A New Experience Teaching Phonemic Awareness - A Teacher Action Research

by

Ivy Ng

June 01, 2006

Introduction

Memoir dated 08-29-2005

Today I got a timeline of this new school year. In September, I have to assess the literacy skills of the children who are going to kindergarten in 2006. This new group of children just turns to four years old and a few of them even started school in July. Where and how should I start to teach the early literacy this year?

I took out the results of Literacy Assessment in last two years (2003 & 2004) from the file box. I laid the papers on the table, looked at the figures, and compared the scores of each year. I found that 85% of the children recognized concepts about print, 82.5% identified at least 21 uppercase letters, 73% identified at least 21 lowercase letters, and 97% wrote their full names on their own. The children, though, performed less well on phonological awareness. Only 30% of the children identified all six rhyming words and 62.5% of children could clap all the multiple-syllables words. Why? Why is it so difficult for young children to acquire phonemic awareness skills?

Not only children are not interested in learning phonemic awareness but I also feel difficult to teach it too. It's time to reflect my instructional methodology in phonemic awareness and to think about how to help children develop basic skills in this area.

Background of the Study

In recent years, the demand to raise reading scores for all children from parents and the public has been loud and clear. Additionally, the No Child Left Behind (NCLB) legislation signed in 2002 has put enormous pressure on teachers to improve students' literacy skills. The federal government has also pushed preschool educators to focus more on basic academic skill acquisition. For example, Head Start teachers have been assessing their children's understanding of certain words, identifying letters, recognizing shapes, and demonstrating skills in simple addition and subtraction problems. In California, preschool teachers are urged to close the achievement gap and ensure that all children are ready to do well academically in kindergarten. Early literacy is a critical curriculum focus for all preschools in the Child Development Program (CDP) of an urban public school district in the San Francisco Bay area. All four to five year old children are expected to achieve certain literacy skills in preschool before moving on to kindergarten. Teachers administer the Early Literacy Assessment to assess a child's literacy skills three times (September, January, and May) a year. The assessment measures concepts of print, alphabet knowledge, and phonological awareness, which involves, for example, rhyming and segmenting syllables.

Phonological awareness gets its name from 'phoneme' – the smallest unit of sound in our speech that distinguish the meaning of one word from another. According to Goswami and Bryant (1990), phonological awareness is a global term for understanding the structure of words in a language separate from meaning. It involves identifying and manipulating the individual sounds in words through rhyming and syllabication. Phonemic awareness is a more advanced form of phonological awareness. It is not phonics and not auditory discrimination. It involves the analysis of the phonemes in words and the ability to hear, identify, segment and manipulate the individual sounds within a language.

According to Adams (1990), there is a strong positive correlation between early phonemic awareness and later reading success. Children who lack phonemic awareness skills are at risk for developing reading disabilities. She thinks it is important for children to learn the English alphabetic system and how print represents spoken words. If children cannot hear and manipulate the sounds in spoken words, they will not be able to decode – to map sounds to letters and letter patterns. Due to the critical role of phonemic awareness in the early stages of reading acquisition, our program requires teachers to

teach preschoolers rhyming and segmenting syllables, so they can perform well on our district's Literacy Assessment.

From my teaching experience, children always develop concepts of print, drawing skills, and alphabet knowledge before phonemic awareness. They learn to recognize letters and write their names faster than picking up rhyming and letter sounds, especially for English language learners. I think this is because letters are a set of symbols in a particular order and are more concrete for young children to recognize. Another reason is that parents also teach their children to recognize their names and some letters before they start school. Laminack (1990) reported that young children are able to read words from graphic cues or commercial logos before they are even aware of letter sounds. Therefore, I taught alphabet knowledge at the beginning of school year before syllables, rhyming, and letter sounds. However, according to the scores from assessments the last few years, children did not perform well on detecting rhyming, onset-rime blending, and matching initial sounds. I did not know why children had difficulty in learning phonemic awareness skills.

According to Adams (1990), children need to be aware of speech sound production in learning phonemic awareness. However, when children learn to talk and communicate with others, they do not need the phonemic awareness skills to speak and understand spoken language. In normal speech, we do not separate the sounds in words. Instead of separating / segmenting a word into its sound structure, we just let our speech flow continuously. For instance, when we say the word 'cup', our ears hear only one unit of sound, not three c - u - p. We merge and overlap the sounds of a word into one sound meaning unit. It does not make any sense in our speech if we divide each of the words we say into their discrete sounds. Children have to be able to perceive the sounds in spoken words; otherwise, they will have difficulty decoding words rapidly. Phonemic awareness is not an easy task especially for young children.

In Piaget's theory of cognitive development, children in the Preoperational Stage (aged 2 years to about 7 years) learn through labels and symbols and manipulation of concrete objects (Flavell, Miller, & Miller, 2002). The cognitive development follows certain stages in different age spans (Duckworth, 1996; Flavell, et al., 2002). According to Piaget, "you must reach out to the world with your own intellectual tools and grasp it, assimilate it, yourself" (Duckworth, 1996, p. 7). Can children learn abstract skills on their own? Is it a matter of maturation? If yes, how can a teacher help or support children to become aware of phonemes before they receive formal reading instruction?

Both Adams (1990) and Yopp (1992) suggest that rich language experiences encourage active exploration and manipulation of sounds and help children develop phonemic awareness. The ability to segment and manipulate sounds in speech can be taught to children explicitly and systematically. However, the lessons need to be carefully planned and presented in a developmental sequence.

