Abstract. This paper explores the strategies for enhancing early literacy in Chinese preschools. Writing and decoding Chinese characters require some skills quite different from those used in alphabetic languages. Nevertheless, core elements of whole language and emergent literacy used in the West have proven viable. Drawing from whole language and emergent literacy work, a two-year project in Nanjing and Beijing slowly introduced emergent literacy techniques into 10 preschool classrooms. Findings suggest that most instructional strategies critical for the development of emergent literacy for western children can lead to effective early literacy development for Chinese children as well. Research cases reveal positive changes in teachers’ knowledge and strategies and in children’s early literacy development.

Keyword: instructional strategies; early literacy; emergent literacy; Chinese preschools

Chinese preschool education has seen many changes during the last 60 years as societal upheavals and transformations have influenced pedagogy. For several decades preschools were prohibited from instructing their children in literacy, and as a result preschool teachers have had little pedagogical training in the area of literacy. In recent years, however, the preschool environments, as well as all of China, have developed enormously, and in 2001 the Chinese government approved the teaching of early literacy skills. The Early Childhood Curriculum Guidelines (China’s Ministry of Education, 2001) state that instructional programs should encourage young children “to become interested in book reading” and “to interact actively with pictures, signs, and print in their school environments and in everyday life” so as “to develop their early reading and writing skills” (p. 3, 6). However, preschool teachers have had little training in literacy and have not been exposed to early literacy concepts. Therefore, children are often instructed in the traditional primary school manner of drawing correct lines and shapes as precursors to writing characters. Interacting with print is restricted to conventional literacy lessons in which children do such things as answer factual or test-like questions about a book that the teacher has read to the children. Rarely is early literacy used in other activities, and almost never is early literacy used in authentic situations such as pretending to read a newspaper or trying to write a shopping list.
Numerous research studies in the west (e.g., Dickinson & Tabors, 2001; Hart & Risley, 1995; Smith & Dickinson, 1994; Snow, Burns, & Griffin, 1998; Teale & Sulzby, 1989) have demonstrated that preschool is the critical period during which strong emergent literacy development may prevent later literacy failure and that differences in the quantity and quality of children’s early literacy experiences predict early school success. They also strongly affect future academic achievement and support their long-term development. Convergent research findings (cited in Crawford, 1995) indicate that young children benefit from intensive early literacy instruction, using different intervention programs based on emergent literacy, whole language learning, and constructivist learning. These programs have many elements in common such as: (1) meaningful, print-rich environments; (2) pretend reading and writing for authentic purposes; and (3) varied oral language practice (e.g., using varied vocabulary and extended discourse during early literacy activities).

Writing and decoding Chinese characters require some skills quite different from those used in alphabetic languages. Nevertheless, some core elements of whole language and emergent literacy used in the West have proven viable such as extended discourse between mother or teacher and child (Zhou, 2002; Yu, 2005), and children labeling their belongings in pretended Chinese characters (Yu, 2006). Less is known, however, about whether these specific strategies and their underlying theories can be used to develop a larger span of critical components that will support Chinese children coming to literacy. Of particular interest to our study have been the instructional strategies the teacher uses during early literacy learning.

The project discussed in this paper has encouraged Chinese preschool teachers to adapt western concepts of emergent literacy and whole language learning to their classrooms and children’s needs, to link theory to practice in their own classrooms, and to discuss strategies as a means to foster early literacy development.

THEORETICAL PERSPECTIVES

What is early literacy?

From an emergent literacy perspective, literacy development starts long before formal instruction, and children’s early experiences with print are recognized as important sources of knowledge that will contribute to their formal instruction. Early literacy is not reading readiness or conventional literacy itself, but emergent literacy, i.e., what children know about reading and writing before they can actually and conventionally read and write. Such behaviors include pretend reading and writing that develop into conventional literacy, as well as the skills, knowledge, and attitudes that are developmental precursors to conventional forms of reading and writing (Whitehurst & Lonigan, 1998). A continuity exists between early literacy behaviors and conventional reading and writing. As Teale and Sulzby (1986) wrote, These behaviors and knowledge are not pre-anything. It is not reasonable to point to a time in a child’s life when literacy begins. Rather we see children in the process of becoming literate, as the term emergent indicates (p. xix).

How does early literacy develop?

