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There is no more crucial or basic skill in all of education than reading.
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Hong Xu

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Strategic teaching and strategic learning in first-grade classrooms

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ABSTRACT

In this article the authors describe Reading Express, a collaborative program which brings together the expertise of first-grade teachers and Reading Recovery teachers to support all first-grade children in literacy development. In the Reading Express program, the Reading Recovery teachers spend one hour per day in each of the first grade classrooms. This time is spent in both whole class as well as small group instruction. The results of Reading Express have been positive for both first-grade children as well as teachers. End-of-year text-level scores and other data indicate that the program is having a positive impact on students’ literacy development. In addition, the first-grade teachers have found they are more strategic in their reading instruction and have more knowledge of their students’ literacy progress as a result of the collaborative planning and instruction.

Teachers at every grade level express frustration when students have difficulty reading. As a classroom teacher for fourteen years, Marie Dean, a first-grade teacher at Mountain Park Elementary School in Gwinnett County (Georgia), experienced a nagging feeling of frustration at the end of every year. She mused, “If I just had a few more months — or a few less students — maybe I’d be able to reach those handful of students who leave my classroom still not reading effectively.” In the fall
of 1994, Reading Recovery, an early intervention program for first-grade children who are experiencing difficulty in learning to read and write, was implemented at Mountain Park and Dodie Magill was hired to be one of two Reading Recovery teachers in the building.

As the first-grade children selected for the Reading Recovery program began to make noticeable gains in reading by October, Marie and the other first-grade teachers saw the opportunity to address their frustrations about other children who would leave first grade with less than optimum success in reading and writing. The first-grade teachers decided they wanted to explore with the Reading Recovery teachers how instruction could be improved for all children in the first grade.

The purpose of this article is to describe how the first grade teachers and the Reading Recovery teachers collaborated in designing an instructional program which incorporated the research on best literacy practice and strategic teaching (Goodman and Watson, 1998; Fountas and Pinnell, 1996). In this article, the authors describe the Reading Express program; the results of the program for students, parents, and teachers; and the collaborative relationship that evolved between first-grade teachers, Reading Recovery teachers, and a university partner.

The Reading Recovery teachers and the first-grade teachers began to have conversations about how they might collaborate to support all first-grade children in the spring of 1995. Katie Kinnucan-Welsch joined the conversations in the fall of 1995 as a partner from a nearby university. The purpose of the conversations was to develop a model first-grade language arts program that was designed to extend the benefit of strategic instruction to all first-grade children (Kinnucan-Welsch, Magill, and Dean, 1997; Kinnucan-Welsch, Magill, Dean, and Schmich, 1998; Magill and Dean, 1998).

The development of Reading Express was consistent with the extensive research suggesting that successful early intervention programs for struggling readers and writers offer greatest benefit to children and are ultimately cost-effective for school districts (Dyer and Binkney, 1995). Reading Recovery is an example of an early intervention instructional program that supports the literacy development of children who have been placed most at risk for failure in reading (for descriptions of Reading Recovery, see Clay, 1979, 1985; Pinnell, Lyons, DeFord, Bryk, and Seltzer, 1994; Shanahan and Barr, 1995). The program is designed to support children in a one-to-one instructional environment where the Reading Recovery teacher purposefully scaffolds each child in the use of cues and strategies as part of the reading process (Schwartz, 1997). One of the dilemmas, however, facing teachers and school administrators is
how to ensure that all children in first grade receive the best possible instruction.

What about those students who struggle with reading, yet cannot be served by Reading Recovery? What about the developing readers who could become even more proficient if they had the tools they needed to improve? And what about the students who were served by Reading Recovery? Can they continue to make progress if they return to a classroom where the instruction may not support the strategies they have learned to help them read independently? Those are the dilemmas that were addressed in the development of Reading Express.

The name “Reading Express” depicts the close relationship between reading and writing as important means of expression. It also indicates the program’s goal of accelerating the reading and writing progress for all first-grade students by taking the “express” route the program offers. Children are instructed in whole groups as well as in small groups where students work in literacy stations, including a teacher-directed station for guided reading. One of the unique aspects of Reading Express is the collaborative relationship between the Reading Recovery teacher and the first-grade teacher. The organizational structure of Reading Express reflects that collaboration.

THE ORGANIZATIONAL STRUCTURE OF READING EXPRESS

Reading Express was structured to provide both whole class and small group instruction by both the Reading Recovery teacher and the first-grade teacher. During the first year of implementation of Reading Express, Mountain Park had five first grades and two full-time Reading Recovery teachers. One Reading Recovery teacher worked with three first grades, the other with two. The Reading Recovery teacher spent one hour every day during the language arts block of time in each classroom. The Reading Recovery teacher led the whole class during that one hour on Monday, focusing on a literacy skill. On Tuesday through Friday, the Reading Recovery teacher worked in each of the classrooms during small group, or literacy station time. The typical weekly schedule for Reading Express is outlined in Table 1. Each component, whole group and small group instruction, is described in detail in the following sections.
Table 1.

The Weekly Schedule for Reading Express

<table>
<thead>
<tr>
<th>Monday</th>
<th>Tuesday, Wednesday, Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole Group Instruction</td>
<td>Small Group Instruction</td>
<td>Individual</td>
</tr>
<tr>
<td></td>
<td>in Literacy Stations</td>
<td>Instruction and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assessment in</td>
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<tr>
<td></td>
<td></td>
<td>Literacy Stations</td>
</tr>
<tr>
<td>Led by Reading</td>
<td>Students grouped</td>
<td>New text reading</td>
</tr>
<tr>
<td>Recovery teacher</td>
<td>homogeneously by text level</td>
<td>Running records</td>
</tr>
<tr>
<td>Focus on strategies</td>
<td>instruction</td>
<td>Assessment of</td>
</tr>
<tr>
<td></td>
<td>Flexible</td>
<td>sight words</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2-4 students per group</td>
</tr>
</tbody>
</table>

**Whole group instruction**

The underlying goal of Reading Express is to provide for all first-grade children support in learning strategies that will enable them to become independent, strategic, self-monitoring readers. At the beginning of the school year, whole group instruction focused on five strategies that children can use when they come to a “tricky word.” The “Five Things Good Readers Do” when they meet a “tricky word” are as follows:

- Think about the story
- Check the picture
- Go back and reread, and get your mouth ready
- Look for “chunks”
- Ask yourself, “Does that make sense? Would we say it that way?”

The Reading Recovery teachers provided explicit instruction for each of these strategies to the whole group during Reading Express time. The Reading Recovery teachers and the first grade teachers decided that the Reading Recovery teacher should lead the whole group strategy instruction until the classroom teachers became more comfortable in explicit strategic instruction. Demonstration and modeling related to each strategy spanned several instructional sessions. The classroom teacher
Strategic teaching

and the Reading Recovery teacher provided support and reinforcement for the use of each strategy during literacy stations and language arts time. An example of language used by the Reading Recovery teacher to model each strategy is detailed in Figure 1.

Figure 1.

Modeling Five Things Good Readers Do When They Come to a Tricky Word

**Think about the story**

“One thing you can do is ‘think about the story.’ By thinking what the whole story is about, you may be able to figure out what the tricky word is. For example, if our story is about bears, and the sentence reads, ‘He likes to eat ________,” you could guess that the word might be ‘honey’ since we know bears like to eat honey.”

**Check the picture**

“Another thing you can do is ‘check the picture.’ Pictures support the text. If you are reading This is the Place for ME, and you are stuck on cave, you can look at the picture of a cave and guess that the word might be ‘cave.’”

**Go back and get your mouth ready**

“Another way to figure out a tricky word is to use the sentence to help figure out the word. Go back to the beginning of the sentence and reread the sentence. Rather than stopping when you get to the tricky word, this time get your mouth ready for the tricky word by making the beginning sound of the word. Let’s take this sentence as an example: ‘I want a drink of w_______.’ If you have to stop for that tricky word, go back to the beginning of the sentence and reread it. But this time when you get to the tricky word ['water'], make the “w” sound, and the tricky word will just POP OUT OF YOUR MOUTH!”

**Look for chunks you know**

“You are beginning to know lots of words now, and you have noticed some of those words have parts in them you know. Let’s look at these words you know: bat, cat, sat. Those words all have a part that looks the same, the at chunk. When you see a chunk you know, say the chunk you know, then cover up the chunk with a finger to look at the letters which come before or after, adding to the chunk. Looking for chunks words a lot better than ‘sounding it out.’”

Does that make sense? Would we say it that way?

“The fifth thing to do when you come to a tricky word is to ask two questions. You know that when you read, it has to make sense. It has to fit with what you have already read and it has to sound right. If you read something that doesn’t make sense or sound right, ask yourself, ‘Does that make sense? Would you say it that way?’ If the answer is no, then try it again and think of how it should have been said.”
These five strategies provided the core of instruction during the first few months of the school year. Although the strategies were taught in isolated segments, it was intended that the child use the strategies as an interrelated set within the reading process. As the children became more proficient in integrating the strategies during continuous text reading, whole group instruction focused on supporting the children to select the most appropriate strategy at a given point in the text. Cross-checking, checking reading of text based on two sources of information, or cues, was also emphasized as the children progressed.

The five strategies were reinforced throughout the year, and language of the strategies became embedded in the language of literacy in first grade. Each first-grade classroom had a larger-than-life hand posted on a wall with each strategy accompanied by a mnemonic symbol. First-grade teachers used this language and provided support prompts for the strategies throughout the day. Parents received newsletters describing the strategies and each child had a smaller version of the hand or take home (see Figure 2).

Figure 2.

The Children's Version of the Hand Depicting the Strategies
The key to the Reading Express Program was that children become intentional in their use of strategies during reading connected text. The whole class modeling and individual support during small group literacy stations provided numerous opportunities within the context of reading and writing to develop strategic and fluent reading behaviors. The children felt empowered that they have choices to make when they come to a tricky word. No longer must they rely on a more expert reader.

Later in the year, whole group lessons included explicit phonics instruction or strategies to improve comprehension such as the development of knowledge of story grammar. Writing also became a focus during whole group as the year progressed.

**Small group instruction in literacy stations**

Children worked one hour each day Tuesday through Friday in literacy stations where learning activities were designed to engage children in small groups simultaneously. Two stations were teacher-directed; one by the Reading Recovery teacher, one by the classroom teacher. The remaining students worked independently at one of four or five other stations. The children were at a station for approximately 15-20 minutes, and changed stations independently as they completed the activities. Children were required to engage in literacy-related activities at three stations during the hour. Free choice literacy stations were selected upon completion of the assigned station activities. A choice board helped manage their selection of stations.

We used a dynamic grouping philosophy (Fountas and Pinnell, 1996) in our literacy stations. Children were grouped homogenously at the teacher-directed, guided reading literacy stations. This grouping was based on matching the child's reading ability to the appropriate text level for instruction. For instructional purposes, children should be able to read text at about 90-95% accuracy. Books used for guided reading were leveled according to certain characteristics such as length, size and layout of print, vocabulary and concepts, predictability and pattern of language, and illustration support (Fountas and Pinnell, 1996, p. 114). The expertise of the Reading Recovery teachers was instrumental in helping the first-grade teachers initially organize the classroom books by text level and in administering the text-level assessments at the beginning of the year.

The teacher-led literacy station instruction followed a guided reading lesson format (Fountas and Pinnell, 1996). Each child in the small group had a copy of the text to be used that day. Rich story introduction
to prepare the children for successful reading of text began the instruction. This introduction can be characterized as "talking through the book." Children had the opportunity to talk about the pictures, make predictions about the story, and hear language that may be unfamiliar to them in print. The introduction was followed by reading text, which varied in format and procedure, again depending on the needs of the children in the group. Sometimes the teacher had the children read the text independently. Children who needed more support may have participated in a choral shared reading. The small group allowed for the teacher to capitalize on those teachable moments as they occurred in the context of reading predictable stories rich in the natural oral language patterns of the children. The key point is that children read every day at their instructional level with immediate opportunity for strategic instruction based on strengths and areas of difficulty.

It is important to emphasize the flexible and dynamic nature of the groups. Children were placed in groups at the beginning of the year matching their oral reading with an appropriate text level. As each child developed and progressed, the text level placement came under constant scrutiny. The first-grade teacher and the Reading Recovery teacher were continuously assessing the appropriateness of each student's group placement, which was directly linked to performance and text level.

The guided reading groups constituted only one activity during literacy station time. Those children not working with one of the teachers were at literacy stations, children were grouped according to either text level or to a demonstrated need in a specific skill or strategy area. They were also, at times, randomly grouped by virtue of choice of station for that day.

One station activity may have extended the whole group strategy instruction for the week. For example, if on Monday the Reading Recovery teacher introduced the at chunk, or word part, to the group, then one of the stations might have the children making words with tiles or magnetic letters with that chunk (Cunningham, 1995). Other stations may have incorporated the language arts objectives that had been developed by the first-grade team. These objectives were in alignment with the language arts curriculum adopted by the county school district. An example of one of these goals is: All first graders must recognize on sight the first one hundred words on Sitton’s word list (Sitton, 1995). Activities at one literacy station were structured to reinforce recognition of previously introduced words from the list. Examples included sight word bingo using these words, typing frequently used words from the list on the computer, using water colors to paint the words, underlining any
chunks they recognized in the words, and ordering words from the list in cut-up sentences.

Other station activities may have extended literacy into other contexts, including sending letters through the classroom post office, a writing/book-making center, dramatic play, puppetry, flannel board. The book center was filled with books on a variety of levels, but emphasizing those books that were easily accessible to the emerging reader. The stations were planned to incorporate speaking, reading, listening, and writing, all in support of a balanced literacy/language arts program.

One component of the program that extended the literacy station instruction into family literacy opportunities was that each child took a book at the appropriate text level home every night. These books had already been read during small group time, so they became an opportunity for the child to reinforce developing literacy competence through reading of familiar text. The parents and guardians were partners in this process. In addition, parents were asked to assist their children in learning sight words. Each child brought home a list of five sight words every week to practice with their parents.

Although Reading Express accounted for one hour out of each day, the first-grade teachers engaged the children in language arts instruction throughout the entire morning block of time. The time outside of Reading Express was devoted to language arts within the context of thematic units and classroom-based literacy activities.

SHARING AND LEARNING TOGETHER: COLLABORATING IN THE PROCESS

Reading Express evolved because the first-grade teachers were interested in knowing more about Reading Recovery instruction. Reading Recovery is a pullout program, and often the classroom teachers have little knowledge of the instruction offered to the children. As Marie recalled, "I wanted to know exactly what was going on out in the trailer." A key aspect of Reading Express has been the Reading Recovery teachers and classroom teachers shared knowledge, expertise, and responsibilities through a collaborative process of planning, implementation, and division of responsibilities. The teachers decided on the following division:

The responsibilities of the classroom teacher:

1. To provide primary reading/language arts instruction for first-grade students;
2. To plan cooperatively with the Reading Recovery teacher for small group and whole group instruction;
3. To maintain records of student progress in literacy development;
4. To observe the Reading Recovery teacher and incorporate the strategies into the routine of the classroom;
5. To confer with the Reading Recovery teacher about special student concerns;
6. In conjunction with the Reading Recovery teacher, to administer pre- and posttests and take running records.