I think my teaching strategies in this area are affected by my own learning experiences. I was educated in Hong Kong and learned English as a second language in kindergarten. Hong Kong children rely primarily on a logographic approach to learning to read English. It emphasizes the visual configurations of words and does not pay much attention to individual letter sounds or a coding system. No doubt, my teaching is influenced by my early learning experience. I therefore taught children to memorize letter names before learning the speech sounds. I relied on visual cues when I taught children letter sounds, syllables, and rhyming. I used this teaching strategy for a few years. However, the results from my Literacy Assessment demonstrate that it was not a very effective way to teach phonological knowledge. I did not understand why some children fail to acquire the skills. I thought about how to help children develop the ability to hear and manipulate the sounds in words and understand that words and syllables are made up of sequences of speech sounds, so I changed my strategies in teaching phonemic awareness.

Purpose of the Study

In my school, over 90% of children are Chinese and speak Cantonese as their home language. As their teacher, I want to find the most effective way to teach phonemic awareness skills to Chinese preschoolers learning English in school. Phonemic awareness is an oral-aural skill that involves the ability to hear and manipulate speech sounds, and the understanding that words and syllables are made up of sequences of speech sounds. This study will examine the challenges for young English Language Learners (ELLs) to achieve phonemic awareness skills in an English-language classroom.

A New Experience Teaching Phonemic Awareness

Changing my teaching and curriculum this year, I started teaching phonemic awareness at the beginning of the year and then concepts of print, alphabet knowledge, and writing names in the second half of the school year. I planned to let children practice listening skills first. My focus was to lead them to hear and feel speech sounds before moving on to other areas. I did not use any text to teach children to separate the syllables in a word and identify the patterns of rhyming words. I did not introduce any letters until they were able to manipulate speech sounds. I also tried to incorporate some developmentally appropriate activities for engaging children, so they could 'play' with sounds instead of just drill them.

Sound Recognition and Recording Activities

Sound is natural to our ears, so people seldom pay attention to the nonspeech sounds we hear. For instance, we are seldom aware of sounds in nature or the snipping of scissors, etc. For children to practice listening skill actively and attentively, I planned and played a few listening games in the small group activities. In the following data, focusing on Annie, Alice, and Kyle, the activities were not carried out on consecutive days.

Activity 1 (10-7-2005)

At small group time, I took my pre-k children aged 4-5 years old to the Block Area and sat in a circle. I stayed behind a big writing board and used paper, marbles, scissors, tambourine, and rubbing sticks to produce sounds. Before starting the game, I showed children the things I had and what sounds they made. Then I asked children to identify the sounds they heard. After a couple trials, I produced two sounds at a time and asked them to identify and remember the sounds in exact sequence. I shook a bell and then rubbed a paper very hard. "Bell. Paper," children yelled out their answers.

At the beginning of the game, everybody participated eagerly. However, after a few trials and moving on to the sequences of sounds, my focal children lost their interest rapidly. Annie said, "Teacher Ivy, I don't want to do this." She just sat there looking bored and did not participate in the game any more. Kyle tried to climb over the writing board and grab the things I used to produce the sounds. Alice did not engage in the

activity. Instead of interrupting me, she wandered in her own world. When I used scissors, sticks, and other materials to make the sounds, sometimes she followed other children and yelled out inattentively, "Scissors, scissors. Stick, stick." From her response, I knew that she did not pay attention to the activity at all.

Phonemes are abstract and we cannot present them to children solely as objects. Therefore, teaching phonemic awareness should begin with ear training. First children need to practice their listening skill to identifying and responding to sounds in the environment. This listening game helped children learn to listen attentively. They learned to distinguish the difference between listening with closed eyes and with open eyes (Armbruster, Lehr, & Osborn, 2001). However, my focal children did not show any interest in this game.

Activity 2 (10-12-2005)

At small group time, I took the children to walk around the school and audiotape different sounds such as pedaling tricycles, opening/closing doors, dishwasher, children's playing and talking sounds, and the ringing of the telephone, etc. Then I replayed the tape and asked children to recognize the sounds. I also asked them to draw the sounds they heard on a piece of paper.

Annie again wanted to do her own task. After I passed out the paper, she said, "I don't want to listen to the sound, Ivy." I did not respond to her as several children also imitated what she said immediately. Kyle said, "Yeah, I don't want to listen too." I ignored their request, played the tape, and asked the group to listen to the sounds on the tape. Annie did not show any interest in the activity at all. She talked to her friends, Gabriel and Stacy. Three girls giggled and moved around at the back of the group. I

separated them and let Annie sit alone. While everybody participated and drew the sounds, she created her own picture (Fig. 1), unrelated to my sound lesson. She concentrated on her drawing until I dismissed the group.

Like Annie, Kyle did not show interest in this activity either. He played with the scrap paper in the recycling box until I reminded him to do the task. Then he snatched a purple marker and drew a big circle on the paper. "Finish," he said. "What did you hear?" I asked him. "Car. I'm done," he replied impatiently. (Fig. 2)





Fig. 1 - Annie drew her own picture in the sound recording activity.

Fig. 2 - Kyle's sound recording picture

"Alice, why don't you record the sounds? What did you hear?" I asked. "Ivy, my mommy will bring me to MacDonald after school. My brother My grandpa has (in Chinese)." Alice did not hear my questions. Her speech sounded more like a monologue than a dialogue. In Piaget's words, this pattern of speech shows evidence of egocentrism (Flavell, et al., 2002). It shows Alice's cognitive immaturity in communication. Alice's egocentric speech behavior is always seen in her social

interaction. It may affect her learning because she is unable to share the perspective of other people.

Many scholars emphasize that children learn from their interests and in their unique learning paths (Duckworth, 1996; Rogoff, 1990; Vygotsky, 1978; Tanner, 1997) but what are the learning styles of Annie, Kyle, and Alice? I did not know why they were not interested in doing any sound activities and unwilling to perform the tasks I provided. Duckworth (1996) believes children need to arrive at their own "wonderful ideas", and provide them with activities corresponding to their learning paths. She thinks teachers should make knowledge interesting to children. However, I still did not know how to motivate my focal children to be aware of the sounds they heard everyday and stimulate their interest in learning listening skills.