Children begin accumulating literacy skills very early in life and a preschool foundation in language and literacy development is essential for helping them master the reading process (Burns, Griffin, & Snow, 1999). Early literacy occurs as children use oral language, reading, and writing in their play
and as they communicate with family, teachers, and peers in response to personal or social needs. Emergent literacy skills and knowledge build on whole, interesting, and meaningful learning (Goodman, 1986; Anbar, 1986; McGill-Franzen & Lanford, 1994; NAEYC, 1998). Children’s active participation in a print-rich environment is considered a critical factor for this (Teale & Sulzby, 1986). From the perspective of constructivist learning theory, the process of effective literacy learning is that children (1) actively engage in meaningful activities related to written language; (2) make sense of written language and use it for different authentic purposes; and (3) connect their own previous experiences to the stories or pictures in written language (Vygotsky, 1978; Goodman, 1986; Crawford, 1995).

**What strategies should the teacher encourage for early literacy development?**

Parents and teachers can play a vital role during early literacy development (Teale & Sulzby, 1986; NAEYC, 1998; Zhou and Zhu, 2006). Interventions and instruction during the preschool years need to focus on emergent literacy skills by creating literacy-rich environments that include a considerable amount of functional print. Parents need to be brought into this process when possible. Encouraging children to use pictures and to create print in genuine contexts will expand their sense of how books work and expose them to different styles and forms of written language. It will also help preschoolers build connections between oral and written language. Of all the factors that play an important role in early literacy development during the preschool years, the following four are considered related to children’s literacy success at the end of kindergarten.

**Varied vocabulary use.** The more words children have in their speaking vocabularies, the more likely they are to make sense of written text (Tabors, Snow & Dickinson, 2001; Whitehurst & Lonigan, 1998). In addition the more words children know, the more success they will have as readers (Cunningham & Stanovich, 1997). Because a substantial oral/aural vocabulary is an essential component of full literacy attainment, the teacher should talk with children in different contexts and use a varied vocabulary, so that children will have more opportunities hear varied vocabulary from teachers and to be likely to use a variety of words in different situations.

**Use of extended discourse about pictures or picture books.** Children benefit when they participate in conversations that use extended discourse (Dickinson & Snow, 1987; Wells, 1985). Planning for the current project reasoned that if Chinese children had more opportunities to hear and produce explanations and personal narratives and engaged in more pretending, they would likely have improved literacy success. Research (Dickinson & Smith, 1994) has shown that discussions teachers have held with groups of children about the books, pictures, tables or figures that they were reading or looking at are valuable, especially when they lead the children into analytical conversations that require them to think about the story or discuss the meanings of printed words and pictures.

**Modeling reading and spelling words.** In the West, children are helped to develop efficient word-recognition strategies and phonological awareness when the teacher models these processes. Their exposure to letter names and sounds during the preschool years has been positively associated with linguistically precocious performance on selected literacy measures (Crain-Thoreson & Dale, 1992). Letter knowledge, which provides the basis for forming connections between the letters in spellings and the sounds in pronunciations, has been identified as a strong predictor of reading
success (Ehri & Sweet, 1991). Although Chinese characters are not composed of letters nor sounds in the way that many western languages are, modeling of the reading process (using characters) and modeling the writing of characters can provide the children with familiarity of how the Chinese writing system works (Yu, 2005). Also, in the first years of primary school, beginning in first grade, Chinese children learn and utilize pinyin, a system of Latin letters that aids them in reading words until they have mastered the character for that word.

Create intellectually supportive environments. Intellectually stimulating environments encourage children to imagine, to think, and to argue about what they are reading or shown. Such environments can provide children cognitive and linguistic stimulation. They also introduce new information or ideas from teacher to children, as well from the children to teacher. An especially important contributor to early literacy development is frequent shared book reading, during which children can discuss anything that they are interested in.

METHODS AND PROCEDURES

The study was conducted through action research, which is a systematic form of inquiry that is collective, collaborative, self-reflective, critical, and undertaken by the participants of the inquiry (McCutcheon, & Jung, 1990). The combination of understanding previously completed research by other educators or researchers combined with the teachers’ own on-going research in their classrooms becomes a powerful tool for conducting balanced inquiries and analyses. This is a research approach that McLaughlin, Watts, and Beard (2000) argue is one of the most effective means for uncovering change mechanisms that can improve schools today. Drawing from the emergent literacy and whole language work of theorists and practitioners in the United States and Britain, a two-year project in Nanjing and Beijing has slowly introduced emergent literacy techniques into 10 preschool classrooms. Ten teachers, in collaboration with Zhenyou Yu, a university researcher, were active researchers and participated in introducing and assessing early literacy skills in their classrooms. In addition, classroom videotapes and notes taken by Yu and the teachers provided a record of data that showed the new strategies introduced, how successful they were with children, and how they could be adjusted for improvement.

