacher of Chinese is respected as an authority; therefore, students do not challenge the teacher and are unlikely to develop questioning or critical abilities. This is why Kuhn (2003) suggested that a student's critical ability may not develop in an authoritative environment. On the contrary, in American classrooms, students are able to learn on their own or with a dictionary in a very short time after mastering the alphabet (Stevenson & Stigler, 1992). When children do not need to rely on a teacher to learn, the teacher serves as a facilitator instead of an authority. In such an atmosphere students are encouraged to question and develop their personal opinions.

Respect for the teacher and ensuring discipline in the classroom may create an efficient learning environment (Stevenson & Stigler, 1992), but appreciating the ability to question can foster a critical and

democratic mind (Kuhn, 2003). The high respect for teachers in Taiwanese classrooms, though ensuring discipline and creating an efficient learning environment, prevents students from developing critical ability, challenging authority, and expressing their own opinions freely. When children are accustomed to passively accepting values from an authority figure, there is not much room left for creativity to flourish.

Nevertheless, a question emerges: Is there really a conflict between developing respect for teachers and also developing the ability to question? Stevenson and Stigler (1992) believed that developing respect for teachers can create a disciplined and efficient learning environment, and if teachers properly guide students toward questioning, students can still develop an ability to question. The problem then becomes how teachers can help students develop both a critical ability and respect for authority. The question may not have an easy answer, but it is worth the effort to find an answer.

Precision and Correctness vs. Thinking and Responsiveness

Similarly, emphasizing precision and correctness in learning Chinese characters leads children to focus on correctness and develop the habit of finding only the correct and uniform answer. In Chinese literacy classrooms, students spend a lot of time learning how to write accurate and correct characters (Pine et al., 1999, 2003). As Pine et al. (2003) recorded, when teachers pose a question, they are usually asking for what is wrong with a character. Such questions only ask for close observation and a correct answer. Students are required to report their observations, but not their personal opinions. A careful and correct answer, instead of a prompt, creative, but possibly incorrect answer, is encouraged.

In American classrooms, students do not usually spend a lot of time learning from the teacher (Stevenson & Stigler, 1992); instead, after spending a short time learning the alphabet system, they start very early using language to think, discuss, and develop ideas (Alberta Learning, 2009). Children use the English language to think, explore meanings, question, debate, and express personal opinions, and develop the habit of thinking and discussing ideas. The majority of time is allocated not to learning the language per se, but learning to use the language to communicate. Any response from a student is regarded as good and valuable. This again encourages children to develop creativity, critical thinking, the ability to question, and self-expression, though children may not develop the ability to carefully observe details, and may not be cautious about making mistakes.

Nonverbal vs. Verbal

Also, because of the emphasis on precision and correctness, careful nonverbal observation and decoding the form and shape of Chinese characters is required. As Pine et al. (2003) noted, the Chinese appear to “focus on visual segmentation”, in marked contrast to American language decoding that focuses on “sound/symbol associations and sound segmentation” (p. 807). The grade-one curriculum summaries in the two countries show the respective different emphases. In the American curriculum summary for grade one (Alberta Learning, 2009), the learning objectives for English language arts emphasize language comprehension, organization, communication, and expression. Verbal activities take the most part of the English language arts classes, with activities such as sharing ideas, information, and brief narratives about personal ideas and individual stories. On the other hand, in the Taiwanese curriculum guidelines for Chinese language arts (Taiwan Grade 1-9 Curriculum Guidelines, 2013), the majority of the time is used for nonverbal activities

such as acquiring phonetic spelling symbols (*zhuyin fuhao*), recognizing and writing Chinese characters, and using a dictionary to learn the language.

Valuing verbal ability involves valuing the personal voice in a democratic society. As Wood (1988) stated, a curriculum for democratic empowerment involves different cognitive, personal, and communal skills, and understanding in order to participate in public discussion. The skills and understanding are significantly related to the encouragement of verbal participation in American classrooms. It is the encouragement of verbal ability that helps children develop a belief in personal rights and the responsibility to participate in public discussion, shape the understanding that individual contribution is important, and acquire skills to participate in public discussion (Wood, 1988). Chinese literacy instruction emphasizes nonverbal observation, and may help develop observational and analytical abilities. However, this training does not help children develop verbal expressive ability, which is important for democratically participating in public discussion.

Conclusions

From the above observations on Chinese literacy instruction and the relationship to Chinese cultural traits, it is obvious that Chinese cultural traits are significantly related to the nature of the Chinese language. Many Chinese cultural characteristics can be observed in Chinese literacy instruction. This observation is consistent with Sims' (1997) finding that the Chinese language influences the way Chinese people think and view the world. Also, the observation provides evidence for Sapir's (1929) statement about the connection between thought and language, i.e., that people see, hear, and experience as they do because of their language habits.

Although a significant relationship between Chinese literacy instruction and Chinese cultural traits does exist, there is an uncertainty about whether the values, beliefs, and cultural characteristics are developed through literacy instruction or whether they are reinforced and sustained, because they have been valued in the culture. The uncertainty is not determinative; instead, the most certain and important quality is that teachers of languages need to understand the values that are embedded in their instruction. When teachers know clearly which values are embedded in their instruction, they can modify their instruction and direct the education process to the goal they intend.

Every cultural characteristic that is demonstrated in a language system can be viewed as both a strength and a weakness. The American emphasis on individualism is what makes the US great, but also may create problems; similarly, the Chinese and Taiwanese stress on collectivism leads to high student academic performance, but also creates different kinds of problems. All of those qualities that have been identified as strengths that contribute to high academic achievement, such as appreciating effort, collectivism, and respecting teachers have in some way been criticized as weaknesses by Taiwanese education reformers. Those qualities that are criticized as weaknesses can in fact be strengths. When teachers know clearly which values may be transmitted in their instruction, they will make careful decisions about modifying their instruction in order to reinforce or add certain values in the classroom experience.

Cultural traits are peculiar to each specific culture, and need to be seriously considered when each country initiates any kind of education reform. They should not be regarded as strengths or weaknesses but

traits that need to be compromised when policy makers or educators adopt new ideas or pedagogy from another culture. Many researchers (e.g., Shoho, 1996) have made a similar conclusion that there is no one best method for teaching and learning; therefore, every culture needs to be aware of its cultural traits and develop culturally responsive education.

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