Activity 3 (10-18-2005)

To reinforce children's attentive and analytical skill for phonemic awareness, I did another activity with them at small group time. I took nine pre-k children to the garden. I gave everybody a clipboard with a piece of paper. I asked them to keep quiet and listen to the sounds in the environment. No surprise. Annie, Kyle, and Alice did not follow directions. Annie spoke to her friends next to her. I had to ask her to stop talking. Kyle and Alice fought over the markers and argued about who knocked over the tray and who should pick up the markers.

A moment later, a child said, "I don't hear anything." A few children also agreed with him. I asked them to close their eyes and try again. This time I described the sounds I heard like birds' chirping, chime, wood banging, and foghorn from the ships near the Golden Gate Bridge. After I introduced the sounds, children started to talk about the sounds.

Then I asked children to record the sounds they heard on the paper. Since we did an activity using lines and symbols to record the sounds of musical instruments a few days earlier, the children were familiar with this kind of activity. I did not need to explain to them again and most had already started to record the sounds on paper. Annie also started to draw on her paper. (Fig. 3) As usual, she focused on drawing her favorite objects – hearts, flower, rainbow, and grass. (We can see these objects next to my handwriting.) I thought about how to bring her back into the activity while I transcribed the other children's words on their drawings. I saw her friend, Gabriel, focusing on recording the sounds with curly lines and symbols of shapes. Then I walked toward Gabriel and talked about how well she had transcribed the sounds in her drawing. Other children also talked about what they heard. I told them I heard the chime and asked them to find where it was. When they looked for the chime and talked about what other sounds they heard, Annie listened to our conversation. She looked at Gabriel's picture and then joined the conversation. Gabriel told her that she heard many sounds. Annie replied that she also heard the boat, car, and bird, too. Then she started to record those sounds with curly lines, zigzag lines, circles, and squares on the paper.

On the other side, Alice stared at us. I doubted if she understood what we were talking about. Her English language skills were a barrier for her to participate in the group discussion as we mainly communicated in English. "Alice, what do you hear?" I asked her in Chinese. She did not respond and just looked at me. "If you hear anything, you can use lines, symbols, or any shapes to draw out the sounds on paper," I explained

to her in Chinese. She was still quiet. She looked at other children's drawing and listened to them attentively. Then she started to draw some curly and zigzag lines as other children did on her paper. When she dictated what she heard, she said in English, "I hear flower. I hear noisy. I hear bus. I hear a bird. I hear car." (Fig. 4).

Kyle was completely distracted by the outdoor environment - observing the ants was more interesting than listening to the sounds. When I asked him to record the sounds, he scribbled all over the paper with a black marker. "Ivy, it's broken," he said. The paper was torn, as it was too wet.



Fig. 3 - Annie recorded the sounds she heard in the garden.



Fig. 4 - Alice dictated what she heard in the garden.

Reflection on October 18, 2005

According to Vygotsky, "from the beginning the child is a social being" (Rogoff, 1990). Social interaction and social exchanges in a teacher guided activity helped Annie from unawareness to an awareness of the sounds. Through observation of Gabriel's work and listening to my *facilitation and discussion* (Rogoff, 1990) with the other children, which contributed to the development of sound awareness, Annie also participated in our conversation and imitated her friend. She knew that she had to change her drawing from heart and flowers to recording the sounds if she wanted to join us. She had to collect some information related to our topic; otherwise, she felt left out as she was doing something different from the others. Peer modeling, social influences, and adult facilitation brought Annie into the activity and helped her realize that she could also perform the skill like her friends. In Activity 2, I separated Annie from her friends and let

her do the work alone. She was isolated from the group. Without peer modeling, she completely focused on her own drawing and ignored what was going on around her.

In Activity 3, I did not want to discourage her and make her feel that her idea of drawing the objects other than the sounds was wrong. According to Duckworth (1996), teachers can encourage children to "raise and answer their own questions, realize that their ideas are significant, so that they have the interest, the ability, and the self-confidence to go on" (p.8). Therefore, I facilitated a discussion between Gabriel and the other children about the sounds we heard in nature to provide peer modeling for Annie. Then she could learn through social interaction. Obviously, in Activity 3, Annie showed interested in participating the discussion and performing the task. Peer social influence and expert's facilitation are important in promoting children's cognitive learning and language development (Vygotsky, 1978).

In Garnica's social dominance theory, the *omega children* are "socially ineffective because they lack communicative as well as social competence" (Tabors, 2003, p. 36). Alice can be seen as an *omega child* who is not accepted by the peers. She does not have any close friends at school. In Activity 3, she sat there alone while everybody talked to each other. She did not know how to initiate a conversation with children sitting next to her. She could have spoken to them in Chinese but she did not. After I restated the task to her in Chinese, she knew what she needed to focus on. She started to listen to us attentively. She constructed the simple sentences with some words she heard from other children's conversation. For instance, we mentioned the sounds we heard in our discussion. She picked up the words 'I hear' from us. Then she reused 'I hear' at the beginning of each sentence and added a name of an object after that. This

13

strategy helped her produce some sentences similar to what other children said, so she could perform the task. Although Alice did not benefit from the social interaction and facilitate discussion directly, she also participated successfully by drawing some lines represented the sounds and dictating her words.