The responsibilities of the reading recovery teacher:
1. To plan cooperatively with the classroom teacher to determine appropriate instruction;
2. To develop with the first grade teachers instructional strategies and techniques based on principles of research-based best practice;
3. To confer with the classroom teacher about special student concerns;
4. To keep records of student progress;
5. To support parents as partners in their children’s reading by sharing information in newsletters;
6. In conjunction with first-grade teachers, to conduct assessments and analyze data on all first-grade students, including pre- and post-assessments and running records.

This sharing of responsibility provided a strong network of support for the first grade as a whole. However, cooperative sharing of instruction requires joint planning time. This can only be accomplished by prioritizing collaborative meeting time. First-grade classroom teachers and Reading Recovery teachers met weekly as a Reading Express team. The agendas during these meetings, however, included topics beyond language arts instruction. Much of the planning, therefore, must be done informally during those hallway or lunchtime conversations that are short, but rich. In addition to the Reading Express meetings, the first-grade teachers planned cooperatively as a grade-level unit, mapping monthly curriculum goals which provided a framework for the weekly planning segments upon which literacy station activities are based. These monthly goals were shared with the Reading Recovery teachers during the Reading Express team meetings as well as with parents through first-grade classroom newsletters.
MONITORING LITERACY PROGRESS IN READING EXPRESS

One of the benefits first-grade teachers have found in the Reading Express Program is that they have a better understanding of their students' literacy development. All first-grade students are tested using the Observation Survey (Clay, 1993) at the beginning of each school year. This instrument is a collection of six informal assessment activities. The observations measure each child’s ability to: 1) identify letters of the alphabet; 2) read a list of words in isolation; 3) understand basic concepts about print; 4) write and spell words from the child’s own language repertoire; 5) indicate heard sounds in words by writing a dictated sentence; 6) implement reading strategies during a continuous text reading. The original grouping and choices for strategy instruction in Reading Express were based on the results of these observations.

The initial assessment was just the beginning. Throughout the year, student progress was continuously monitored. Each child in first grade had a literacy progress folder that documented growth in a systematic way. Included in these folders were running records, anecdotal records, and Language Arts Progress Reports and Writing Assessment, tools developed in accordance with Gwinnett County (Georgia) Literacy Standards. The detailed documentation was shared by the Reading Recovery teacher and the first-grade teacher. First, the Reading Recovery teacher kept a log of whole group lessons. Also, the first-grade teacher and the Reading Recovery teacher made anecdotal records of literacy accomplishments and areas needing support during the literacy station time. These individual records noted shifts in reading performance as well as areas of difficulty in reading or writing. Dated writing samples also contributed to the literacy profile of each child.

Running records, a recording of oral reading, were an invaluable tool in the program. Frequent running records were taken on each child and placed in the literacy progress folders. These records were used to assess the appropriate text level for each student. In addition, the running record indicated not only the child’s accuracy in reading, but also supplied invaluable information about why errors were made. This information drove the strategic instruction tailored to each child. The information gathered as part of ongoing monitoring of progress was shared formally with parents during conference time and informally as the need arose.
READING EXPRESS IS MAKING A DIFFERENCE:  
THE RESULTS OF THE PROGRAM

Reading Express has been a concentrated effort on the part of first-grade classroom teachers and the Reading Recovery teachers to support the goal that all children can read by the end of the first grade. The decisions that were necessary to support this program were not easy ones, however, and the entire Mountain Park Elementary staff was involved in those decisions. In addition to the hour spent daily in each first-grade classroom, each Reading Recovery teacher at Mountain Park served four first-grade students individually each day and about ten to twelve students over the course of the year. In the Reading Express model, the Reading Recovery teachers focused all energies on the first grade. In order to make the model affordable, the first-grade teachers relinquished paraprofessional support in their classrooms. The upper-grade teachers concurred with this concentration of resources in the first grade and agreed to have slightly larger classes in order to provide the necessary funds to deliver the program. Such a decision was a difficult one, but one that has been supported in the current research on Title I and remedial programs (Allington and Walmsley, 1995).

It has been important for us to document the effectiveness of this program through systematic data collection. The data include pre- and post-test scores on the Observation Record, periodic running records for each first-grade child throughout the year, anecdotal records, video tape clips of text reading, and writing samples. Text levels based on running records yielded information for individual children as well as for the entire first grade. The text level simply indicates the level of text at which a child is reading instructionally through an integration of the cueing systems. Table 2 outlines the grade level equivalencies for text levels as defined by Reading Recovery.

The effectiveness of Reading Express across all first grades was examined in terms of calculated median text level for all first-grade children over the course of three school years. The median text level represents the midpoint at which half of the first-grade children were above and half were below in terms of text level reading at the end of the school year.
Table 2.

Text Level to Grade Level Comparison

<table>
<thead>
<tr>
<th>Text Level</th>
<th>Grade Level</th>
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<tbody>
<tr>
<td>34</td>
<td>8</td>
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<tr>
<td>32</td>
<td>7</td>
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<tr>
<td>30</td>
<td>6</td>
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<td>28</td>
<td>5</td>
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<tr>
<td>26</td>
<td>4</td>
</tr>
<tr>
<td>22-24</td>
<td>3.1/3.2</td>
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<tr>
<td>18-20</td>
<td>2.1/2.2</td>
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<tr>
<td>14-16</td>
<td>1</td>
</tr>
<tr>
<td>9-12</td>
<td>Primer</td>
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<tr>
<td>7-8</td>
<td>PP3</td>
</tr>
<tr>
<td>5-6</td>
<td>PP2</td>
</tr>
<tr>
<td>3-4</td>
<td>PP1</td>
</tr>
<tr>
<td>A-2</td>
<td>Readiness</td>
</tr>
</tbody>
</table>

The text level comparison for years 1994-1995 through 1996-1997 is indicated in Figure 3.

Figure 3.

Median Text Level 1994-1997
During the 1994-1995 school year prior to implementation of Reading Express, the median student from all first-grade classes completed first grade reading at Reading Recovery text level 14, which fell within the expected range for children at the end of first grade in Gwinnett County. During the 1995-1996 school year, the first year for implementation of Reading Express, the median student from all first-grade classes completed the year at Reading Recovery text level 24. The 1996-1997 school year, year 2 of Reading Express, found the median text level for all first-grade students to be 30.

The median text level, however, does not provide a complete picture of first-grade performance. As part of the Reading Express data collection, end-of-year text levels from all first-grade children were collected during the spring of 1996 and 1997. Results from all first-grade children for each of those years are represented in Figure 4, including those who received one-to-one instruction in the Reading Recovery program. Two years, 1996 and 1997, are represented in the figure. The data are organized by stanines (Clay, 1993).

Figure 4.

End of Year Text Level 1996 and 1997
As this figure indicates, students are making progress toward the goal that every child is a reader by the end of first grade. During Spring 1996, the end of the first complete year of Reading Express, most children’s performance put them in the seventh stanine, with slightly fewer children in the ninth stanine. During Spring 1997, the end of the second year of Reading Express, only three children had text level scores which fell in the fifth stanine, and 55 children were reading at the ninth stanine level.

The most important indicator of success, however, was how first-grade children developed as successful, independent readers and writers. It is clear from the text level data reported above that children are experiencing success. But what does this success look like? Anecdotal data and writing samples from two children offer insights into their progress.

Abby

Abby (a pseudonym) was a female with limited text knowledge when she entered first grade. She had successfully completed one year of kindergarten, but came from a home environment that did not support easy transition into school literacy learning. She began the year knowing 50 of 54 letters and could identify 30 of 37 phonemes. She could read 5 of the 20 words from the Ohio Word Test. Her Concepts About Print score was 9 out of 24. Her text reading level was 3.

The teachers saw that Abby needed a high degree of teacher support, particularly in her knowledge of print. She had not yet grasped the one-to-one correspondence concept, did not understand return sweep, and was inventing text based on picture cues. She had limited sight word knowledge, and was not always able to transfer word recognition to text. She did not self-correct or use phrasing and fluency in her reading.

The teachers worked with Abby and other children who had similar knowledge of how our oral and written language system works. Literacy station activities were designed for her and other classmates that focused on the essential concepts of print and on transferring her knowledge of print from one context to another. By January, Abby was reading at a text level of 16 with a good self-correction rate. She was using a self-extending system based on meaning, visual, and syntax cues. These cues had been emphasized in large group instruction as well as in Literacy Station activities. Fluency and phrasing had improved considerably. Her balanced approach to reading sparked a high degree of interest in books and in reading outside of the school environment. Her mother became more supportive of reading in the home after conversations she had with the teachers and as she saw her daughter’s interest in books increase.
May, Abby had made remarkable progress in reading. She demonstrated a self-extending and balanced reading system and was reading at text level 30 at 96% accuracy rate. Her self-correction rate was 1:1.5.

Robert

Robert entered first grade as a reluctant male reader. He demonstrated little interest in books and exhibited low time-on-task behavior. He knew 48 of 54 letters and 30 of 37 phonemes. Robert, like Abby, did not yet have basic concepts of print at his command. He did not understand one-to-one matching, return sweep, or the difference between letters and words. He could not identify known words within a text, but was able to use pictures to construct meaning. He was hesitant to take a risk when faced with an unknown word. He was reading at text level 3.

Robert also engaged in whole group and literacy station activities that were designed to build on his strengths. By January, he had extended his knowledge of sight vocabulary and was able to move beyond using the pictures as his only cue. His text level reading had progressed to 13. He was using the initial sounds of words to guess (for example, shout for should), but was not monitoring using all cueing systems. His phrasing and fluency were choppy.

By the end of first grade, Robert demonstrated a more balanced approach to reading. He was monitoring and cross-checking using visual and structural cues as well as meaning cues. He ended the year reading at text level 24.

As indicated through these examples, the children in Reading Express have a broader range of reading and writing strategies and are able to apply those strategies as they read and write. They are making significant gains in reading and writing. They are exhibiting enthusiasm and confidence in their reading and writing. They prefer reading to other activities. They are "hungry to read."

REFLECTIONS ON READING EXPRESS

What factors contributed to the success as measured by median and stanine text level data? How have we managed to continue this program after the initial years despite resource pressures? First, Mountain Park School continues to embrace the idea of early intervention and wholeheartedly supports that effort. Available resources were intensified at the first-grade level in an effort to reduce the need for remediation at the higher grades. The entire Mountain Park staff was involved in this commitment. That commitment has continued.
Second, parents continue to play a key role in Reading Express. The team communicates regularly with parents through a newsletter describing the Reading Express program and the strategies the children are developing as part of their reading process. Included in the newsletter are practical suggestions for parents in how they can help at home. Parents are active in their children's literacy experiences and they have expressed satisfaction in their increased ability to help their children at home.

Third, the emerging readers and writers have the benefit of two professionals in first-grade classrooms for one hour every day. The collaboration among the Reading Recovery teachers and the first-grade teachers has been one of the most powerful aspects of the program. The first-grade teachers acknowledge that the collaborative planning and the whole group instruction offered by the Reading Recovery teacher has supported professional growth for all involved. As a result, the first-grade teachers have become more proficient in supporting strategic reading and writing for all students. The true challenge, however, lies with those children who were reading at levels 14, 15, and 16 at the end of the school year. Modifying Reading Express to ensure that the Reading Recovery teachers have more access to these students during the literacy station time may be the solution to that problem.

Reading Express began as a program designed to improve the quality of instruction for all first-grade students, not just those identified as having greatest need. The purpose of Reading Express was to bring into alignment instruction in first-grade classrooms with the sound literacy practices and strategic teaching upon which Reading Recovery is based. It has resulted in a powerful, ongoing professional development experience positively impacting the entire first-grade community. Students have made substantial gains in reading and teachers have grown professionally through the implementation of Reading Express.

An idea that began as a series of conversations among professionals concerned about the literacy development for all first-grade children in a school has found its way to other districts, other children, and other teachers. Dodie is now implementing the Reading Express Model in the first grades at Partee Elementary, a neighboring school. Katie is currently working with the first-grade teachers and Reading Recovery teachers in a rural district in Indiana. Marie is teaching with new staff at Mountain Park and further refining the model. It is our hope that our experiences can support attempts by other teachers to ensure that all children will be readers by the end of first grade.
REFERENCES


Kathryn Kinnucan-Welsch is a faculty member in the Department of Teacher Education, at the University of Dayton in Ohio. Dodie Magill is a teacher at Partee Elementary School in Lithonia Georgia. Marie Dean is a teacher at Mountain Park Elementary School in Lilburn Georgia.
Applications of cloze procedure to reading assessment in special circumstances of literacy development

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ABSTRACT

This study forms part of an on-going investigation of second language reading development of elementary school children from a bilingual, indigenous, community where high levels of proficiency in both languages are common among all age groups. Modifications were applied to the standard rational deletion cloze procedure to adapt assessment to the special sociolinguistic circumstances of reading in an indigenous language, and for the purpose of exploring practical classroom applications of the cloze procedure for instruction.

INTRODUCTION

With the growing interest in literacy among speakers of minority languages in countries where the national language holds a virtual monopoly over writing, teachers and researchers working in the area of second language (L2) reading have begun to experiment with locally developed assessment approaches. Exploring the possibilities, for example, of teaching an indigenous language in school represents a major departure from traditional literacy teaching policies; proceeding to design assessment tools to actually evaluate student performance in the formerly excluded language reflects a superior level of consciousness and commitment to the goals of additive bilingualism and biliteracy development. Researchers in Latin America have pointed out that biliteracy, the use of indigenous languages in reading and writing in school, in addition to Spanish, is a necessary condition for the development of both the vernacular and the national languages, particularly in regard to reversing the
erosion and loss of the former (Cerron-Palomino, 1993; Jung, 1992; Chiodi, 1992). Thus, biliteracy and additive bilingual development are necessarily complementary. In all such cases, however, educators face the special circumstances of both bilingual development itself (in relation to the significant social discontinuities and imbalances that characterize the contact between the languages spoken in the community), and reading and writing in the vernacular.

The purpose of this report is to evaluate the suitability of one particular assessment technique, the cloze procedure, for literacy teaching in an indigenous language. On the one hand, classroom-based research of reading development in vernacular languages promises to shed new light on the broader theoretical problems of assessment in bilingual and multicultural contexts. In addition, informal, teacher-designed assessment instruments (cloze being one relatively accessible option of the paper and pencil variety) offer immediate solutions to the problem of the availability of classroom literacy materials in vernacular languages.