Research Questions

The following research questions guided the project in its initial stages:

1. In what ways did the teachers respond when they were introduced to the concept of emergent literacy?
2. What instructional strategies appear to be critical for developing Chinese children’s early literacy?
3. What are the effects of early literacy instructional strategies for Chinese children in preschools?

Procedures

The project has been carried out with ten teachers in three preschools. The classes included a total of 297 children divided equally among three-, four- and five-year-olds. The ten teachers and Yu formed a collaborative team. They each visited one of the ten classes twice a month. Action
research provided them a means for blending the knowledge of teachers as reflective practitioners with knowledge from scholarly works that Yu periodically introduced. The project emphasized collaboration between the classroom teachers and Yu in each cycle of the three phases of the design, which are compliant with the research model as described by Kuhne and Quigley (1997).

**Phase I Planning**. Firstly, Yu visited each of the ten teachers individually in the classrooms and, after the instructing teachers were comfortable, their teaching process was videotaped so that they could all review the tapes later, and so that Yu could learn how literacy was being used within the classroom environment. He also noted to himself how the environment and teaching could be enhanced.

Secondly, all the teachers and Yu watched the videotapes together to discuss what they had been doing in class and what they could do better. After they were introduced to some ideas about emergent literacy and print-rich environments, the teachers and Yu then developed new ideas for introducing emergent literacy strategies and decided what they should do next in their classrooms to improve their strategies. For example, when a new book was introduced to the children, teachers decided they should show the book cover and have the children predict what might happen in the story and then discuss the story. They decided this would be better than the more traditional method of the teacher reading the book directly and having the children recite and memorize it. Also during the book reading the children might be asked to compare their own experiences to those in the story, to describe or imagine what the character in the story is like, or why and how things happened in the story. The importance of the teachers being in control of the change process in the classrooms was always emphasized.

**Phase II Action**. The teachers tried to use new strategies in their early literacy activities in the following weeks, and some of their teaching processes were videotaped again so that their effects on children’s early literacy behaviors could be observed by themselves and by the team.

**Phase III Reflection**. The next time we visited classes, we focused on whether the new strategies had been used in the activities and the effects they had on the children’s literacy behaviors on the spot and on the videotapes of the other teachers’ teaching processes. In this research discussion teachers talked about why the new strategies worked or did not work as well as what should be changed next or how they could improve teaching strategies more. Additionally, they and Yu discussed specific ways literacy learning and encouragement could be introduced into more areas of the daily curriculum. For example, in a home play center with a phone, there were no pencils and paper available for writing. Once the teachers introduced these materials, the children began to write messages while they had pretend phone conversations, thus utilizing their developing literacy skills in more authentic situations.

This cycle was then repeated again with additional improved teaching strategies gradually introduced.

**RESULTS**

After two years the results suggest that Chinese preschool children in this project responded to the newly introduced early literacy instructional strategies. Following is a summary of the traditional teaching methods used before the early literacy concepts and strategies were introduced and specific
changes made in the children's behavior through the teaching of early literacy awareness and practice.

*Changes in the classroom teachers' knowledge and strategies*

Before the new ideas were introduced, the teachers simply considered early literacy as learning the difficult task of reading and writing Chinese characters so as to read stories independently. The teachers often used traditional ways to introduce pre-literacy skills such as:

- holding up a paper on which a Chinese character was written and having the children memorize it;
- teaching them how to draw lines correctly so that they could write characters just as a primary student could do (see examples 1a and 1b below);
- asking children to recite and remember a story; and
- reading the children a story and asking them factual and test-like questions.

*Example 1a.* A 2-year old practices lines for writing.

![Example 1a](image)

The teacher of this child, like almost all Chinese teachers, thought stroke knowledge was the foundation for writing Chinese characters, and asked children to draw Chinese strokes during an instructed lesson. Here stroke lines were made by a child of 2 years 6 months after a lesson about how to make vertical lines.

*Example 1b.* Copying characters conventionally:

![Example 1b](image)
The teacher thought preschoolers should learn to write Chinese characters conventionally, the same as primary school students. Therefore the children were asked to learn to write characters in isolation with exactness and correctness emphasized. This is a handwritten Chinese poem that a child of 5 was asked to rewrite in a formal style.