Detecting Syllables

According to Adams (1990), syllables are meaningless and children seldom notice and think about them. "Syllables are acoustically and articulatorily distinct" (p. 300) in the flow of oral language. They correspond to the sound pulses of the voice; they can both be heard and felt. Children do not need to be consciously aware of syllables as representing particular speech units; they only listen for the peaks of loudness and feel the opening and closing cycles of the jaw. I agree with Adams that children usually master the skill of segmenting syllables after a few lessons and perform very well on the assessment. After the sound recognizing activities, the children developed a sense of awareness of sounds in the environment. I moved on to the next step – detecting and counting syllables in words.

Clapping Games

At circle time, I introduced a clapping game called 'Clap the Syllable.' I used children's names and demonstrated how to clap the syllables. At the beginning, Annie and Kyle clapped their hands randomly. After several trials, they sometimes only clapped once at the beginning syllable of a word. Sometimes they clapped the beginning and ending vowel sounds only. For instance, when I said a child's name 'Joanna', they clapped for the 'Jo' and the 'na' only and skipped the middle syllable 'an'. However, both of them were very excited to yell out their names when it was their turn. Annie forgot to clap while yelling out her name. Kyle only clapped once at the beginning sound. (There are two syllables in his real name.)

On the following day at small group time, I used picture cards to reinforce children's ability to analyze words into syllables by asking them to clap and count the syllables in a variety of different words. I let them draw one card from the pile. Then they had to name the object on the card, clap the syllables of the names, and tell something related to the object. Annie and the other children participated in the activity happily. She clapped the syllables of every word accurately. It demonstrated that she had mastered the skill. Kyle focused on the pictures more than the sounds of the words. When it was somebody's turn, he did not clap but yelled out the names of the objects in pictures only or moving around on his spot. He did clap the syllables correctly when it was his turn to draw a card. Alice showed more interest in participating in the game even though she still could not clap the syllables of the words accurately. However, at least I felt that I did not lose her as the day before.

To reinforce children's ability to segment words into syllables, I wanted them to clap and count the syllables in a variety of different words instead of only their names. One day, I played a game with the children at large group time. I put different things in two black bags. I called each child to come up, pick one thing, feel it, and guess what the object was before taking it out from the bag. After guessing what the object was, he/she could take it out from the bag and show it to everybody. Then we clapped the name and counted how many syllables in the word. Everybody focused and participated in this game eagerly. Annie clapped all the words without any difficulty. I was so surprised that Kyle engaged in the game attentively and clapped the syllables accurately. Alice also concentrated and followed along with us even though she could not perform the task correctly as the other children could.

Reflection on October 26, 2005

Unlike words, syllables are meaningless. Therefore, I used familiar words, i.e. children's names, to introduce the syllables to the group in the first lesson and then moved on to unfamiliar words for them to clap at the syllables of all the different words. From Annie's response, I noticed the new syllable game was a little difficult for her on the first lesson but it kept her interest in participating in the activity. After completing two more activities, she segmented words into separate syllables competently.

It is hard to predict what Kyle might do and respond to my lessons due to his short attention span and strong desire to have control over his learning and performance in class. He is unwilling to join in or do the tasks I provide for in the large/small group times, as they are not his choice. Among the three clapping games, he was only interested in the third one. Maybe it took him time to transfer the concept introduced to him from previous days.

Alice also needs more time to take in and process new information and actions. In these three detecting and analyzing syllables games, possibly the sound structure of the words were too abstract for her to catch on to just yet. I notice she has experienced difficulty in coordinating clapping and producing a word at the same time, but I believe she has at least some syllabic awareness.

Recognition of Rhyme

After segmenting syllables, the next step – 'rhyme play' directed children's attention to similarities and differences in the sounds of words. According to Bryant (1990) and Adams (1990), the recognition of rhyme may be the entry point to phonemic awareness development for many young children as it comes quite easily to them. On the contrary, I have a different experience teaching rhyming the last few years. Less than 50% of the pre-k children score 6 out of 6 on the Literacy Assessment. I think I made a mistake in teaching rhyming. I diverted children's attention to the spellings of words to distinguish the similarities and differences in the sounds of words instead of focusing on the sounds only in a meaningful context. For instance, I used the sight words 'mat' and 'cat' to indicate that the ending sound of these two words were the same, so they rhymed. It confused the children. This year, I used a different strategy to teach rhyming; however, it was still challenging for my focal children, Alice and Kyle. I started to teach rhyming in the middle of October last year but both of them did not show any improvement in this area until three months later. Annie produced rhyming words after a few lessons. As these three children developed the skill at different times and levels, I will describe their learning paths separately.

Annie's Question – 'Rhyme, Mine?'

At the beginning of the rhyming lessons, I invited children to play with rhymes and generate rhyming words for their names like Calvin, Malvin, Belvin, Nelvin, etc. I also read rhyming stories and sang rhyming songs to direct children's attention to the sounds of language; I did not focus on spelling at all. I even encouraged them to create nonsense rhyme words. I not only played this rhyme word game with children in group time but also in the informal instructional time whenever there were opportunities. Sometimes our conversations did not make any sense but I found that children loved to do this silly rhyme play. They were excited to elicit rhyme or nonsense rhyme words at any moment.

For example, I told children about the recipe when I was cooking quesadillas with them. I specified the ingredient 'tortilla' and the food 'quesadilla' on purpose as these two words partially rhyme. Annie yelled out at once, "They are the same." She meant the ending sounds of these words rhymed. Then I said, "We're going to eat the yummy quesadilla. Mmm....yummy for my _____." Everybody responded quickly, "Tummy." "Mummy too," Annie said proudly.

Another example shows that Annie focused on the similarities in the sounds of words. At Halloween time, I read a book called 'Froggy's Halloween' by Jonathan London, which had many rhyming words. When she heard the rhyming words, she would yell out, "They're the same!"