THE SOCIOLINGUISTIC CONTEXT OF LITERACY ASSESSMENT

The present study will report on initial methodological considerations that emerged from one particular application of the cloze procedure as it was piloted with a group of 3rd and 5th grade bilingual students. The investigation was designed as a follow-up probe of the limits, so to speak, of cloze testing after its successful application in a previous study in the same school under significantly more controlled, and interactive conditions (Francis, 1994; Francis and Nieto, 1996). Participants in the study were 3rd and 5th grade students from an indigenous community in Central Mexico distinguished among neighboring towns for the high levels of conversational fluency that school-age children exhibit in both Spanish and Na’huatl. Virtually all children beyond the second grade demonstrate, at least, basic, interpersonal, oral comprehension skills in both languages.

However, while a large percentage of entering kindergarten and first graders are monolingual or dominant in Na’huatl, all literacy instruction is in Spanish. Thus, for many students, the regular reading program represents a L2 literacy acquisition situation. For teachers experimenting with vernacular literacy, reading instruction would involve a biliterate enrichment experience for the majority of the bilingual students, and an analogous L2 literacy program for Spanish dominant children. For the latter group, the sociolinguistic context of L2 literacy is clearly of a qualitatively different nature. For monolingual Na’huatl speakers,
literacy instruction in the vernacular would offer the obvious benefits of L1 literacy development.

As the results reported below will suggest, cloze testing appears to represent a viable alternative (among others) for situations where there are neither generalized or stable literacy practices in the vernacular, and where assessment of literacy in the language has never been attempted. Before outlining the procedures and discussing problems of method, a brief review of the sociolinguistic circumstances of this particular testing program are in order. As is characteristic of many vernacular or indigenous speech communities: 1) except for isolated pilot projects, Na’huatl plays virtually no direct role in the primary grades in literacy instruction, regardless of the range of competence levels that students exhibit in Spanish; 2) for many, if not the great majority of students, the activity itself, of reading a continuous text in the indigenous language represents a completely novel experience; 3) points 1 and 2 reflect a general distribution of language use functions (and for many bilingual speakers a normative allocation) where texts in Na’huatl are rare and hard to find. (e.g.: bibles or religious tracts in private possession, unused first grade bilingual education materials stored away at the local elementary school); 4) the progressive erosion of the vernacular continues unabated in the face of the expansion of the national language into previously traditional/indigenous domains; 5) related to all of the above, a lack of orthographic standardization and a perceived dialectical fragmentation by Na’huatl speakers themselves, call into question, for many, the very concept of vernacular literacy.

Historians of literacy in Mexico, however are familiar with the linguistic and language policy background to the present day situation that should be cause for reflection for researchers of reading and writing development in bilingual contexts. Na’huatl, for example, is one of the indigenous languages of the Americas that was the medium of a great literary tradition that spanned hundreds of years, including both the pre-Conquest epoch and, in alphabetic form, the first period of Spanish colonial rule. Particularly during the 16th century, Na’huatl played a central role in the domains of higher education (at the University of Mexico and other institutions sponsored by the church), literacy teaching and writing in general (including not only religious texts, but legal documents, ethnographies, and historical accounts), and the theater (Heath, 1972, Lockhart, 1992, Sten, 1982, Leon-Portilla, 1996). Given the precipitous ascendency of Na’huatl as the lingua franca of evangelization and public administration during the period following the fall of the Aztec empire, it
is entirely possible that in many regions of Mexico more people were literate in Na'huatl than in Spanish.

Thus, one of the great ironies of the history of literacy is that today, among present-day speakers of the language (numbering between one and 1.5 million) that learning to read and write is generally associated with learning Spanish as a second language, and that the voluminous body of literature in their language, catalogued in libraries and universities, is primarily the object of study by historians, linguistics, and anthropologists. Nevertheless, in the speech communities themselves, the historical consciousness of this literary tradition and the knowledge of the continued existence of an accessible archive that embodies it, continues, in turn, to spark interest in the development of the Na'huatl language, as well as many of the other 56 autochthonous languages of Mexico (Montemayor, 1993).

Among the new generation of bilingual teachers of the region, an emerging consensus on the necessity of introducing literacy instruction in Na'huatl in the elementary grades poses a series of new pedagogical challenges on the level of school-wide language policy, classroom materials, bilingual instructional models, and assessment procedures. By necessity, local teachers would need to design their own reading evaluation instruments to begin the process of even conceptualizing the tasks before them that teaching literacy in an indigenous language implies.

As is customary in virtually all public elementary schools in Mexico that serve indigenous bilingual children, initial literacy instruction is provided exclusively in Spanish. Exceptions include pilot programs which have attempted to implement the long-standing Secretariat of Education language policy (DGEI 1990) to provide reading materials and learning activities in the students' indigenous language. The local school in which the present study was carried out falls into this category; however, literacy teaching continues, with occasional digression, to be in Spanish, the second language of most entering first grade children. Nevertheless, the new reorganized bilingual program represents a significant departure from previous practice; today, Na'huatl-speaking students are free to use both languages both on the playground and in the classroom, even to address their teacher in Na'huatl, an inconceivable occurrence under the former Spanish-only system (although this marked use of the indigenous language is still not common). Furthermore, official school policy emphasizes the recognition of the indigenous language (spoken by over 90% of the town's population) in various concrete ways: singing of the national anthem in both languages, introducing the Na'huatl alphabet, occasional writing, poetry, and declamation contests, and explicit teacher
admonitions to value and preserve the community’s linguistic heritage (the majority of the school staff, including both administrators, is bilingual as well).

Thus fortuitously, an important convergence of interests is posed with reading teachers working with the languages of wider communication, who over the past decade, in turn, have been exploring classroom-based alternatives to standardized testing (Valencia, Hiebert and Afflerbach, 1994; Hodges, 1997). Our own experience with the cloze assessment sessions themselves, and subsequent initial analyses of the Na’huatl language cloze sample have confirmed our working hypothesis that, with appropriate modifications, the universally recognized usability and practicability of the technique can be matched by satisfactory levels of reliability and validity.

RESEARCH ON CLOZE AND LANGUAGE ASSESSMENT

Oiler and Jonz (1994), in their recent volume, equate “meaningfulness” with “coherence,” tracing the origins of the cloze procedure to the early studies of the Gestalt psychologists. The ability to effect closure, combining fragments or isolated elements to form coherent and meaningful wholes, was considered, more generally, a measure of intelligence. Thus, early on, researchers proposed that the cloze procedure must be applied to self-contained, connected, and complete segments of discourse. In this respect alone cloze could be considered an integrative measure of reading; but in addition, the theory that cloze requires the simultaneous application of vocabulary knowledge, grammatical competence, sentence level decoding, and passage level comprehension strategies approximates the task to an even greater degree to the criterion of actual silent reading under normal, contextually constrained conditions.

Particularly in L2 reading assessment, cloze appears to represent a valuable compliment, for example, to the analysis of oral miscues since the latter will tend to shift undue attention to the recoding aspects of oral reading. The second language reader, with only partial control over the L2 grammatical system, sound patterns, morphology, etc. will, by necessity, direct more attention to producing an oral version of the text that sounds more target-like, this, of course, at the expense of comprehension (Nurss and Hough, 1992). In other words, more conscious local processing takes limited working memory resources away from discourse-level processing. For a discussion of the relationship between oral output and decoding in the first language (L1) reading, see Salasoo (1986), and
Mandel-Glazer, Searfoss, and Gentile (1988), also McLeod and McLaughlin (1986) on controlled and automatic processing in L2 readers, and Zhang’s (1988) study of Chinese ESL students’ oral reading miscue patterns. Hypothetically, for the L2 reader, in “alleviating” the pressure to devote limited controlled processing resources to recoding surface features, cloze should provide for a more authentic measure. But as Miller and Smith’s findings indicate, the effects of overt verbalization for readers of different ability levels are complex, and further investigation will need to examine these factors in both L1 and L2 readers.

Since the analysis of oral reading miscues and cloze testing share both integrative and on-line features, and both allow for qualitative scoring, they can perhaps be combined in a way that compensates for their respective deficiencies; cloze not being without its critics, who surely would point to the contrived and “unnatural” conditions that a fragmented text imposes, for example, on the inexperienced reader/test-taker.

On the related issue of cloze task sensitivity to sentence-level vs. text-level context, the research findings are inconclusive. Fixed-ratio deletion passes, at least, appear to be poor measure of awareness of larger context, with only a small percentage of items dependent on information across sentence boundaries (Cohen, 1994, p. 237). Bachman (1985), however, has demonstrated that the use of rational deletion criteria can significantly increase cross-sentence context dependence from the 10% that would by typical of a 1/11 fixed-ratio deletion. For beginner L2 readers, this modification would be especially effective since shifting the deletion method away from a random selection, toward, for example, more content words, will produce cloze passages that are more predictable in general, and, at the same time, more sensitive to discourse-level constraints (DeSanti, 1989). Also see Chavez-Oller et al., (1994), and for L2 readers, Hanania and Shikhani (1986).

Research on the critical issues in the assessment of second language learners’ reading proficiency is part of a broader discussion on language assessment in general. In the literature, integrative approaches have come to be contrasted with what have been categorized as “modular perspectives,” unfortunately, in terms that have often obscured the debate. The latter have been associated with discrete point methodologies and an analytic focus on structural units of language, the former, with “descriptive” approaches emphasizing holistic or global processing, and contextualized communicative proficiency closely tied to general cognitive abilities. Especially in the area of literacy assessment, the distinction is useful; however, reductionist models of language fall into the error of
counter-posing modular and integrative across all aspects of linguistic competence and language use proficiency. For example, strong versions of the "synergistic perspective" reject the autonomy of linguistic knowledge implying that all language processing is contextually constrained, meaning-based, and integrative in the most complete sense (e.g., corresponding to a kind of general system where a global/unitary factor governs the greater part of all linguistic and intellectual performance). Damico (1991), for example, argues that:

The internal structure of language proficiency is also integrated. The components of language (e.g., syntax, phonology, semantics, pragmatics, reception, and expression) are essentially terminological distinctions created in the mind for ease of discussion and analysis. They are not divisible and discrete in their functioning; they function holistically. Communication can only be assessed directly as it functions in naturalistic contexts, thus insuring linguistic reality (p. 178).

While in the area of classroom-based reading instruction and assessment, the notion of integrative and holistic processing is very attractive (and as we shall see, for valid reasons), the lack of theoretical clarity inevitably leads to serious practical problems. Evidence from extensive evaluations of bilingual students' language and literary skills has revealed important distinctions (linguistically and psychologically real) among the different components of school-related second language proficiency (Harley et al., 1990). Many aspects of language use in school are indeed closely tied to the general cognitive functions. This type of integrative processing, in fact, is characteristic of academic discourse, in its various forms, both oral and written. However others are not, or certainly less so, depending on the circumstances: for example, those aspects of language proficiency related to competence in the language code itself — the strictly linguistic aspects that in L2 learners often evidence remarkably uneven rates of acquisition. It appears that grammatical and phonological processing, for example, are more "encapsulated," autonomous, or modular — the aspects of language that some researchers refer to as the fast processes, that are "rapid and mandatory" (Sharwood-Smith, 1991).

On the practical level, confusing the modular and integrative aspects of language proficiency has led to egregious misinterpretations of assessment data in bilingual settings. The failure to separate the issue of linguistic competence from academic/literacy-related language proficiency has led to categorizing large numbers of bilingual students as
"semilingual" or "alingual" — in principle, a highly unlikely possibility for any language minority community, since such severe language disorders should represent a distinctly low incidence condition among all school-age populations.

In reading assessment, since the classroom teacher's concern will emphasize comprehension, it will be the discourse-level processes that must figure most prominently in evaluation tasks, precisely those that depend upon, to a greater degree, the intervention of top-down strategies and integrative mechanisms for constructing meaning. Recent trends in literacy assessment have de-emphasized the discrete point methods that sought to examine, analytically, the different components of decoding, again for sound pedagogical reasons. However, from the (correct) priority placed on evaluating discourse-level strategies and text comprehension it does not follow that all processing of written language is global, holistic, and integrative to the same degree.

Sharwood-Smith (1991), emphasizes that even if we accept a differentiated, modular-type, set of mental representations for the different aspects of language proficiency, this still leaves open the question of how language, in real time, naturalistic/authentic, uses (such as reading comprehension) is actually processed. In other words, the autonomous/interdependent knowledge structures that correspond to the different linguistic subsystems may, depending on the type of task, for example, interact in different ways, some more integratively, others in a more linear or encapsulated way. Reading specialists are familiar with the general concept of modularity from the implicit assumptions that underlie Oral Miscue Analysis (Goodman, 1994); subsystems of language as they come on line in the reading process interact. This implies that syntactic knowledge, semantic knowledge, phonological knowledge, etc. maintain a certain autonomy, to some degree, to be able to interact in the first place, a feature of language processing, for example in reading assessment, that allows for the analytical comparison of Observed response and Expected response. For example, in skilled reading, the linguistic subsystems are processed in an "integrated," and very efficient manner; in less-skilled reading often one or another subsystem predominates at the expense of the others.

The research on second language readers has perhaps contributed most to refining an interactive model where the role of discrete point, bottom-up, processes have received a more balanced treatment. Studying L2 readers text processing strategies under conditions of wide ranging variations in the level of L2 language acquisition (an opportunity not available in the case of L1 readers) has lent support to a version of the
modular perspective — a relationship of autonomy and interdependence among the language learner’s faculties that account for text comprehension. In studying L2 reading, less so in the classroom context, researchers often arrive at significant and important findings when discrete components are isolated for analytical purposes, again confirming that the global phenomenon that we observe does not correspond to an undifferentiated and completely context-dependent general purpose processor.

As the previous discussion of the cloze procedure indicated, this particular assessment tool would fall toward the mid-range on the continuum between fully integrative and purely discrete point assessments. Depending on a wide array of both modifications in the presentation of tasks, and interpretative approaches, cloze will tap the reader’s repertoire of strategies for utilizing context at different levels. If meaning depends on mentally constructing text coherence, the task of restoring a fragmented, “incoherent,” reading passage will call upon this set of discourse competencies at least to some significant extent. Local closure and parsing ability will also be revealed in respondents’ choices. Deletion procedures and scoring methods will determine, to a large extent, how sensitive the test actually is to text-level coherence and semantic and syntactic constraints at the sentence-level (see Cohen, 1994, on Structured-response formats, pp. 233-242). Particularly with L2 readers, a focus on both levels, separately and in regard to how they interact, will offer fruitful avenues of investigation.