After the project collaboration, the teachers’ knowledge and strategies changed. They began to understand the differences between early literacy and conventional teaching, and they began to accept emergent literacy concepts. Typical of their changing attitudes was this Nanjing teacher’s comment:

I have thought that early literacy was learning reading and writing characters before they went to school. The characters were just simpler than those primary students read and wrote in class. Now I know it is more important for young children to be interested in the meaningful characters in everyday life and to engage in using literacy for their authentic purposes.

The teachers also began to use related strategies, rather than just more rote reading and writing. Concrete strategies they used were the following:

- They provided print-rich physical environments by themselves or collectively with the children. For example, on the classroom walls or on the tables in the home centers, the teacher put pictures or Chinese characters that they or the children prepared. These pictures or characters explained rules for play, gave directions for activities, etc. Every day the teachers spent a few minutes reading to the children, or asked some of the children to read books they liked best if they wanted to.
- They provided children with opportunities to use print in authentic ways. The teachers encouraged the children to use their drawings and writing attempts for authentic ends and for real reasons. For example, the children were encouraged to use their drawing and print to express emotions and to share ideas with others (see example 2a and 2b below), and they were asked to make their own book following the story structure in the book they were reading (example 2c).
- They used various conversational strategies. The teacher encouraged children to share their own ideas and imagination about the pictures, roles, and even the Chinese characters in the book; to use different words to express the same event (example 2d); to comment on the rules of print or pictures in the book; to predict what happened from the cover picture; to compare their own experience to that in the story; to perform the story in the book; and to invent new games using anything in the story so that the story was the origin of the idea.
- They provided children with opportunities to interact actively with Chinese characters. The teachers occasionally pointed out to the children, within authentic situations, the rules of print and pictures in books. For example, they often asked the children to think of the written characters that they were exposed to in different contexts. What does it look like? Who has the same character in their name? Where else have you found the same character? were some questions the teachers often asked.
**Example 2a. Happy and Sad**

After talking about being happy or sad, the children shared their own ideas with their peers and teacher about what made them happy or sad. The teacher then wrote down what they dictated. For example, one said, I’m happy when I go to Nanhu Lake, while another said, I cried when I miss my mother. This was another opportunity for the children to see that their talk can become print and that their feelings are an integral part of literacy.

**Example 2b. Favorite Sports**

In an activity that used English accompanied by comprehensible input as the communication medium, the children asked different people what their favorite sport was. The teacher had first asked them, and then they had asked three of their friends what their favorite sport was. Finally they drew the results and described it to those friends.
This example has three sentences. In each sentence the picture on the left is of the friend, the hearts in the middle stand for *likes*, and the right side shows what sport the friend likes. In this case the friends like (from top to bottom) bowling, swimming, and basketball. The children have learned that their marks can communicate ideas and feelings and that print can be part of the total communication process.

*Example 2c. I Can Book*

The class made a book about what they can do. The teacher took photos, the children said what they were doing, and the teacher wrote it down. Instead of just being read books by the teacher, the children learned that they cannot only read books, but they can make them themselves. This *I Can* book is read continuously by the children and constantly had more and more pages added with photos of what others can do.
Example 2d. My Family

During a lesson that focused on families, the children used new vocabulary words while they shared a family photo with their class. The teacher also showed a photo of her family and described them. The genuine communication between the teacher and children that is unusual in a Chinese classroom, provided a natural context for developing language.

Changes in children’s early literacy behaviors

Before the new ideas were introduced into the classroom, the early literacy activities were taught passively. Children were asked to imitate, recognize, read, or copy formally the Chinese characters and sentences appearing in their environment or books which had just been taught. Children had few opportunities to be exposed to print outside the literacy class, and even in the literacy class, they could do nothing but recite or copy what the teacher asked them to. Results of random observations showed that after the class had progressed two to three minutes more than two-thirds of the children no longer did anything related to early literacy learning. At the end of the two-year project, however, many changes appeared among the participating children. A few are listed below, followed by examples of the children’s work.

· They had become more interested in reading by themselves or in shared groups. For example, they were willing to read a book in the book corner for fun or pretend to read the characters in familiar books by themselves. They liked to talk about the pictures or roles of people in a book with their peers. They also liked to ask teachers or their parents questions related to the book that they were reading.