In Fig. 5, Annie created a word 'mesadilla' rhyme with 'quesadilla' after the cooking activity in classroom. In Fig. 6, she generated more rhyming words on her own too. She even asked me, "I have a question. Rhyme, mine?" She did not know if 'rhyme' and 'mine' were rhyme words or not as she had not learned how to distinguish the final sound yet. Through detecting and producing rhyme word skills, Annie also increased her awareness of English phonemes. She noticed that there was a 'm' sound in these two words and also the ending sounds of 'rhyme' and 'mine' were similar. She was not sure if they rhymed or not. She was ready to move on to the next level of learning phonemes.



Fig.5 – Annie created a nonsense word "mesadilla" rhyme with "quesadilla".



Fig.6 – Annie generated many rhyming words on her own in this Halloween picture.

Alice's Bumble Tumble Pinble

On the last day of January, I read aloud a book called 'Tumble Bumble' by Felicia Bond.

Ivy: Tumble, Bumble. (emphasized the ending sound of these two words) What do you hear?
Annie: Rhyming words.
Ivy: Can you give me a word rhyme with 'tumble, bumble'?
Annie: Sumble.
Alice: (raised her hand) Pinple? (said in a very soft voice.)

As I stopped and explained some words while reading the book at the first time, I reread the book again without pausing. I paused at certain places for children to chime in the missing words when I was reading aloud.

Ivy : A tiny bug went for a <u>walk</u>. He met a cat and stopped to _____." Alice : <u>Talk</u>. (*chimed in at once*)

I was very surprised and happy to see that Alice produced a rhyme word and

chimed in with the missing rhyme words. I had been waiting for this moment for so long.

It was a good start. Alice is fond of this book and always chooses it to read on her own at

the Book Area. She always says, "Ivy, bumble tumble pinble," or "bumback, numback."

She repeats these few nonsense rhyming words over and over. If I respond to her, "Hey,

these are rhyming words. You create rhyming words", she grins immediately.

On another day, at choice time, Alice brought one of the stacking nests to me.

Alice : This is ha..ha..ha.. cofy. (she talked in English. I guessed she might want to say hot coffee.)
Ivy : This is hot coffee. C..c..coffee. What is the letter sound do you hear?
Alice : B.
Ivy : If it's B, then it is b..b..boffee, not c..c..coffee. It's c.
Alice : Boffee, bumfee, coffee, they <u>yime</u> [rhyme]. (She showed a big smile.)
Ivy : Yes, they rhyme. Good job, Alice. You create some rhyming words.

These rhyme words did not make sense at all but she enjoyed playing with the speech sounds through her own rhyming words. It demonstrates that she has developed

an ear for the sounds of words and got the idea for simple rhyme patterns after repeated exposure to the various rhyming activities and rhyming books I read in class.

Kyle's Unique Learning Style

Everyday after lunch, children line up for their turn to brush their teeth and use the bathroom before nap. I supervise them and pass the toothbrushes to them in the bathroom. To engage them in doing something meaningful instead of fooling around in line, I use this moment as extended learning time. Of course, I have to present my teaching in a very funny and interesting way; otherwise, nobody would pay attention to me.

Kyle was waiting for his turn to brush his teeth. As usual, I was playing 'Name Game' with them. Today I changed everybody's name to begin with 'W'.

Ivy	:	Wabrina, Sabrina, your turn. WwWeric, Eric.
Kyle	:	How about my name?
I vy	:	Wyle, Kyle.
Kyle	:	How about Kyle Deng?
Ivy	:	Wyle, Kyle Deng.
Kyle	:	Haha. Two Kyle. How about Matthew?
Ivy	:	Watthew, Matthew.
Kyle	:	How about change my name to P?
Ivy	:	Pyle.
Kyle	:	Pyle. Hahaha. Pyle. How about Wendy? Change her name to P.
Ivy	:	Pendy, Wendy.
Kyle	:	Pendy, Wendy. They're rhyming words.
On an	othe	er day, Kyle used the bathroom. Matthew came in to brush
his tee	eth.	
Kyle	:	Ivy, change Matthew's name to P
Ivy	:	What would you say Matthew's name if you change it to begin

1 v y	•	what would you say Matthew s hame if you change
		with P?
Kyle	:	(Silent. Just staring at me.)
Ivy	:	PpPatthew.
TZ 1		

Kyle : Patthew? Patthew. Ha..ha..... (*laughed happily*)

Kyle experimented with the beginning sound of the words. He showed an understanding that sounds can be manipulated and changed. He used children's names to create his own rhyme. He saved the original ending of the names and replaced its beginning sound with another sound, as he knew that each letter had a different sound.

I always play rhyming, letter names and sound games with the children during this transitional time. I find that children enjoy this kind of interaction and engage their attention in learning better than in a formal setting of directed instruction. Yopp (1995) suggests, "phonemic awareness may also be facilitated in a less direct, but perhaps more natural and spontaneous way" (p. 538). No doubt, Kyle responded to these informal lessons with enthusiasm and achieved significant gains in the activities conducted in a natural and playful way. This transitional learning time works for Kyle because it is short and not compulsory. He can choose to stay or to leave; he can choose to participate or drop out; the most important thing is he can direct the play his way. It fits his unique language needs and learning style.

Factors Affecting Children's Learning in Phonemic Awareness

Differences in Two Languages

Most of the time when we talk about teaching young children phonemic awareness, we assume all children have the same language background and knowledge of English. We think all children start on the same page in acquiring the structure and sound system of words in a language. For native English speaking children, they are often exposed to the letters and printed words even before they start school. They may not acquire letter sounds until a later age but at least they have early experience with letter names. Letter name knowledge is connected to speech and print. Children who have some knowledge of letter-names are more able to link letters and phonemes. They do not need to rely only on visual cues to identify words as they can use letter-sound information to recognize words. For Chinese speaking children, like my students, they do not have the same experience as English speaking children in knowing letter names when they start preschool.