SUBJECTS

To be able to examine students’ reading skills in Na’huatl, two grade levels were chosen that would hypothetically reflect growth in literacy skills (acquired “in Spanish” and available during the experimental situation, reading a text in Na’huatl); and with both groups beyond the initial literacy acquisition stage, relatively few “non-readers” would be participating in the study. Subjects included all 3rd and 5th grade students (four classes) in attendance on the day scheduled for each testing session (50 third graders, 54 fifth graders, for a total of 104 subjects). Including the training and practice items, sessions averaged one hour and ten minutes (time elapsed from initial instructions to the group to completion of the cloze passages by all subjects). Teachers’ reports confirmed that all students possess at least passive oral competence in Spanish and Na’huatl. Again, all 104 students learned to read and write in Spanish; experiences with Na’huatl texts of any kind had been incidental or sporadic at best.
DESIGN AND PROCEDURES

To achieve a measure of uniformity regarding access to previous knowledge schemata (both content and genre related) a traditional narrative of conventional, logical/causal, structure was selected. The story, "Soatl iuan miko" [The woman and the monkey] related a familiar theme of a young woman who bears a child after being kidnapped by an animal, escapes, and returns to her village where she and her son confront the injustices of society.

The deletion procedure sought to maximize context support for the task by: 1) maintaining a low ratio and providing a long lead-in; since the narrative was short, out of 339 running words, subjects completed only 15 blanks; 2) deleting only common, relatively high-frequency, content words (10 nouns, 5 verbs), in all cases, the final word in a sentence or phrase. While the omission of content words in final position ensures optimal textual predictability, careful omission procedures, even involving other grammatical functions, with sufficient sentence-level lead-ins, will provide adequate context support. Clearly, for more advanced readers, with more experience with Na'huatl texts, the above modifications become less critical. To facilitate the task, especially for young students who, faced with the cognitive demands of this kind of decontextualized reading activity, tend to guess at random, simply selecting words from the text itself, a list of the 15 exact words deleted, plus 10 distracters was displayed. Instructions indicated that words could be chosen either from the list of options, or subjects could provide their own responses. See Guthrie et al., (1974) for a discussion of the "maze procedure," a kind of multiple choice cloze format, similar in some ways to the modification in this study. Depending on the selection of each set of distracters, "maze" would lend itself particularly well to exact-word scoring (e.g., full credit for sentence and text-level compatibility, partial credit for sentence level compatibility alone, and so forth).

Since none of the students had ever participated in a cloze assessment activity of this nature, a brief training session was conducted with sample passages to demonstrate basic cloze test strategies. Before beginning the task, an overview of the story was provided orally, in Spanish, introducing the characters and the setting, and providing a general predictive framework for the event sequence, upon which students, with pencils in the desk, were asked to read through, silently, the deleted passage from beginning to end.
Scoring followed a rational cloze, qualitative rating procedure similar to the method described in MacLean and d'Anglejan (1986); also see DeSanti's (1989) extension of cloze that incorporates coding categories from the Reading Miscue Inventory. A seven point scale differentiated among the following types of responses:

6-exact replacement or response that is syntactically compatible with the entire sentence and semantically compatible with the text as a whole;

5-the above criteria are met but response requires "some minor syntactic adjustment" (MacLean and D'Anglejan 1986, p. 819);

4-response is syntactically and semantically compatible at the sentence-level only;

3-the criteria in #4 are met, but response requires minor syntactic adjustment;

2-the reader's response creates a sentence fragment (partial compatibility);

1-response does not form part of a grammatical fragment, indicates only a semantic relation to some reference in the text;

0-random response, not compatible syntactically or semantically with any fragment, no relation to any reference in the text.

In this study, subjects completed one cloze test as part of a larger investigation of biliteracy and language development. The same group of 3\textsuperscript{rd} and 5\textsuperscript{th} graders also participated in assessments of written expression in Spanish and in Na'huatl, the results of which are the subject of a separate report. Previously, a cohort of 2\textsuperscript{nd}, 4\textsuperscript{th}, and 6\textsuperscript{th} grade bilinguals from the same school completed a battery of literacy assessments including Oral Reading Miscue Analysis, a cloze test, Oral Narrative and Writing. One of the methodological objectives of the investigation is to compare findings from the earlier, more individually oriented, evaluations of reading and writing to the present large scale group applications. If results from the latter evidence similar tendencies, this finding would lend support to the development of practical, classroom-based, instruments that are in fact accessible to teachers working in similar bilingual settings. However, the limited sample, methodological shortcomings, and the resulting tentative interpretations that are outlined in the next section indicate the need for further research on the application of cloze to the special circumstances of literacy development occasioned by the contact between a national language and indigenous language.
RESULTS

In this preliminary and exploratory phase of the study, it was important to determine if, under the conditions outlined above, actual student performance on the test was at least minimally consistent and reasonably stable. Subsequent analyses and comparisons, for example, with parallel cloze tests in Spanish, and writing samples in both languages, would depend on responses as a whole being non-random.

A comparison between the grades showed that 5th graders did outperform 3rd graders, as would be expected (but under the circumstances, not guaranteed) if students were responding meaningfully to the text. Converted to percentages, the mean score for 3rd grade was 31.8, for 5th grade, 45.2. A one factor ANOVA was performed with the Scheffe F indicating a significant difference between the grades; F(1,102) = 29, p<.005. For the entire sample, a split-half reliability check yielded a Spearman-Brown corrected r=.63. Considering that the number of deletions was far below the recommended 25 to 30 for maximum reliability (Bachman, 1985), and that for many of the younger students task difficulty resulted in a large number of responses that involved guessing (split-half reliability for 5th grade, alone, improved to r=.69), internal consistency could be considered adequate.

Given the special circumstances of reading in Na'huatl, and in particular, performance on an assessment instrument (for students, both a novel experience in general, and involving the application of skills in a language not normally associated with the academic setting), the dependability of the sample of tasks would be an important concern. Generalized confusion, rejection of the instrument, and the tendency toward random response would call into question the adequacy of the cloze items in regard to the proficiency being measured. See the discussion on estimates of internal consistency in Linn and Gronlund, (1995, pp. 81-90). In this regard, note the distribution of scores for individual cloze insertions, comparing third and fifth grade responses (Table 1).

Exact-word scoring, while generally yielding low overall ratings, would offer the classroom teacher a relatively rapid estimate for group comparisons and assessment of the appropriateness of classroom texts, for example. For the purpose of studying students' reading strategies however, qualitative scoring offers a wide range of analytical opportunities. For example, as part of a broader, on-going examination of interlinguistic transfer, cloze responses that were made in Spanish were coded separately. Comparing 3rd and 5th graders, a number of observations were noted that could provide data for further study.
Table 1

Distribution of Scores for Individual Cloze Insertions

<table>
<thead>
<tr>
<th>Score</th>
<th>Third Grade</th>
<th>Fifth Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>264</td>
<td>173</td>
</tr>
<tr>
<td>1</td>
<td>80</td>
<td>102</td>
</tr>
<tr>
<td>2</td>
<td>100</td>
<td>106</td>
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<td>3</td>
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<td>4</td>
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<td>5</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>6</td>
<td>73</td>
<td>164</td>
</tr>
</tbody>
</table>

While it appears that 3rd graders tend to switch to Spanish with greater frequency (29 total switches/50 3rd grade subjects = .58, as compared to 20/54 fifth graders for a frequency of .38) the 5th grade students’ use of Spanish material appeared to be more deliberate and purposeful. In general, we would expect compatibility ratings to be higher for Spanish switches since the reader obviously cannot be selecting at random, and would tend to be more aware of word choice as a result of a more conscious lexical search. In fact, the average rating for 3rd graders was 44.8 (13 points higher than their overall mean); for 5th graders compatibility increased to 64.1. Indeed, 5th graders may seem to exhibit a more selective switching pattern, possibly benefiting, to a greater extent (an increase of almost 19 points over their overall mean), from the opportunity to manipulate the two language codes in the written modality. The relatively low number of total switches (49 out of 1299 total responses) advises caution against any early interpretation; however comparisons with similar code alternation phenomena in writing and oral discourse may reveal significant parallels. In any case, the switches themselves (together with the number of new words supplied from students’ own lexical searches, plus alternate spellings of choice words) indicate that in these cases response patterns were far from haphazard. The examples shown on Table 2 are representative of levels 3 & 4 and 5 & 6.

The results below on interlinguistic switching are offered as one possible avenue for further research that has received little attention in the field of second language reading. Cloze in particular appears to present special advantages in tapping this processing phenomenon that is the object of widespread interest among teachers working in bilingual schools.
Table 2

Cloze Responses with Spanish Switches (in italics)

Level 3: sentence level compatibility requiring minor grammatical adjustment
Level 4: sentence level compatibility
Level 6: text level compatibility

Hector — 5th grade
Oasito kuajtlan, omajsito inauak in xolopijtli uan okimakak in chango. (level 4)
[He came to the forest, he came to where the devil was and he gave him the monkey]

Elena — 3rd grade
Nikojkoltsin oknikia momachtis, oktitlan inauak se inicuela. (level 3)
[His grandfather wanted him to learn, he sent him to a the school (exaxt word answer: priest)]

Petra — 3rd grade
Opank miek tonaltin, in pipiltontsin omochi telpokua uan sepa kuak amo ompa okatka in miko, otlatlapo okimemej ni nantsin uan okuikak ompa ni poeblo. (level 6)
[Many days passed, the boy grew to become a young man and once when the monkey wasn’t there he opened (the cave) and carried his mother away and took her to the town]

Inocencio — 5th grade
Ompa nijki amo okxiko in teopixki, okilnamik “Niktitlanis kuajtlan una ompa mak kuakan in tlapa; (level 4 Na’huatl response) uan niktlaajkuuiluis in xolopijtli kampa kampa makikua, una ijkon tiyolpachiuske uan ompa tlamis nin pleito.” (level 6)
[There the priest couldn’t stand him either, he thought “I’ll send him to the forest so that the man (exact word answer: animals) eat him up; and I’m going to write to the devil where he lives so that he eats him up, so that we can live in peace and that way will end this dispute, quarrel]

DISCUSSION: RESEARCH DIRECTIONS

Regarding the applications of cloze, two objectives were outlined in the introduction to this report: 1) to explore some of the features of the technique among its numerous variants and modifications as an investigative tool; 2) mindful of the time and resource limitations of the
Applications of cloze classroom teacher, to propose its expanded application as a teaching approach. In the area of literacy, at least, productive research models often directly inform sound classroom practices; see for example the examination of integrative and discrete point perspectives in the above section: "Research on cloze and language assessment." Thus, our discussion of the study will begin with (1), and conclude with some general considerations regarding (2).

For an initial probe regarding the suitability of cloze testing into the relatively uncharted domain of literacy assessment in vernacular languages, the results seem to offer a well-grounded starting point. The challenge will be to improve reliability while, at the same time, maintaining high levels of redundancy and context support. As was evident from the relatively low success rates, increased redundancy and context support represent a minimal condition in situations of incipient or initial literacy development; in this case, literacy development extended to a previously "non-academic" language. Under the circumstances, the following adaptations would contribute to greater consistency: 1) with increased exposure to, and practice with, the activity, time devoted to training sessions can be applied to the task itself — longer reading passages resulting in more deletions (We are still hesitant, however, to increase the deletion ratio much beyond 1/20. Moreover, interest in the activity and general attentiveness were actually significantly underestimated, suggesting that students would easily tolerate longer sessions); 2) preparing texts of varying difficulty levels to accommodate both below grade level readers, as well as Spanish dominant passive bilinguals with a tenuous command of Na’huatl.

Regarding considerations of validity, improving the "authenticity" of the assessment task itself: 1) greater context support previous to the actual cloze activity, including a more complete activation of story and content schemata, accompanied by a graphic representation of the narrative, would provide needed extratextual redundancy for many readers; 2) directions and previous knowledge activation should be presented in the language of the text, instead of Spanish. In this case, increased context support should result in a greater dispersion of scores, in turn, actually favoring reliability.

The superior performance of 5th graders over 3rd graders would hardly deserve even passing mention if the cloze test were in Spanish (the language of virtually all literacy instruction in this case). While the results of the Na’huatl cloze were to be expected, the outcome could conceivably have been different, a smaller, non-significant, difference for example. Given the acute sociolinguistic imbalances between Spanish
and Na’huatl, bilingual students performance on language tasks in their indigenous language, in a school setting, are often significantly affected (e.g., negation of linguistic knowledge or refusal to exhibit competence in the latter). In addition, despite the minimal presence of Na’huatl in daily academic discourse, the apparent access to comprehension strategies appears to confirm models of interdependence (Cummins, 1994) based on research in more “balanced” bilingual contexts.

Regarding evaluation of reader insertions, qualitative approaches are clearly preferable in the case of student/student peer correction sessions. On the other hand, for certain limited purposes, exact-word evaluation can provide classroom teachers with useful information. In this regard, an interesting comparison is found between the quantitative exact-word scoring results and the seven point scale. The exact-word method yielded decidedly low scores for both groups: 8.8% and 16% respectively. However, despite the narrow spread of scores, concentrated at the low range, the correlation with the relative compatibility scores (r=.78, p<.005) suggests that for classroom purposes the exact-word method could be useful to teachers for global, whole-class measures, for example, of text difficulty of reading material in Na’huatl. Evaluating individual responses for acceptable substitutions for the exact word and partial credit is entirely too tedious and time-consuming for most classroom teachers.

The opportunity for examining both interlinguistic transfer and access to discourse processing skills is far from exhausted by the precursory analysis of Spanish switches reported above. In contrast, again, to oral miscue analysis, the processing of cloze passages is less “data-driven,” (in this regard resulting in a less “authentic” task), allowing for greater “on-line” reflection, e.g., involving language choice decisions. Our own findings from the previous study of 2nd, 4th and 6th grade readers found cross-linguistic switching in oral reading to be extremely rare. We are reminded, here, of Hanania and Shikhani’s (1986) findings that cloze tests and writing assessments showed a closer correlation than initially expected. Cloze tests, especially under untimed conditions, should allow for greater degrees of attention to both structural features and meaning relationships within and across the text, as in written expression.

Previous analysis of our 2nd, 4th and 6th grade cohort’s writing sample (Francis, 1998) suggested an interdependent relationship between the development of children’s metalinguistic awareness and patterns of lexical borrowing from Spanish when writing in Na’huatl. As may be indicated, tentatively, in our 5th grade cloze readers’ Spanish switches, with experience in manipulating the bilingual system, older students use their
translinguistic resources in a more reflective and meditated way (of the 29 Spanish switches made by 3rd graders, 7 received compatibility scores of 0, while only one 5th grade switch resulted in a completely incompatible response). Again, it is important to emphasize the speculative nature of any interpretations of subjects’ switching patterns on cloze responses, primarily in consideration of their low frequency. The tentative analysis, rather, suggests a line of future research into this important aspect of bilingual literacy development. However, keeping the tentative nature of the analysis in mind, the apparent tendency on the part of 5th graders to apply this strategy in a more conscious manner is entirely consistent with previous findings (Francis, 1997). Older, more mature, bilingual writers (6th graders in this case) showed a tendency toward avoiding content word switches from Spanish to Na’huatl; and on assessments of basic vocabulary knowledge they showed the same tendency (e.g., to substitute the “borrowed” Spanish items with Na’huatl equivalents.