· They had begun to actively use Chinese characters for real purposes in a wide range of activities and places. For example, they began to ask the teacher to write down what they said about their drawing or when they used the form of one poem to make up a new poem (example 3a and 3b). They tried to write down what others told them on the telephone at the house corner, with the pencils and paper that were provided by the teacher. They tried to write a shopping list just as their mothers had done; they searched real store advertisements from the supermarket to discover what they could read (example 3c). They liked to make their own books with the help of the teachers (example 3d), and so on.
They had begun to use many strategies that research is showing to be effective for successful literacy development, such as comparing their own experiences to those in a book, arguing with the ideas of the teacher or their peers by stating I think or I don’t think so because and finding new ways for the roles of story characters to help them solve their own problems.

Example 3a. Friends Poem

The class was studying about making friends. They drew a picture and made up their own individual poems related to their pictures. The teacher then wrote their poems beside the pictures for them and the children signed their names. This poem was made up by one of the children:

One said he’d like to have a dog and make friends with it,
and he asked me if it was Okay.
Another said he’d like to have a cat and make friends with it,
and asked me if it was Okay.
I was asked if it was Okay for me to make friends with a dog or a cat.
It was hard for me to say no,
but I’d rather make friends with a butterfly.

Example 3b. The Windmill

The children studied what happened to the wind and learned a poem about windmill. Then they were asked to draw and make up their own poem. The teacher wrote down what they said, so as to help the children build their awareness of the interconnection between oral and written language. The writing in this sample is modeled on a poem they learned:

Turns and turns the toy top
Blows the windmill
We turn around, tiptoeing.
Example 3c. Reading Store Advertisements

Children in this class engaged in two early literacy activities. One group, with the teacher, searched real store advertisements to discover what they could read the store logo, the prices, and the pictures of what was for sale. They talked with each other about their findings. The other group cut out items from another set of store advertisements and sorted them into categories vegetables, fruits, housekeeping items, etc.

Example 3d. A Class Book
The children drew pictures that were put together into a class book. They then dictated what they were doing to the teacher. The girl who made this page described it to the teacher with two sentences that the teacher wrote down:

The girl is jumping on the ground up and down.
The rabbit and the boy are jumping on the grass up and down.

**DISCUSSION AND CONCLUSION**

The findings in this study suggest that the instructional strategies most critical for the development of emergent literacy for western children can lead to effective development of early literacy for Chinese children as well. At the same time, critical attention to the role of language differences must not be dismissed in the case of children who learn Chinese literacy with a logographic system quite different from most western languages that use an alphabetic system.

In the two-year collaborative project, the four types of strategies that the teachers implemented were demonstrated to be effective for the development of early literacy for their children. The key component of the strategies was that the children were encouraged to actively engage with interesting, meaningful, and functional written language. The print-rich physical environment appeared to activate the children to explore the function and meaning of print and the relationship between written language and their here-and-now activities. The teachers and Yu learned that when the children had opportunities to use print for authentic purposes, they could understand the functions of written and oral language. In addition, the children also acquired the conventions of written language use and practiced preliminary reading and writing skills. They discovered that it was fun to find another tool for communicating with others. Engagement in extended discourse and direct interaction with Chinese characters are only effective when they are based on children’s own experiences. Then these strategies will assure that the children use higher-level cognitive processes. Consequently, when the children used these strategies they were not only likely to participate actively in the activities, but also their early literacy skills and print awareness were improved.

The research team in this study, using an action research approach, continuously engaged in careful observations, ongoing reflection, and feedback to each other. Alanis (2003) points out that collaboration between university experts and practitioners is essential in helping teachers learn about and apply theoretical views to create interesting and developmentally appropriate learning situations and to use assessment to inform their practice. Participating in the research process was an important component of how the teachers developed for without the teachers’ reflections and discussions, little long-term change would have occurred. Participation in the action research appears to have solidified the teachers understanding of how the new practices were affecting their children and how they were helping them develop early literacy skills. Although Chinese teachers, in general, have many more opportunities to discuss how to improve their practice than teachers in the United States (Ma, 1999; Pine, Huang & Huang, 2003), the sustained two-year project provided the increased time needed to comprehend newly introduced theory and slowly develop a fundamental understanding of the nature of the changes it was bringing.

In sum, early literacy development is not the same as learning conventional reading and writing. Learning oral language, especially vocabulary variation, extended discourse, and active engagement with print-rich environments are the foundation to early literacy development. For teachers, strategies elicited from emergent literacy and whole language learning have been shown to be effective for Chinese early literacy development among the children in this project. The key
components of the effective strategies have been the use of interesting, functional, and meaningful learning processes. These are also the general learning principles of constructionist theoretical views (Vygotsky, 1978). In addition, action research has proven to be an effective way to change teachers' theoretical ideas into effective practice and skills that elicit the development of strong early literacy foundations for the children.

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