Chinese is not an alphabetic language and this difference can affect Chinese children in learning phonological processing skills in English. Chinese contains very few consonant clusters, whereas English has many. In Chinese, each individual single-syllable morpheme corresponds to a single character. However, in English, a single word may have more than one syllable phoneme and morpheme. These differences may affect the English Language Learners' (ELL) awareness of the phoneme in English. Chinese is also tonal and there is attention to sound and pitch and different tones have different messages.

The basic unit of reading Chinese is the Chinese character, which represents a morpheme and a syllable. On the contrary, the basic unit of reading English is the letter, which represents only a single phoneme and speech sound. When I learned Chinese, I only needed to map the spoken syllables onto written characters and did not need to be aware of speech sounds. Learning to read in English requires a completely different set of skills in phonological awareness. I notice that most Chinese parents always teach their children to recognize the English alphabet instead of teaching them speech sounds in English because it is similar to their learning experience in Chinese. Chinese parents might bypass phonology in learning English and rely on visual cues since this is similar to their learning experience in Chinese. So I believe the native language background affects the ELL children in my classroom in learning English phonological skills.

Chinese children might also have some difficulties in learning to segment syllables. When I teach children syllabication, they can clap and count the syllables in most words accurately. However, they cannot perform the task on certain words like 'girl'. I notice that it is difficult for Chinese speaking children to distinguish the pronunciation between the sounds 'rl' and 'ral' especially for young children who have not learned spelling yet. They always clap twice for the words like 'girl, pearl, sail, and tail', etc. They always think there is a vowel sound 'a' or 'o' in front of the consonant 'l'. They pronounce these words as 'gir-al, pear-al, sai-ou, and tai-ou'. Another example, 'ice-cream', children always say 'i-zie-cream' and count three syllables in this word instead of two.

One Language or Two

Research shows that phonemic awareness can be explicitly taught to children directly through a carefully planned and developmental sequence (Yopp, 1995). Young children and children with language disabilities can be trained to achieve phonemic awareness skills (Yopp, 1992). However, what language should we use in teaching the skills? Use only one language, English, or two languages - English and a child's home language? Which is more appropriate to teach ELL preschoolers to acquire phonemic awareness skills?

At my school, almost 99% of the children are ELLs and they only start to learn English in school. Their English language skills all are developed at a different pace. There are large individual differences in second language learning processes for young children (Tabors, 2003). For instance, among the three focal children, Annie and Kyle's English skills are more advanced than Alice's. They can use English to express their thoughts and engage in a conversation with adults. But Alice is still at the stage of telegraphic speech (Tabors, 2003, p. 60), where she uses a few content words to start for an entire statement in English. She understands and talks more when I use her home language in one-on-one interactions. English is a learning barrier to Alice. Although she has improved her English skills to survive in daily talk and interactions, it is still not enough for her to understand English instruction. This is why she is unfocused in large/small group time and appears unmotivated. Learning phonemic awareness is more challenging for Alice. Bilingual teaching, though, does support Alice's needs at this stage. Ideally, I should teach children in two languages. Ironically, I cannot do it in reality because helping children achieve English skills is one of the concerns of the school administrators and parents. But I do use two languages informally when I interact with children at choice time.

In our educational community, people always debate how important it is to promote children's home language and discuss how to support ELL children through bilingual education. However, bilingual education is only provided for K-12 grade students. My district has no official bilingual policy, nor does my center. Individual teachers are then left to be the decision makers of whether to implement bilingual education in their classroom. The ELL preschoolers are left to *sink or float* in terms of their second language learning. Some children float like Annie but some sink like Alice, because she cannot acquire the new language fast enough to keep up socially and academically. In our program, although the administrators promote multicultural education and multilingual materials in classroom, they also strongly emphasize helping ELL children to get ready for the mainstream education in kindergarten, which is mostly in English in our district. Many Chinese-American parents also want their children to acquire English language as early as possible. Parents view English as the language, that enables their children to succeed in the mainstream society.

If we want children to learn phonemic awareness successfully, we cannot only provide awareness-building activities for them to practice the skills. We have to help children develop their English language knowledge simultaneously. Phonemic awareness is not only strongly related to reading and writing but also English language development. They are all interrelated. Just as a table has four legs : language, phonemic awareness, reading, and writing - when one leg is broken, the table collapses.

Challenges for a Teacher

Teaching phonemic awareness English is quite challenging for a non-native English speaking teacher. As I mentioned before, I was born and educated in Hong Kong. Although I learned English in kindergarten, my teachers never taught me the individual letter sounds and sound-symbol connections. We relied primarily on a logographic approach to learn English. We emphasized the visual configurations of words and used a 'look and say' method to read both in English and Chinese. As I do not need to become aware of phoneme-sound relations in speaking Chinese, it was hard for me to ignore English spelling patterns when I devised phonemic awareness activities. Additionally, phonemes are abstract units for young children and not easy to isolate because we seldom hear isolated phonemes in our speech – we hear whole words. It is challenging to get children to learn or know something that neither they nor I have firsthand experience with.

Another challenge is that teachers are assumed to have a deep understanding of phonemic awareness in order to teach it effectively. I do not have a solid foundation and formal training in it. Our program does not provide on-job training, materials, or an instructional plan. I need more background knowledge about phonemic awareness and more practical ideas for teaching ELL young children in this area. Research shows that few teachers receive formal training to teach children sensitivity to the sound structure of words. Only 2% of teachers-in-training and 19% of working teachers knew that the word *box* is constructed from four separate speech sounds (Mather, Bos, & Babur, 2001). Basically, I learned about phonemic awareness and teaching strategies from books. When I have problems with certain letter sounds or onset-rime blending, I ask other teachers whose native language is English. Interestingly, I always get different answers and so I do whatever I can and infer from what I learn from books for my teaching.