Orthographic choices, “interference” features in reading and writing, and the transfer of grammatical patterns are all strong candidates for further research, with important pedagogical implications for teaching literacy in bilingual contexts. Among both teachers and parents in language minority communities, these issues are the source of persistent, on-going, discussions and controversies.

Related to our discussion of modularity in general, future research can examine how some aspects of bilingual children’s language proficiency may show developmental trends that differ from others. For example, findings from previous phases of the present study suggested that the advanced that children demonstrate in constructing global coherence mark a steady upward trend, while the lack of control over certain surface features (related to interlinguistic transfer) seem to be almost impervious to correction. On the other hand, we can take note of developing maturity in regard to switching patterns that are evidence of bilinguals’ enhanced control over other aspects of transfer.

The application of comprehension skills to reading in Na’huatl is a complex phenomenon. Comparing students’ Spanish cloze tests will possibly shed new light on this promising research domain as well. In any case, it would seem reasonable to include both discrete-point type analyses (that correspond to the modular aspects of linguistic transfer), and more integrative measures (that can account for the top-down functions) in evaluating and studying second language literacy in all its varied and multifaceted aspects. Appropriate to our theme, Kalantzis, et. al., (1990, p. 206) point out that, in practice, the discrete-point/integrative
distinction coincides with the dilemma of the "conflicting demands...of validity and reliability." Indeed, the respective clusterings of modular/bottom-up/discrete-point/reliability versus unitary-global/top-down/integrative/validity reflect complementary perspectives on the functioning of very complex interacting systems.

CONCLUSION: PEDAGOGICAL APPLICATIONS

The application of cloze to language and literacy teaching seems to have received relatively less attention (see Greenewald, 1981; Jacobson, 1990). If in the domain of assessment applications the research debate has yet to produce a broad consensus, in the area of teaching literacy skills the advantages of cloze are less controversial; they reside primarily in its wide-ranging elasticity. An assessment technique with potentially high content validity, in fact, should lend itself well to instructional applications. For example, an important feature of informal classroom-based evaluation is maintaining the option to be able to shift dynamically between teaching and testing, as well as completely integrating, when appropriate, the two pedagogical activities. Depending on the deletion method, readers' attention can be drawn to specific linguistic features that are the object of instruction, particularly, structures that L2 learners appear to be ready to master.

In this regard, since the procedure can be readily modified to maximize natural, text-based, redundancy, one of its obvious advantages is that teachers with minimal levels of proficiency in their students' L1 vernacular, for example, can with great facility generate an entire series of reading comprehension activities in the language. This particular benefit of cloze is especially relevant to the majority of school settings where in fact teachers do not speak or understand the indigenous language of the community. Since summative evaluation is not the objective of the activity, students who are speakers of the language evaluate their own and their peers responses. Small groups, formed heterogeneously, or by language ability, according to the instructional objective of the day (among other learner-related considerations), effect closure of the texts through the invaluable process of reflecting upon, confronting, and debating linguistic options. Here, qualitative rating scales, such as those referred to in previous sections, provide the optimum framework for developing language awareness and comprehension monitoring. See Block
Applications of cloze

Here, in fact, is where assessment and learning tasks are most productively integrated; self-referenced evaluation, peer feedback, and interactive reflection promote a more analytical posture toward language and language learning (Genesee and Upshur, 1996). Cloze-passages focus learner's attention on relevant features of the text, and provide the opportunity to view the task of comprehension from the point of view of problem solving. For practical suggestions on the use of cloze in L2 teaching, see Wallace (1992) and Nuttall (1996).

In teaching and in assessment, the same fundamental principles outlined above apply. The selecting of learning tasks, however, shifts the focus toward authentic and representative samples of language — a kind of content validity consideration. Depending on the deletion choices made in designing cloze passages, the classroom teacher can alternately focus on one or another comprehension monitoring strategy, at whatever level of decoding meaning that seems to present special difficulties for the L2 learner. Interactive models of second language reading (Nurss and Hough, 1992) provide for the flexibility that teachers require in deciding to which aspects of top-down and/or bottom-up processing learners' developing metacognitive strategies should be directed as they gain proficiency in both literacy and their second language.

More generally, the development, at the community and school level, of literacy learning materials in the indigenous language has become a vital necessity given the limited production of vernacular language primers and grade school readers available from the Secretariat of Public Instruction in Mexico City. In addition, informal classroom assessment of reading in both Spanish and Na'huatl will offer bilingual teachers new insights into the rich and complex interaction among the different aspects of their students' language proficiency. In this respect, researchers' theoretical interest in probing this new field of study coincides with local educators' search for new directions in second language literacy teaching.

NOTES

1. In regard to the comparison between oral miscue analysis and cloze testing, the tension between validity and reliability is a pertinent consideration. Unlike in other domains, language assessment is faced with a kind of partial trade-off that places these two requirements of assessment into a kind of contention of sorts. Maximizing reliability is
often achieved at the expense of validity and vice versa (Alderson et al., 1995, pp. 186-188). Davies (1990) frames the dilemma in terms of "being explicit as to what is being tested... and controlling uncertainty through statistical operations" (p. 53). In cloze testing, for example, a decrease in the frequency of deletion provides for more redundancy, consequently favoring validity, but possibly at the expense of internal consistency of responses. However, since cloze is more "test-like," and potentially amenable to manipulation that will improve reliability, it can serve as a useful compensator for, or corrective to, more "authentic," but less controlled (or controllable) reading assessments.

2. To what degree cloze passages are sensitive to discourse-level constraints remains one of the central controversies in the field. Citing studies by Kamil et al. (1986), Bernhardt (1991) argues that attention to sentence-level constraints is sufficient for correct responses. Also, see the discussion in Storey (1997). For example, subjects' scores were not significantly different between deleted texts, where sentences were randomly rearranged, versus texts with normal, coherent, sequences. Bernhardt's strong critique of cloze, however, seems directed toward traditional designs (fixed ratio deletion and exact word scoring). In this regard she correctly observes that for a L2 learner, often "cloze testing is a vocabulary exercise, not an assessment of reading" (p. 197).

Further research could focus explicitly on this interesting research question. For example, applying a series of rational deletion designs, the degree of discourse-level compatibility of responses can be examined using MacLean and D'Anglejan's (1986) qualitative scale, that specifically takes text-level constraints into account. A series of experimental cloze passages could include the following: 1) deletions in which, in fact, only sentence and clause-level clues are necessary for closure; 2) a finer distinction could be highlighted by differentiating between responses that require semantic or syntactic processing alone; 3) deletions that explicitly require the application of discourse-level comprehension strategies for "full credit," as opposed to responses that are compatible syntactically and/or semantically at the sentence-level only.

Bernhardt proposes the recall protocol as an alternative, a technique that has proven to be reliable if scoring templates are carefully designed to insure interrater consistency. However, for the purposes of the present study recall protocols present two limitations: 1) if retelling is oral, administration of the assessment must be individual; 2) if recalls are solicited in writing, the intervening factor of proficiency in written composition skills is not possible to control, especially in the case of younger children.
3. The role of context, first in reading acquisition and later in proficient reading has been the subject of considerable discussion. Specifically in regard to cloze, it is important to distinguish between two broad categories of context. Oiler (1992) refers to the principle of scaffolding in initial literacy learning: how “supplemental context” in situationally dependent reading activities supports the task of “linking linguistic forms with facts of experience” (p. 61). Here, the novice reader constructs meaning from written language input where the “fit” between text, previous knowledge and even situational context is, optimally, complete.

Depending on appropriate modifications and its form of presentation, cloze tasks begin to require the beginning and intermediate reader to shift away, strategically and reflectively, from extratextual context toward the use of the particular kind of context that characterizes school literacy — textual referents alone, situated inside the text itself. See Olson (1994) on the “discourse of literal meanings” where texts are taken as “closed.” Developmentally, a shift occurs: from the manipulation of situations and concrete categories to the mental manipulation of their representations.

4. Completely avoiding function word deletions also seemed to provide the opportunity to be able to differentiate, to a greater degree, between use of text-level compatibility and local, sentence-level context use, respectively, Bachman’s (1985) type 3 and 2 levels of context (p. 539); in our schema, categories 5/6 and 4/3 (see table 2).

REFERENCES


Norbert Francis is a faculty member in the Department of Education at Northern Arizona University, in Flagstaff.

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Young Chinese ESL children’s home literacy experiences

Hong Xu
Texas Tech University

ABSTRACT

This article describes home literacy experiences of six Chinese ESL kindergartners. The experiences include the parents’ provision of literate home environments as well as children’s functional use of Chinese and English and engagement in Chinese and English literacy activities. The findings indicate the diverse and cultural nature of the home literacy experiences and the supportive roles of parents and other family members. Suggestions for teachers and parents to promote ESL children’s literacy development are discussed.

As a teacher educator, I have had many opportunities working with kindergarten teachers who have children speaking English as a second language (ESL). Often, teachers wonder about how Asian parents support their ESL children in school learning. Given cultural and linguistic barriers, teachers often fail to communicate with parents to learn about their children’s home literacy experiences. Similarly, parents seldom initiate conversations with teachers to show how they support their children’s literacy development (Delgado-Gaitan and Trueba, 1997). Many teachers turn to insiders, Asian educators or researchers like myself, for information about Asian ESL children’s home literacy experiences.

I initiated this study in response to the inquiries from teachers about Asian ESL children’s home literacy experiences. To maximize chances to obtain authentic information through effective communication with the children and parents, I decided to focus this study solely on Chinese children and their parents as they and I shared most aspects of the Chinese culture and at least one Chinese dialect. In particular, I was interested in varied home literacy experiences supporting literacy
development, a most important indicator of school success (Allington and Walmsley, 1995).

THEORETICAL PERSPECTIVE

This study was conducted from the perspective of emergent literacy. According to this perspective, young children acquire literacy concepts and knowledge through ample exposure to and interacting with print. In early years, such experiences with print occur in young children's active engagement in various home literacy practices. Existing research has documented the impact of home literacy experiences on young children's literacy development in these classic descriptive studies (Clark, 1976; Durkin, 1966; Heath, 1983; Taylor, 1983; Taylor and Dorsey-Gaines, 1988). Children who were early and successful readers have seen adults' modeling of literacy behaviors, been read to, and interacted with capable and literate family members in various literacy practices (e.g., grocery shopping and reading labels and signs). Some recent correlation studies on home literacy environments and early reading development (Senechal, LeFevre, Hudson, and Lawson, 1996; Snow, Barnes, Chandler, Goodman, and Hemphill, 1991) strengthened the findings of these classic studies.

Home literacy practices include parental provisions of literacy-rich environments, reading and writing environmental print, storybook reading, completion of school homework, coloring and drawing, and watching TV (Clark, 1976; Delgado-Gaitan and Trueba, 1997; Durkin, 1966; Harste, Woodward, and Burke, 1984; Holdaway, 1979; Purcell-Gates, 1996; Taylor and Dorsey-Gaines, 1988; Teal, 1986; Wells, 1986). These home literacy practices promote young children's literacy development by providing them with meaningful social contexts to explore use and meanings of print as well as its conventions. As parental support for home literacy experiences can range from provision of literacy materials to storybook reading to school-related instruction (Rasinski and Fredericks, 1989; Taylor, 1997), the frequency and duration of home literacy practices can vary from home to home. The works of Purcell-Gates (1996), Taylor and Dorsey-Gaines (1988), and Teal (1986) indicated that there appeared to be differences in the amount of literacy experiences that young children had at home. Purcell-Gates further pointed out that such differences are reflected in children's literacy knowledge.

Additionally, there is an emerging line of research with a focus on ESL children's positive home literacy experiences. For example, Delgado-Gaitan and Trueba (1997) described Hispanic children's home
literacy experiences. They found that children’s literacy activities involved interaction with written texts beyond school learning. More importantly, regardless of English proficiency levels, the parents read materials in Spanish to children (e.g., letters from Mexico and newsletters from school) and sometimes in English. Some parents even made efforts to learn how to read books to their children by attending ESL classes. Oral translation for their parents became one of the common literacy practices for these children. Other studies (Caplan, Choy, Whitmore, 1991, 1995; Caplan, Whitmore, and Choy, 1989; Kang, Kuehn, and Herrell, 1996) examining Asian parents’ support reported similar findings. The two large-scale and multiple-site studies on Indochinese refugees (Caplan, Choy, and Whitmore, 1991, 1995; Caplan, Whitmore, and Choy, 1989) indicated a positive relation between parents’ reading to their children as well as supervision of homework and the children’s school success, regardless of parents’ English proficiency levels.

Research to date on home literacy experiences focused on ESL children of all grade levels. With an evolving understanding in the importance of early literacy development, a great interest emerged among teachers and researchers in learning more about young children’s home literacy experiences. Moreover, a rapidly increasing population of young ESL children in American schools has given rise to a need to better understand and value these children’s home literacy experiences. Therefore, in this study, I addressed the following three research questions: What were the selected young Chinese ESL children’s literate home environments? What were their Chinese literacy experiences? What were their English literacy experiences?

METHOD

Given the research questions of this study requiring a focused and detailed examination of young ESL children’s home literacy experiences, I used a multiple case study (Yin, 1994) as the appropriate research design. A multiple case study allowed me to investigate home literacy experiences as well as contexts where such experiences occur without my external manipulation (Merriam, 1988; Yin, 1994).

PARTICIPANTS AND SETTINGS

The kindergarten teachers who expressed their interests in learning about ESL children’s home literacy experiences helped me obtain an
initial pool of potential participants. After I secured research permission from the parents, six parents were willing to participate in this study. The age of the children ranged from 5 to 6. Four children were born in the United States; two came to the United States at age 2. Table 1 provides a brief description of participating children and their families.

Table 1

<table>
<thead>
<tr>
<th>Name</th>
<th>Chinese Dialects</th>
<th>Parents' Educational Levels</th>
<th>Parents' Occupations</th>
<th>Siblings</th>
<th>Grandparents Living in the Same Household</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ling</td>
<td>Mandarin YunNan</td>
<td>Both: literate in Chinese</td>
<td>Father: advanced English communicative skills</td>
<td>Father: restaurant waiter</td>
<td>One younger sister</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Father: limited English communicative skills</td>
<td>Mother: no job</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eng</td>
<td>Mandarin Cantonese</td>
<td>Both: literate in Chinese</td>
<td>Father: factory worker</td>
<td>One elder brother</td>
<td>Both: no English</td>
</tr>
<tr>
<td></td>
<td>Cantonese</td>
<td>Father: advanced English communicative skills</td>
<td>Mother: acupuncture doctor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fan</td>
<td>Cantonese</td>
<td>Both: literate in Chinese</td>
<td>Father: casino dealer</td>
<td>One elder brother</td>
<td>Both: basic English communicative skills</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Both: basic English communicative skills</td>
<td>Mother: casino maid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dao</td>
<td>Mandarin Taiwanese</td>
<td>Both: literate in Chinese</td>
<td>Father: university professor</td>
<td>Two elder sisters</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Taiwanese</td>
<td>Both: literate in English</td>
<td>Mother: registered nurse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shen</td>
<td>Cantonese</td>
<td>Both: literate in Chinese</td>
<td>Father: restaurant dish-washer</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Father: limited English communicative skills</td>
<td>Mother: assistant manager of front desk in a hotel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wei</td>
<td>Cantonese</td>
<td>Both: literate in Chinese</td>
<td>Father: casino dealer</td>
<td>One younger brother</td>
<td>Both: no English</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Both: advanced English communicative skills</td>
<td>Mother: restaurant waiter</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The children were enrolled in five half-day English-only kindergarten classrooms in a large school district of a western state. Eng and Fan were in the same classroom. In the classrooms of Ling, Eng, Fan, and Shen, the teachers conducted daily 10-minute reading with a whole class. The children had little time to read books of their own choice. In the classrooms of Dao and Wei, however, children were read to on various occasions. They also had time to read books of their choice and participated in the activities for oral language development (e.g., show-and-tell and sharing). However, writing in the five classrooms was limited to coloring and drawing in worksheets.

DATA COLLECTION

To ensure data triangulation (Yin, 1994), I collected data from multiple sources over a six-month period. Multiple sources of data allowed me to capture the diverse and cultural nature of young ESL children's home literacy experiences. I conducted semi-structured interviews with the parents at the beginning and end of the study. The questions for both interviews focused on various aspects of home literacy experiences. After each interview, I asked the parents and children to carry out some literacy activities so that I could observe and document child-parent interactions.

For another source of data, I had at least 10 informal conversations with each parent between the first and second interviews. The purpose of informal conversations was to gather and update information about the children's home literacy experiences. An informal conversation took place when a parent picked up her child after school where I was observing the child's classroom. The conversation contained a parent's responses to my questions regarding update information on home literacy experiences (e.g., What kinds of books is your daughter reading now?). My questions were the same for all the parents. During the conversation, the parent also responded to my questions that arose from previous data analysis, and shared observations of the child's literacy behaviors. For two or three times during this study, the parents invited me to go home with them after school so that they could share with me some literacy activities.

The data were further gathered from the telephone conversations with some parents who sought my professional opinions about teaching literacy to their children. Data collected were in Chinese except those
from one parent. Gathering data in Chinese, with which the parents felt most comfortable, ensured authenticity and validity of the data.

DATA ANALYSIS

Interviews and informal conversations were tape recorded and later transcribed; telephone conversations and observations of child-parent interactions during home literacy activities were recorded as field notes. The transcripts and field notes, if in Chinese, were translated into English. To minimize the meaning loss, a bilingually literate colleague cross-checked the translation. I employed constant comparison method (Glaser and Strauss, 1967) to analyze data. While data collection and analysis were ongoing, I focused initial data analysis on broad categories: literate home environments and literacy practices. As the subcategories emerged, previously coded data were recoded to reflect new subcategories. Coding and recoding continued until data saturation occurred (Guba and Lincoln, 1986). To minimize bias in data analysis, a trained colleague and I compared each other's analyzed categories and subcategories from a same set of data. The discrepancies in our data analysis were discussed and then adjusted. Furthermore, I used memo writing (Miles and Huberman, 1994) to assist me in deepening my understandings of each child's unique home literacy experiences and discovering the patterns across six children's home literacy experiences.

FINDINGS

Case synopses of individual children

Ling, a quiet and sweet girl, lived in a print-rich environment with writing supplies, coloring and story books, and a television set. Ling seldom had school homework or was asked by her mother to do other reading or writing activities to reinforce school learning. Ling enjoyed coloring, drawing, watching TV, and reading supermarket advertisements. Her mother often read Ling's favorite books to or with her.

Eng, an outspoken and enthusiastic girl, was surrounded by English and Chinese books that her mother bought or borrowed from a local library. She was often busy with independent reading, doing homework, coloring and drawing, watching TV, and teaching her mother American English and her grandmother the English alphabet. In addition to supervising the completion of school homework, Eng's mother taught Eng Chinese and reinforced knowledge of print in English by using
environmental print with her, reading books to or with her to do extra homework.

Fan, a shy and self-reliant boy, had easy access to a number of English books. Although he was seldom read to, he spent much time reading independently and watching TV. He was an independent and strategic learner, who thought a lot while reading and watching TV and was skillful at solving problems during his reading. He was resentful at any kind of homework. Fan’s mother taught Fan some Chinese words.

Dao, a shy boy with a sense of humor, had many English books that his parents bought or borrowed from a local library. He was often read to by or read with his elder sisters, as his parents were busy with their professional careers. He had a keen interest in various kinds of animals and always asked questions while reading books. His parents occasionally asked him to copy words from his reading books.

Shen, a quiet and diligent girl, lived in a print-rich environment with writing supplies, coloring books, and English books that her mother bought. Her after school daily schedule was always full of such activities as being read to, reading books to her mother, independent reading, copying, and watching TV. Shen’s mother supervised her completion of school homework as well as home daily activities.

Wei, an outspoken and a confident boy, was always proud to show me what he colored and drew and what he could read. He enjoyed reading supermarket advertisements, and copying down road signs and learning about their meanings. His daily literacy activities were a blend of being read to, independent reading, copying words from his reading books, and watching TV. His parents offered him assistance when he encountered difficulties during literacy activities.

CROSS-CASE COMPARISONS

Literate home environments

Literate home environments were evident in the parents’ provision of print and print-related materials. I noted during home observations, a television set, a number of English books, English newspapers, TV guides, writing supplies, and coloring books. In the homes of Fan and Eng, there were several Chinese books. Eng and Fan each had an electronic bilingual Chinese-English translator. Interestingly, there were always children’s works completed at school or at home displayed on the refrigerators. Both Eng’s mother and Dao’s father took their children to local libraries to check out books. Shen’s mother bought whatever books
Shen loved, and she just wanted Shen "to have a habit of wanting books and wanting to read."

In addition, literate home environments were present in the way that parents and sometimes grandparents demonstrated interests in learning English, and modeled meaningful use of both Chinese and English. The parents considered reading books to or with their children as an opportunity to learn English. The parents of Ling, Eng, Fan, and Wei willingly accepted the children's correcting their mispronunciations of English words. The parents of Eng, Dao, and Shen, though with a relatively higher English proficiency level, still asked their children about English equivalents for some Chinese words. During the second interview, some parents commented that their children had become more confident in their knowledge of English and more motivated to learn it.

Another aspect of literate home environments was the parents' daily interactions with print that served as modeling for their children. Based on my interactions with the parents and observations, I noted that they read advertisements before going grocery shopping. Some parents wrote a grocery list in Chinese; others wrote it in English. The parents often read a TV guide for daily shows and newspapers in English or in Chinese.

**Chinese literacy practices**

**Functional use of Chinese.** The children's use of Chinese was mostly oral communication with their parents, siblings, and grandparents. Some children also had experiences with written Chinese. The parents of Fan, Dao, Shen, and Wei mentioned that their children often showed interests in knowing what the characters on a calendar were. The parents also reported that their children wanted to learn about the characters on the store and restaurant logos in a Chinatown. Eng, Dao, and Shen often pretend-read a Chinese menu while dining at a Chinese restaurant. Eng explained, I read a Chinese menu, eat Chinese food, and really feel like a Chinese."

**Chinese literacy activities.** Several parents engaged their children in learning Chinese. Fan's mother sent him to a Chinese school, and also taught him to read some basic Chinese characters by asking him to read after her pages from a Chinese book. Using a different method, Eng's mother taught her some Chinese sight words.

*I teach her Chinese starting with the simple characters, for instance, how to write water and hand in Chinese. I also teach her how to write sun and moon in Chinese while Eng and I were reviewing English words, sun and moon. On the calendar, there are Chinese characters for*
Monday, I teach her each character; then we review these characters for Monday when the next week comes.

By comparison, Shen’s mother used Chinese as a tool to help Shen comprehend an English book. In the beginning, she first told Shen in Chinese about the book and then read it to her in English. As time proceeded, she first read the book to Shen in English and, if Shen did not understand it, her mother then translated the book into Chinese.

English Literacy Practices

Functional use of English. The functional use of English literacy was most evident in the three areas. First, there was an increasing use of English as a communication tool at home. Eng, Dao, and Fan talked to their brothers or sisters in English more often. Wei tended to speak English to his parents, grandmother, and whoever came to his home for a visit. Ling and Shen, in a detailed and fluent fashion, explained to their parents about school activities more often in English than in Chinese.

Second, the children became increasingly interested in and aware of using environmental print. The children, observed by their parents, often shouted out with excitement food labels at a supermarket. The parents, in turn, used environmental print as a rich source for their children to learn English. The mothers of the children, except Dao’s, encouraged their children to read advertisements and coupons to select food to buy at a supermarket. Eng’s mother asked her to cut words and pictures to paste on the sheet of a target letter (e.g., apples on an A sheet). Similarly, Shen’s mother asked her to circle the pictures and words that started with a target letter. Fan was the only child who enjoyed reading the newspaper every day.

Third, the children, with assistance from a parent or sibling, often read a TV guide for their favorite shows. Ling, Dao, Fan, Shen, and Wei often checked with their parents to make sure that they were looking at the right page with the shows. According to her mother, Eng would read aloud several shows from a TV guide to obtain her mother’s consent before watching.

English literacy activities. The parents of the six children agreed that the Chinese language was important; they, however, never overlooked their children’s English learning. Ling’s mother expressed the wish of the parents for their children, “In order for Ling to go to college, she has to have good English. After she gets a degree, she will have a decent job and win others’ respect because she is well educated.” The parents engaged their children in a variety of English literacy activities to
"help them become successful readers and writers," as Shen’s mother remarked.

The first literacy activity was being read to. Five of the six children were often read to except Fan whose mother was not sure that her English was good enough. The books, mostly related to school learning, consisted of stories and information. Each book was read at least two or three times. Based on the accounts of the parents and my observations, the parents were reading books as if telling stories. The parents seemed to share the belief "that learning English is just like learning Chinese. It requires a lot of practice and memorization. They [the children] should practice and practice so that they will remember English words.” The parents frequently stopped reading to assess the children’s knowledge of print. For example, Eng’s mother, after reading the page of colors, asked Eng, “Now, how to spell yellow?” Shen was often asked to find a word on a page beginning with a target letter that she was learning at school. The parents of Eng, Shen, and Wei concluded each book reading by asking them to copy words from the book. The parents often checked the children’s comprehension at the end of story reading as well as asked children’s personal responses to the story (e.g., Do you like this book? Is Cinderella happy now?). Additionally, some parents assisted the children in developing an awareness of speech-to-print match. Eng’s and Shen’s mothers as well as Wei’s parents finger pointed every word on a page while reading.

As the study proceeded, two new patterns of parents’ story book reading emerged. One pattern indicated that the parents were reading, not telling stories to the children. This new pattern likely resulted from children’s increasing interests in and knowledge of print. Eng, Ling, Shen, and Wei noticed a discrepancy between their mothers’ oral reading and words on the page. Ling, for instance, questioned her mother when she skipped unknown words.

Another pattern found parents gradually moving away from asking the children too many questions to check their knowledge of print. Instead, the parents focused on children’s comprehension of books. Based on numerous informal conversations with the parents and the second interview, the parents came to realize that the children were interested in what was happening in a book. Such interest was demonstrated in children’s retelling books after being read to at home and at school.

The second literacy activity was independent reading. The data revealed variability in the children’s frequencies in independent reading. Fan was the only child for whom independent reading was the main literacy activity at home. Dao, Eng, Shen, and Wei read books more often
than Ling, although Ling read more toward the end of the study. The children read favorite and easy books more than one time, and often abandoned difficult books in the middle of reading and seldom picked them up to read again unless the parents or others first read to them and repeated it several times. Over the course of the study, the children had also developed their unique interests in different types of books. Ling continued her love for fairy tales but started exploring informational books. Eng still considered informational books as her favorites. Both Dao and Fan were fascinated with books of different animals. Shen still only loved fairy tales. Wei, on the other hand, developed a wide variety of interests in books, including those about animals, fairy tales, and fantasy.

Even though the children were reading independently, they could always obtain assistance from their parents. The children considered their parents' prompt and satisfactory responses to their questions very important. Wei would get very upset and even lose his temper if his father did not immediately tell him the meaning of an unknown word. When Ling's mother did not have an explanation for Ling's unknown words, she would tell Ling to copy down the words and later ask her dad. Eng's mother did not permit Eng to use an electronic English-Chinese translator for an unknown word because "Once she used the translator, she would depend too much on it and she was not going to memorize words." As I observed, Eng's mother first said the word, then explained it by using it in different sentences, and later asked Eng to copy it. Shen's mother used a similar approach to explaining to Shen unknown words.

Fan was a persistent learner in that he would ask everyone about unknown words, starting with his mother, brother, and grandmother until he got relatively satisfactory explanations. Then, he cross-checked the explanations in his electronic English-Chinese translator. Like other children, Dao asked questions about his reading books. Unlike other children, his questions changed over the course of the study, which indicated his developing knowledge of print. In the beginning, Dao tended to ask questions about pictures (e.g., What is it?). Toward the end of the study, his questions were primarily about words (e.g., What does this word say?).

The third literacy activity involved reviewing school learning. The parents assisted, to some extent, the children in reviewing content of school learning by supervising completion of school homework and providing extra homework. Ling did not have homework from her school or home, but Ling's mother checked Ling's knowledge of print during her
reading aloud to Ling. Fan was often required to finish his homework before watching TV; like Ling, Fan never did any copying words at home. Eng and Shen were asked to do a lot of copying based on what was taught at school. Eng's mother checked out library books related to what Eng was learning at school. Shen's mother bought activity books to help Shen with the alphabet and sight words. Both Eng and Shen copied words from the books. In addition, Shen was required to read to her mother the books from school and to name pictures starting with a target letter.

The fourth literacy activity was coloring and drawing. The six children enjoyed coloring, but at first paid little attention to print associated with the objects or people that they were coloring. For instance, Shen pointed at the picture of Mickey Mouse as a response to my question, "Where on this page can you find the words, Mickey Mouse?" Only three out of six children tried to label their drawings. The labels may or may not be associated with the drawings. Ling wrote down Dad, Mom, and the names of her sister and herself in her drawing. Eng put down numbers, letters, and some color words; Wei often put a stop sign, and some color words and numbers in his drawing.