Summary

All children, especially ELLs, do not develop phonemic awareness knowledge simply through immersion in a print-rich environment. They need both play based and teacher guided oral language activities that focus on developing sensitivity to the sounds and spoken words, rhymes, made up silly names by replacing one sound for another and clapping syllables. Teachers need to know that many ELLs are less able to discern differences in sounds within English words as native English speaking children. The ELLs require much more oral language support with focus on listening and speaking and opportunities to hear and discriminate words and sounds to increase their phonological and semantic knowledge. Simultaneously, we need to begin with easier concepts and progress to more advanced levels of phonemic awareness. Phonemic awareness activities need to spark a sense of enjoyment and engage children in songs, rhyming games, and language play.

Policy Recommendation

In terms of policy, there are a few implications in my study. In order to promote effective practices in teaching early literacy and phonemic awareness in preschool, I recommend that the policymakers should :

- Provide resources to develop standards-aligned curricula that are engaging to children, and for in-service training to deepen teachers' understanding of a range of literacy approaches.
- Provide special support for curriculum focused on phonemic awareness for teachers working with students from language backgrounds most distinct from English, for example, language with other than Indo-European roots.
- Set up a task force to undertake a feasibility study on providing bilingual preschool program for children who are linguistically and culturally diverse and develop a language acquisition curriculum to facilitate children's second language learning.

 Mandatory preschool should be provided to 3-5 year old children. Research shows that young children can absorb high-level skills. Mandatory preschool can close the learning gap between rich and poor students and prevent a high dropout rate.

References

- Adams, M. J. (1990). *Beginning to read : Thinking and learning about print*. MA : MIT Press.
- Armbruster, B. B., Lehr, F., & Osborn, J. (2001). Put reading first : The research building blocks for teaching children to read. Washington, DC : Partnership for Reading.
- Bryant, P. (1990). Phonological development and reading. In P. D. Pumfrey, & C. D. Elliot (Eds.), *Children's difficulties in reading, spelling and writing : Challenges and responses (p. 63-82)*. London : The Falmer Press.
- Duckworth, E. (1996). *The having of wonderful ideas & other essays on teaching * teaching*. NY : Teachers College Press.
- Flavell, J., Miller, P.H., & Miller, S.A. (2002). *Cognitive development*. NJ : Pearson Education, Inc.
- Goswami, U. & Bryant, P. (1990). *Phonological skills and learning to read*. Hove, East Sussex : Lawrence Erlbaum Associates Ltd.
- Laminack, L. (1990). "Possibilities, Daddy, I think it says possibilities" : A father's journal of the emergence of literacy. *The Reading Teacher*, 43(8), 536-540.
- Mather, N.; Bos, C.; & Babur, N. (2001). Perceptions and knowledge of preservice and inservice teachers about early literacy instruction. *Journal of learning disabilities*, 34, (p. 472-482).
- Rogoff, B. (1990). *Apprenticeship in thinking : Cognitive development in social context*. NY : Oxford University Press.
- Tabors, P. O. (2003). *One child, two languages*. Maryland : Paul H. Brookes Publishing Co.
- Tanner, L. N. (1999). Dewey's laboratory school. NY : Teachers College Press.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological process.* MA : Harvard University Press.
- Yopp, H. K. (1992). Developing phonemic awareness in young children. *The Reading Teacher*. 45(9), 696-703.
- Yopp, H. K. (1995). Teaching reading. The Reading Teacher, 48(6), p. 538-542.

Appendix I

Method

In this study, I wanted to find out how to support Chinese bilingual preschoolers to develop phonemic awareness skills in English. This study was designed as a descriptive and qualitative teacher research project implemented in my preschool classroom.

Setting

I teach in a public preschool Child Development Program (CDP) in a city within the San Francisco Bay area of California, which provides services for 3 - 5 years old children. The majority of children are ethnic Chinese and a few Vietnamese and Latino. Our program is based on a sliding-fee scale and parents must work, attend school, or be in job training. The school is open Monday through Friday, from 7:30 a.m. to 5:30 p.m. Children attend for at least six hours a day. There are three preschool classrooms and one preschool special education classroom. It has a sand box and a structure area in the front yard full of trees and grass. A community garden is situated next to the school.

There are twenty-two children in my classroom. Nine are aged 4–5 years old and will enter kindergarten in August 2006. Thirteen are aged 3-4 yrs old and will spend another year in the same classroom. Twenty children are Chinese, one Vietnamese, and one Italian. The majority of the group speaks Cantonese and a few speak English. Among the five teaching staff, four are bilingual in Chinese and English and one speaks English only. We use English for almost all interactions. The early literacy skill in curriculum is highly valued in our program. Our objective in literacy is to get seventy-five percent of

the four-year-old children in the preschool programs to master the literacy objectives as defined by the Child Development Preschool standards.

Participants

I have been teaching at this school for seven years. I chose three children from the group as focal children for this study because they share some common characteristics in their background. All of them will turn to five in May/June 2006, and will enter kindergarten this year. Their home language is Cantonese.

Annie had been at another preschool for a year and transferred to my school in July 2005. She is bilingual in Chinese and English. Her parents can communicate in English but they mainly speak Cantonese with her. At school, when Annie does not know the names of the objects in English, she will say them in Chinese, as she knows that I will tell her in English. She interacts socially with teachers and peers in classroom. She gives labels to objects she sees in everyday life. She uses drawings, words, and mental images to represent objects and events. In addition, symbolic play is found in her social interaction everyday. In the first literacy assessment, she identified all five parts of books, wrote her full name, and recognized uppercase letters except 'N, V, Y, Z' and lowercase letters except 'e, f, p, q, v, and x'. However, she did not perform any phonemic awareness skills.