Toward the end of the study, the parent and my observations of the children indicated that the children started making sense of the relationship between words and pictures. For example, the children often asked their parents about the names for the pictures in their coloring books. In the drawings by Dao, Fan, and Shen, there appeared more and more words, although perhaps not related to the drawing. Ling, Eng, and Wei, in their drawings, made a closer connection between words and pictures.

The fifth literacy activity was watching TV. All parents viewed TV as an important source of perfect American English input. Dao's mother explained, "I don't want to teach Dao English because I am afraid that my Chinese accent will affect Dao's English. He can learn perfect American English from different TV shows." The children watched TV shows ranging from those with primary educational focus (e.g. Sesame Street) to those with a combined focus of education and entertainment (e.g., Wishbone). The mothers of Ling, Shen, and Wei reported spending at least one hour per day watching TV with their children. They asked the children questions related to the ongoing events on TV and responded to their inquiries.

While watching TV, the children demonstrated different behaviors, which indicated their active engagement in the ongoing events on TV. Ling exhibited varying facial expressions and often repeated words from a TV show. Eng and Shen were able to retell events in a show
immediately after it and even a few days later. Dao and Wei were proudly shouting out the words that they could understand. Most interesting was Fan's behavior. His mother recounted, "He practices saying what is learned [from TV shows] every day. He talks to himself [while watching TV]. While he is talking, nobody can be talking. He says, 'You interrupt my story in my head…'"

**DISCUSSION**

*The diverse and cultural nature of home literacy experiences*

The findings of this study reflect the diverse and cultural nature of the home literacy experiences of the six Chinese children. The diverse nature is present in (a) literate home environment; (b) a wide range of literacy activities both in Chinese and in English; (c) and different degrees of parental and other family members' involvement. The children had easy access to a variety of print materials and writing supplies. An important element of literate home environments involved the adults' interests in learning English, functional use of print within meaningful social contexts, and engaging the children in purposeful use of print.

Not all the children participated in the same amount of literacy activities in both Chinese and English, although they all experienced similar types of literacy practices (being read to, independent reading, reviewing school learning, coloring and drawing, and watching TV). Eng for example, had more experiences with Chinese literacy practices than Wei. Fan read English books independently more often than other children did. Some of these activities centered more on reinforcing school learning; others reflected a combined emphasis of reinforcing school learning, and promoting enjoyment of learning. Through these literacy activities, the children exhibited different levels of growth in literacy knowledge as well as interests in and love for books.

The parents and other family members were involved in the children's literacy experiences more often in some homes than in others. Fan's mother was least involved in his literacy learning as she stated that her English was not good enough and could not help him. The support from the mothers of Eng and Shen was the greatest compared to that from the mothers of Ling, Dao, and Wei. Only the fathers of Ling, Dao, and Wei and the grandmothers of Eng and Fan had some levels of involvement. Dao’s sisters were the only siblings who played the unique role of parents and were involved in his home literacy learning experiences at home. Although there existed variability in the degrees of
involved, parents and other family members provided the children with as much support as they could.

In addition to the diverse nature, the Chinese ESL children's home literacy experiences mirror the influence of cultural beliefs and practices that their parents held. Regardless of English literacy levels, the parents held the similar beliefs about the importance of their children's education. Driven by this set of beliefs, the parents engaged the children in varying literacy activities every day or at least provided a nurturing environment as in the case of Fan's mother. Furthermore, the way that the parents and other family members engaged in the children in various literacy activities, such as copying, reflected their own cultural beliefs and Chinese learning experiences. That is, the adults learned to read and write Chinese by rote memorization and ample practices when they were at school in the Mainland China, Taiwan, or Hong Kong.

Another aspect of the cultural nature reflected in the children's home literacy experiences was the use and maintenance of Chinese. Chinese was evidently a tool for communication between the children and other family members. It was also a crucial tool for the children to develop an interest in and knowledge of print as a result of seeing Chinese in their environments and observing family members using Chinese. To Eng, Fan, and Shen, the experiences of listening to stories of English books read in Chinese or learning about Chinese might have helped them with connecting Chinese literacy with English literacy in terms of a love for books and stories.

CONCLUSIONS AND IMPLICATIONS

This study, with a focus on six Chinese kindergartners and their parents, explores young ESL children's literate home environments and their Chinese and English literacy experiences. This study is important in two ways. First, the findings of the study produce further support for the premise that young children's home literacy experiences support literacy development to various degrees, regardless of factors such as low SES status and speaking English as a second language (Caplan, Choy, and Whitmore, 1991, 1995; Delgado-Gaitan and Trueba, 1997; Goldenberg, 1987; Purcell-Gates, 1996; Purcell-Gates, L'Allier, and Smith, 1995; Taylor and Dorsey-Gaines, 1988). Second, the findings suggest some implications for teachers and parents of ESL children.

After I completed this study, I shared the findings with the five teachers of the six Chinese ESL children. The teachers were somewhat shocked by the findings. They were surprised to learn that the Chinese
ESL children had such diverse opportunities to interact with print as opposed to their assumption that the parents probably asked the children to do some extra homework in addition to school homework. The teachers of Ling, Fan, Dao, and Shen were amazed at the vast knowledge about print that they demonstrated during various home literacy experiences. At school, the children were often too shy to actively participate in classroom literacy activities to demonstrate their literacy knowledge. Dao's teacher could hardly believe that his parents were not as much involved in his home literacy activities as she expected, because Dao's parents who were highly well-educated, should know the importance of parental involvement. The teachers of Ling and Fan, however, were happy to learn that the children's mothers, though not very proficient in English, were also supportive of school learning.

The teachers' reactions to the findings of the study lead to one fundamental implication related to teacher perceptions and knowledge of ESL students. The diversity in the children's home literacy experiences urges teachers to challenge the stereotypes of ESL children as "Asian models" portrayed by the media (Caplan, Choy, and Whitmore, 1991, 1995). Each child needs to be perceived as a unique individual from a unique home environment with varying home literacy experiences and knowledge in English and native language. It is detrimental to overlook differences in ESL children's home literacy experiences and to assume that all ESL children from one ethnic background possess rich literacy knowledge while those from another ethnic background do not. Stereotypical assumptions could prevent classroom literacy instruction from addressing the needs of individual ESL children.

Another implication focuses on teacher pedagogical practices that support and complement ESL children's home literacy experiences (Purcell-Gates, 1996). Teacher support can be accomplished by continuing to engage ESL children's actively in various literacy activities that would strengthen and enhance their literacy knowledge, which have developed through home literacy experiences. Additionally, teacher support needs to extend to ESL children's native language. Although I do not consider it possible for every teacher to learn their ESL children's native language, I do believe it is important for every teacher to learn about ESL children's native language. Teachers can gain knowledge of a common native language through bilinguals in a community or an uncommon native language from international students from a local university.

Knowledge of ESL children's native language, along with their home literacy experiences in native language, would provide teachers with insights into similarities and differences in literacy development and
transfer literacy skills between the two languages. Such insights would build foundations for responsive literacy instruction for ESL children. In particular, a teacher's interest in learning about ESL children's native language, in turn, promotes their self-esteem (Cummins, 1994). Teachers can also encourage ESL children to share their native language with the class in a language project or thematic unit (Jiang, 1997).

In complementing home literacy experiences, teachers must gear classroom literacy instruction toward the areas in which ESL students have limited experiences and literacy knowledge (Xu, in press). For example, Fan had little experience with being read to at home. It become vital for Fan to have many opportunities to hear books read aloud to him at school in order for him to develop literacy knowledge such as speech-to-print match and reading with fluency and expressions.

A third implication is associated with parent provisions of home literacy experiences for their ESL children. Similar to teacher reactions to the findings of this study, the parents were surprised but relieved to learn that what they were doing with their children at home was supportive of school learning. Their responses may indicate that parents of ESL children often lack confidence in their abilities to assist their children's English literacy development. Communicating with teachers about their children's English literacy knowledge may validate and reassure the value of home literacy experiences for parents. On the other hand, some home literacy activities (e.g., copying words), often colored by cultural beliefs and practices, may not be the most effective ways to develop ESL children's literacy knowledge. Therefore, parents need to be open-minded to teacher suggestions of authentic literacy activities, which would maximize ESL children's active interactions with print. For example, teachers can introduce to Ling's parents interactive storybook reading (Klesius and Griffith, 1996) and model it for them to facilitate Ling's active participation and to assist her in making a transition from being read to independent reading.

Additionally, parents' over-emphasis on their ESL children's learning English may cause a possible loss of children's ability to communicate in native language. Parents need to be informed by their children's teachers of the empirical and research evidence, which supports the important role that native language plays in their ESL children's English literacy development. The parents of ESL children, while celebrating their children's accomplishments in English literacy, need to remember promoting native language literacy, starting with simple and easy activities, like read-aloud and use of environmental print.
If ESL children are to receive mutual and continued support from school and home for literacy learning in English and native language, it seems essential that both teachers and parents (or other family members) are familiar with their literacy experiences in both settings. Teachers and parents need to frequently exchange valuable information about home and school literacy experiences. Only when teachers and parents of ESL children become partners, the children’s chances to successfully develop literacy both in English and native language can be maximized.

REFERENCES


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Critical teacher thinking and imaginations: Uncovering two vocabulary strategies to increase comprehension

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ABSTRACT

Dedicated teachers who were taking a university course for reading assessment and diagnosis candidly discussed students’ problems with vocabulary words that impede successful reading comprehension. Their viewpoints about ways to help students learn to use vocabulary strategies effectively led to the development of two vocabulary strategies that were based on cognitive and personality styles. The interactive process of developing the strategies pushed the teachers’ imaginations and created a challenge for the teachers and their college professor.

The graduate students in my university graduate reading diagnosis and assessment course excitedly shared the importance of designing specific reading activities addressing students’ cognitive skills and personality styles to increase their motivation to read. The focus of the course was to assist teachers in learning how to assess and diagnose students’ reading strengths and weaknesses. The graduate students were expected to select a student who was having difficulty with reading. In addition, they were to administer and analyze results of authentic reading assessments for the student, and design instructional plans. During this process, many of the graduate students decided to focus on vocabulary strategies because the students they selected were in the upper elementary grades and had limited vocabularies that negatively influenced their reading comprehension. As a result, the focus of this article is to share the teachers’ problem solving processes as they linked research-based vocabulary and comprehension development to student motivation, cognitive skills and personality styles.
Initially, the teachers shared their goals for improving reading instruction during class discussions. The teachers yearned to increase their knowledge about reading instruction, particularly vocabulary knowledge. For example, a teacher stated, "I feel helpless in aiding those who struggle in reading." One teacher stated, "I would like my students to leave my classroom as readers and to see reading as enjoyable." Another teacher shared that "Instruction in word meanings must go beyond the definition and include experiences in which the student builds relationships between new words and what h/she knows." The teachers' reflections indicated that they were eager to learn how to increase their students' vocabulary capabilities and time that they spent reading.

TEACHER DISCUSSIONS CONCERNING STUDENT MOTIVATION

The teachers selected and discussed research concerning reading motivation that suggested that kindergarten and young children believe they can learn to read and have high expectations for their learning (Eccles, 1993). In contrast, students in upper elementary grades are less confident about their ability to learn and often become frustrated and unmotivated to continue efforts to engage in literacy experiences (McKenna, Ellsworth, and Kear, 1995; Stanovich, 1986). Since the teachers who designed the strategies mainly taught students in middle and upper elementary grades, they found that words that are not recognized easily interfere with comprehending text. When words and their meanings are not understood, students become frustrated and often have comprehension problems (Graves, Juel, and Graves, 1998). As a result, the teachers agreed that vocabulary problems cause comprehension difficulties and interfere with motivation to read for many upper elementary grade students.

TEACHER DISCUSSIONS CONCERNING STUDENTS' VOCABULARY KNOWLEDGE

The following quotes reflect the various reading vocabulary concerns expressed by the practicing teachers in my graduate class and their desire to increase their knowledge about vocabulary instruction to increase their students' comprehension.

"I had a child who could read aloud very well but would score low on skills tests. I didn't know where to go from there... It was very confusing. The scary thing, however, is that a large portion of my children need extra assessment and remediation. I know that my students have
difficulty in understanding unfamiliar concepts. They have no strategies to call on when they stumble” (teacher, Denise Smith).

“One problem with comprehension is that a reader may be able to read the word, but the meaning or definition is unfamiliar. A teacher must constantly assess in order to know if there is a comprehension problem. One idea is to have students recall information” (teacher, Cathy Hagelgan-Grubbs).

TEACHERS' DISCUSSIONS EMPHASIZING VOCABULARY AND COMPREHENSION RESEARCH

The teachers inferred that students in Denise and Cathy’s elementary classes had vocabulary problems and lacked the capability to independently use effective vocabulary strategies to increase their reading comprehension. Since the purpose for reading is to comprehend text, they shared that it is essential that students become strategic readers who can construct meaning through activation of prior knowledge. They concurred that students need to be able to freely discuss topics with peers to develop critical thinking in noncompetitive environments and interact with meaningful texts and authors to increase reading comprehension. These interactions during positive experiences with others, increases students’ motivation, enjoyment, and interest during literacy activities. Importantly, the conversations included discussions about teacher initiated strategic instruction that leads to independent learning due to students use of reading comprehension strategies. The success of comprehension strategies depends on the students’ ability to become strategic readers as risk takers who interact with others socially when sharing literacy interests.

The teachers connected vocabulary development to helping their students become strategic readers. They understood that strategic readers need the ability to self-select strategies and derive meaning from texts of various genres. The class extended their knowledge by discussing a study by teachers at the Benchmark School (Pressley, Gaskins, Cunicelli, et al., 1991) that indicated that teacher explanation of strategies, mental modeling, and student use of strategies with extensive feedback across different tasks requires extensive practice. Pressley et.al. (1991) further indicated that it is “essential to provide extensive information to students about when and where to apply the strategies were learning, as well as information about the learning benefits produced by use of strategies (Pressley, 1998, p. 211). The teachers agreed that transference of the new strategy to other academic tasks should also be discussed with
students. Throughout the learning of strategies, constant teacher reinforcement of student use and reflection of the strategies increase their motivation to use the strategies independently. Such positive task orientations and interactions increase the students’ expectations for learning to comprehend materials. The students learn to associate their success with their efforts (Schunk, 1991).

Beyond learning effective strategies that motivate students to learn, authentic assessments related to students’ reading comprehension capabilities were advocated to assist teachers in identifying specific reading comprehension difficulties plus pinpointing students’ ability to select and independently use comprehension strategies. They realized that assessments should include discussions with students about whether they use or do not use vocabulary strategies for effective comprehension of text. Further, they discussed how students should also learn to self-assess their use of comprehension strategies for established reading purposes.