Kyle also attended the same preschool as Annie and was transferred to my school in July 2005. He is the only child in the family. His parents are bilingual in Cantonese and English and they mainly speak Cantonese with him. He has a good memory and language skills. He can express himself clearly in Cantonese and communicate with teachers in English. He is energetic, confident, and competent in large motor skills. In the first Literacy Assessment, Kyle identified all five parts of books, 25 uppercase letters and 19 lowercase letters, and recognized his name but he did not know how to write his name yet. He did not yet detect rhymes nor clap the syllables.

Alice attended another preschool for two years. She transferred to our school in mid September 2005. Vision in her right eye is weak and she wears eyeglasses. Alice speaks mainly in Cantonese. When she came to my class in September 2005, she understood very little English. She seldom chooses books to read on her own. She does not fully master fine motor skills in writing, drawing, and cutting. In the first literacy assessment, she recognized her name only. She did not show any knowledge in concepts of print, alphabet knowledge, and phonemic awareness skills. She could not even identify numbers and letters.

Data Collection

This study was designed as descriptive, qualitative teacher research focused as a self-study and implemented in my preschool classroom. The data set includes my personal journal, field notes, child observation, anecdotal notes, audiotaping, photos, and samples of children's work. I have collected data related to my research question from October 2005 to April 2006. Data was collected during my normal teaching activities of children's choice time, large group time, and small group time in the morning sessions. Choice time is when children choose their own activities in all areas (e.g. art, writing, book, science, block, manipulative toys, and dramatic play) and they decide with whom

they want to work. Large and small group times are when children participate in teacherdirected instructional activities.

I relied on observation, field notes, and anecdotal notes. I used field notes to record the children's conversation, action, responses, gestures, general attitudes, and performance. Although I tried to record observations in my field notebook, it was not always the case. I sometimes jotted down notes on any scrap paper or even on the back of children's work. My analysis of these notes helped me plan subsequent lessons to further children's knowledge and understanding. I also used photographs of the children engaged in activities to prompt my memory. I also audiotaped children's reading, dialogues, and group discussion. I also engaged in journal writing to reflect my teaching, record my memories and thoughts about class occurrences.

My daily lesson plan was another way to record my lessons and consider the themes, topics of interest, and activities I implemented. It helped me keep track of my teaching and the learning that occurred. I had individual folders for each focal child, miscellaneous data, research info/document, research articles, etc. I kept the field notes, transcriptions, child observation, and all documentation in folders arranged chronologically. I collected children's work at choice time and small group time. I also kept these samples in children's individual folders, too.

The children's scores in the mandated Early Literacy Assessment were used for comparison from pre to post study. In our program, all four to five year old children are expected to achieve certain literacy skills in preschool before moving on to kindergarten. Teachers administer the Early Literacy Assessment to assess a child's literacy skills three times (September, January, and May) a year. The assessment measures concepts of print, alphabet knowledge, and phonological awareness.

Data Analysis

I frequently reviewed the journal and field notes. I wrote down my comments on the transcriptions and children's work. I reflected what the data was telling me about children, their play, and their emerging knowledge. I put down some quotes from articles, reference books, and course reading next to the data if they were related. I examined the field notes, journal, transcriptions, and children's work for evidence of themes, common words, and topics that arose in both children's dialogues and interactions between children and teacher. I tried to explore the themes from my data and to understand how they were interrelated. I did so by asking myself, "What do I see behind a picture or a piece of dialogue?" instead of "What is this picture about or the content of the conversation?" As the time progressed, I realized that I was following children's interests in planning my lessons and activities based on their responses. In my journal and field notes, I discovered that I used certain words and phrases across the data - 'children's interest', 'play', and 'teacher's guidance'.

References

- Adams, M. J. (1990). *Beginning to read : Thinking and learning about print*. MA : MIT Press.
- Armbruster, B. B., Lehr, F., & Osborn, J. (2001). Put reading first : The research building blocks for teaching children to read. Washington, DC : Partnership for Reading.
- Bryant, P. (1990). Phonological development and reading. In P. D. Pumfrey, & C. D. Elliot (Eds.), *Children's difficulties in reading, spelling and writing : Challenges and responses (p. 63-82).* London : The Falmer Press.

- Duckworth, E. (1996). *The having of wonderful ideas & other essays on teaching * teaching*. NY: Teachers College Press.
- Flavell, J., Miller, P.H., & Miller, S.A. (2002). *Cognitive development*. NJ : Pearson Education, Inc.
- Goswami, U. & Bryant, P. (1990). *Phonological skills and learning to read*. Hove, East Sussex : Lawrence Erlbaum Associates Ltd.
- Laminack, L. (1990). "Possibilities, Daddy, I think it says possibilities": A father's journal of the emergence of literacy. *The Reading Teacher*, 43(8), 536-540.
- Mather, N.; Bos, C.; & Babur, N. (2001). Perceptions and knowledge of preservice and inservice teachers about early literacy instruction. *Journal of learning disabilities*, 34, (p. 472-482).
- Rogoff, B. (1990). *Apprenticeship in thinking : Cognitive development in social context.* NY : Oxford University Press.
- Tabors, P. O. (2003). *One child, two languages*. Maryland : Paul H. Brookes Publishing Co.
- Tanner, L. N. (1999). Dewey's laboratory school. NY: Teachers College Press.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological process.* MA : Harvard University Press.
- Yopp, H. K. (1992). Developing phonemic awareness in young children. *The Reading Teacher.* 45(9), 696-703.
- Yopp, H. K. (1995). Teaching reading. The Reading Teacher, 48(6), p. 538-542.