Discussions centered on the value of students appreciating the purposes of strategies to help them understand why they should implement vocabulary strategies when they are experiencing difficulties making meaning of words. Additional shared research emphasized the importance of teaching students to use their cognitive skills to enhance learning (Flavell, 1977; Vygotsky, 1978; Morgan, 1997). Meichenbaum and Asarnow’s (1979) study reinforced the notion that students can develop cognitive skills if they are taught to direct their use to the academic tasks they are acquiring when using strategies to increase comprehension.

Because reading is a cognitive and interactive process of obtaining meaning from text and discussion of text, development of metacognitive (students thinking about their thinking) my students read about aspects of reading and writing comprehension to determine how students can become strategic readers. According to Paris, Lipson, and Wixson (1983) students who develop metacognition can actively reflect about their cognitive processes to evaluate and monitor their reading comprehension.

“I can understand why I have difficulty correcting comprehension problems. I possessed many characteristics of a good reader and I assumed students automatically performed the mental tasks of self questioning and rereading. It’s hard to know what a child is or is not thinking while they are reading” (graduate student, Cheryl Daughterty).

The teachers decided they should model metacognition strategies when they are reading aloud to their students. The teachers practiced sharing their thinking processes during reading and discussed strategies they use for successful comprehension with their students. Conversations included research and classroom application ideas concerning
metacognition for declarative and procedural knowledge purposes. Students indicate declarative knowledge about text when they recognize different text structures, discuss and understand goals and tasks, and understand their strengths concerning comprehension of various texts. Declarative knowledge "does not imply any ability to adapt to a range of situations or any attempt to monitor reading progress" (Raphael and Hiebert, 1996, p. 196). Procedural knowledge indicates students' ability to select strategies and skills for successful reading comprehension. Thinking about unfamiliar words and learning how to understand their meanings in contexts helps students value and develop an interest in words instead of an aversion to unfamiliar words.

Long term memory of vocabulary words as sight words is also considered an essential component of successful comprehension. Organizing words and recognizing relationships between words, help students retain the words in their long term memory. Creating visual images, understanding word origins, and recognizing special features within words such as multiple meanings and connotations, provide students with the opportunity to relate personally to words in meaningful contexts. Frequent exposure to words and learning events that build awareness concerning word knowledge leads to students' interests in words. The more associations that students can provide among words, the better the students will be able to understand the words in texts of various genres.

"When a child answers 'I don't know' to a comprehension question, sometimes this inability stems from lack of prior knowledge or it can reflect the reader's hesitancy to take a risk or lack of awareness that such risk taking is not only allowed but desirable, I hope my classroom encourages risk taking" (teacher, Donna Tapp). Donna's statement implies that if students feel secure in a socially interactive, thought provoking, noncompetitive, learning environment, they frequently take risks and freely share personal interpretations of text with their peers and teachers.

"Word knowledge is vital in the comprehension process of reading. Instruction in word knowledge/meaning needs to go past definitions and include experiences that the learner can relate to so relationships between the new words and the experiences can be formed" (Lori Barentine, a teacher in my class). Lori offered this after reading our class text, Reading Diagnosis for Teachers (Barr, Blackowicz, & Wogman-Sadow, 1995).
TEACHER DISCUSSIONS OF FREQUENT READING
AND EXPANDED VOCABULARY KNOWLEDGE

Interestingly, Lori’s thoughts led to discussions centered on teaching vocabulary while exposing students to authentic literature and related activities of interest to increase comprehension. The teachers decided students’ vocabulary must reflect wide reading experiences while they are learning new words. During this process students need to develop an interest in words. Research indicated that first graders have a speaking vocabulary of approximately 5,000 words and will increase to about 50,000 words when they enter college (Just and Carpenter, 1987). “Students learn to read 3,000 to 4,000 words each year; it quickly becomes clear that most of the words students learn are not taught directly” (Graves, Juel, and Graves, 1998, p. 187). The lexicon of words stored in memory provides students with a lens to understand the meaning of print. Obviously, students learn many words through a wide range of reading experiences. The more words known by the reader, the better are their chances to understand and enjoy what they are reading.

To increase students’ ability to solicit meaning from words the teachers decided to design vocabulary strategies that students can eventually implement independently while reading and thinking about text to help them with their reading comprehension. Students, thereby, need to develop vocabulary knowledge during the reading process, involving their ability to extract word meaning in context.

Research by Fielding, Wilson, and Anderson (1986) found that many fifth graders spend little time reading. Since the teachers realized many middle and upper elementary students do not value reading, they acknowledged that it would be difficult to motivate students. Due to their conversations, the teachers were building personal knowledge about how to design vocabulary strategies that were well-grounded in research, related to their reading goals, and would motivate their students to learn effective vocabulary strategies to increase comprehension.

TEACHER DISCUSSIONS LINKING READING RESEARCH
TO COGNITIVE SKILLS AND PERSONALITY STYLES

Energetic sharing about motivation and comprehension research were linked to cognitive skills and personality styles of students. Since students’ personal characteristics influence their motivation and conscious comprehension efforts toward reading, the teachers determined that they needed to design instructional plans that included modeling,
sharing, and scaffolding of students’ learning encompassing experiences for individual cognitive skills and personality styles.

"While reading about vocabulary, the first thought that came to mind was something I heard a small child say many years ago. When President Reagan was running for re-election, a reporter interviewed a kindergarten class. The reporter asked the children what they thought of President Reagan’s Defense Plan. One boy replied that if you leave the fence open the dog will get out and dad will be mad. I think that this illustrated how easy it is for children to confuse unfamiliar vocabulary. When dealing with poor readers I agree that we should include motivation, time for reading, instruction of key concepts for vocabulary and strategy development for effective context use" (teacher, Mike Mau- riello).

Mike’s concern led to teacher reflections emphasizing the need for student discussion before, during, and after reading or listening to a story to increase comprehension related to vocabulary difficulties. The teachers stressed that interpretations based on personal experiences can either mislead or guide a student when they are attempting to comprehend the meaning of vocabulary words in narrative or expository text. Students need to think about the purpose of a particular text and interact with the author to construct meaningful interpretations of text. Due to different background knowledge affecting vocabulary as well as use of cognitive skills and personality styles, students need opportunities to share their vocabulary knowledge to motivate them and retain meaningful information in long term memory.

Mike’s reflections indicated the importance of recognizing the individual personality styles and cognitive skills of students in terms of academic performance as suggested in the research of Flavell, (1977), Vy-gotsky (1978), Morgan (1997), and Meichenbaum and Asarnow (1979). The teachers shared additional research of the 20th century concerning studies of individual differences and experiences that were examined concerning cognitive and personality styles in order to determine how individuals perceived their experiences and retained information in long term memory.

After reflecting on the research, the teachers emphasized the necessity for students’ reading success to be linked to experiences that affect them personally and socially while expanding their critical thinking skills. The theoretical implications of including cognitive skills and personality styles of learning within the curriculum requires the implementation of innovative instructional approaches that are child-centered and individually appropriate. These child-centered approaches
expand students' awareness of their cognitive skills and personality styles and create an awareness of others' ways of learning. Related conversations suggested that since students' process information differently, their perception and interpretation affect the amount of attention they will employ during the learning process.

The teachers came to significant conclusions after discussing and researching the cognitive and personality styles of learning, vocabulary, and comprehension knowledge. They concurred that students who have difficulty with vocabulary because of limited schemata (prior knowledge) require assessment and instruction related to their personal styles of learning to increase motivation to read. As a result, the teachers decided to design, model, and scaffold two strategies to help their students implement effective comprehension strategies. Through teacher observations and conversations with students in their classrooms, the graduate students developed ideas and suggestions for the strategies. They also determined that the strategies could be useful as informal assessments to indicate whether the students understood how to independently implement the strategies and retain information learned.

DESIGNING AND ASSESSING VOCABULARY STRATEGIES

To overcome their students' reading dilemmas and incorporate what they had learned during the course, the teachers decided to develop two strategies ("Stylish Words" and "Synonym Substitution") to integrate vocabulary instruction across the content areas and to provide their students with frequent reading opportunities. As a result, the vocabulary strategies infused interest, effort, personality styles and cognitive skills, risk taking, literacy experiences, and creative learning experiences within noncompetitive classroom context.

Stylish Words

The strategies presented are the "fruits" of the teachers' inquiry, discussions, research, and commitment during the graduate course. The following two vocabulary strategies evolved: "stylish words" and "synonym substitution."

The graduate students constructed the vocabulary strategies around the students' cognitive and personality styles based on the research of Morgan (1997), Myers and Briggs (1980) to increase student motivation. In addition, the teachers also emphasized the importance of research (Pressley et.al. (1991), Raphael and Hiebert (1996), Barr, et.al. (1995)
that linked metacognition to vocabulary and comprehension development. As a result, they had the students share their thinking about how they were using the strategy and when it would be helpful for them to initiate the strategy when learning vocabulary words independently. The teachers also encouraged the students to read more frequently to increase their vocabulary. If students encountered difficult vocabulary words, the teachers modeled how they would use the strategy with a partner or on their own to discover the meanings of words that interfered with comprehension.

During the process, the students interacted by sharing different ways of implementing reading strategies based on their own personal styles of learning. The strategy, “Stylish Words,” is for students who identify their personality styles based on the research of Myers and Briggs (1980) Type Indicator (MBTI) and/or Silver and Hanson (1994).

The assessments determined personality and cognitive styles indicating areas where individual students focused their attention and decided how to use information during the learning process. Using the four personality styles from Silver and Hanson (1994), ST-Sensitive Thinker (students who like to create lists and brainstorm); SF-Sensitive Feeler (students who like to personalize learning); NT-Intuitive Thinker (students who like to research information); NF-Intuitive Feeler (students who like to use imagination and create new words), the teacher lead the students through the following four word exercises. The exercises strengthened word recognition, vocabulary, spelling, and increases students’ knowledge of the effects of word origins, and suffixes and prefixes. By combining the four styles every student should be successful within their learning comfort zone and strengthen their other less used cognitive styles through interactions with peers.

The following is an example of how to use the “Stylish Words” vocabulary strategy to increase comprehension. The words should be selected from a narrative or expository text to be shared by the students:

ST: List five words you select and want to learn from the story. (Ex. Mischief).

SF: Write sentences using the five words. Make each sentence very personal to you. (I get into mischief when my mom leaves me in charge).

NT: Research and discuss the origin and definition of the five words. What part of speech is each word? ( Comes from the French meschever, meaning “to come to grief”).
NF: Create new words from the five words by using prefixes, suffixes, pluralization, synonyms, antonyms, etc. (Ex. mischievous).

Next, the students from each group discuss their findings and combine the information in their individual vocabulary journals related to the story. Some of the teachers have used the strategy with their students and found that the students were motivated to share their findings about the words and remembered the meanings of the words while they read their texts. The students were encouraged to talk about the strategy and share how it affects their reading comprehension. The “Stylish Words” strategy was developed by Lori Barentine, Mary Harris, Beverly Key, Donna Tapp, and Christi Zelek.

THE “SYNONYM SUBSTITUTION” VOCABULARY STRATEGY

Two applications of the strategy

1) Students read a passage or chapter as a group. They select vocabulary words written on strips of paper or they select their own difficult words. They do not share the word with anyone. The students decide on a definition, check their definition of the word in context or in a dictionary, and substitute a synonym. Next, they illustrate their selected word or present a dramatic presentation of the word to the other students in the group to identify. Finally, the word is visually presented as an analogy. For example, dagger:knife::saber:sword.

Summary of the strategy:
• READ
• SELECT WORD
• DEFINE
• SUBSTITUTE SYNONYM
• ILLUSTRATE or DRAMATIZE
• CREATE ANALOGY

2) Assign different parts of a passage or chapter to groups to identify difficult words. The group members substitute words that are synonymous for difficult words in the passage. The objective is to make comparisons of vocabulary words and their meanings. The groups “teach” the analogies to the class. Acknowledgement of spelling patterns within the unfamiliar words can also be compared to spelling patterns in unfamiliar words. For example, the spelling pattern /ife/ in the word knife can be compared to the same spelling pattern in the word life. Dramatic presentations and illustrations follow the analysis of the words.
Summary of the strategy:
- READ
- SELECT WORD
- SUBSTITUTE SYNONYM
- TEACH ANALOGIES
- FIND SPELLING PATTERNS
- DRAMATIZE OR ILLUSTRATE

The "Synonym" strategy was developed by Cheryl Daughtery, Pam Goddard, Edna Griggs, Cathy Hathcoat, Hayley James, Denise Smith, and Becky Warren.

DISCUSSION

The dedicated teachers' efforts uncovered thought provoking instructional strategies and activities for reading comprehension that work in real classrooms. The teachers gained an understanding for scaffolding instruction to provide students with opportunities to develop metacognition and understand the selection of reading strategies that complimented their cognitive and personality styles. Further, the students learned to appreciate how individuals are unique in their style of learning. The students also benefited by sharing and selecting comprehension strategies that they were comfortable implementing. The personalization, interaction, and recognition of individual styles of learning while using the strategies, increased the students' ability to interpret the meaning of unfamiliar vocabulary words during reading and enjoyable activities.

Since vocabulary knowledge is highly correlated to comprehension, students can develop rich vocabularies that increase their critical literacy resulting in successful comprehension when teachers provide them with strategies that they can select and apply independently. Once students can aptly apply the strategies during the reading process, their chances for successful comprehension increases dramatically.

In summary, both student-centered instruction, and teacher and student understanding of how the cognitive and personality styles of individuals positively affect academic achievement, are important elements for motivating students to value reading. Building meaningful discussions during interactive sharing sessions such as the two comprehension activities conceptualized by my graduate class, provides opportunities to expand students' critical thinking. Students also build confidence when they develop procedural knowledge as they select effective comprehension strategies.
Kincheloe (1993) sums up teachers' commitment to improving instruction when he stated, "Teacher educators understand that self-directed education undertaken by self-organized community groups is the most powerful form of pedagogy" (p. 198). Kincheloe's reflection exemplified the teachers' sense of accomplishment that resulted from their efforts to improve reading comprehension instructional strategies. The teachers were reaffirmed in their desire to teach and create comprehension strategies. They were overjoyed when they sensed their students becoming aware of their unique and yet collective personality and cognitive styles that affected their academic performance and motivation. They were further rewarded when the students learned to use the strategies to increase their comprehension successfully.

Cultivating imagination and creative teaching that instills critical thinking is rewarding especially when teachers enjoyed the vision of joy reflected in their students' faces during interactions when they began to understand the value of being strategic learners. I was also fortunate to be rewarded when I observed the "fire" ignite in my graduate students. Rather than remaining frustrated by the problems their students experienced while they were learning how to increase their vocabularies and reading comprehension, they became challenged to help them overcome difficulties. Questioning and evaluating instruction can certainly lead to imaginative answers resulting in fulfilling, cheerful, and successful classroom environments.

REFERENCES


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