Scaffolding EFL Learners’ Comprehension of Texts

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INTRODUCTION

Scaffolding has proven one of the most recommended, versatile, and powerful instructional techniques of socio-constructivist teaching (Clark & Graves, 2004). Davis, and Miyake (2004) define scaffolding simply as support in the form of reminders or help. They view scaffolding as a component of a larger set of methodology in activity-based learning: modeling (demonstrating), coaching, scaffolding, articulation, reflection, and exploration. Pearson (1996) points out that scaffolding allows teachers to provide cueing, questioning, coaching, corroboration, and plain old information to help students complete a task before tackling it independently. In this sense, scaffolding is frequently singled out as among the most effective pedagogies available. Synthesizing descriptions by Davis and Miyake, along with Pearson, scaffolding as presented in the study is defined as teachers who say and do to enable students to grasp a text that they could not completely understand alone. That is, scaffolding can lend support to help bridge a gap between what students know and can do, versus what they don’t know or can’t do, but intended to know and do (Gillies & Boyle, 2005). Although there is virtually universal agreement that scaffolding plays a key role in fostering reading comprehension (Lutz, Guthrie, & Davis, 2006; Markee, 2004), limited empirical research exists on how ESL/EFL teachers scaffold learners’ textual understanding and reading comprehension. Study focusing on elementary school teachers is especially scant; we know very little about how to help ESL/EFL readers overcome reading difficulties, let alone promote their reading interest and motivation. Yet recent studies on scaffolding reading have claimed that the best teachers can do to foster students’ comprehension is far from complete. When employed, it typically supports word recognition (Fournier & Graves, 2002); comprehension instruction of any kind draws much less frequent attention (Roehler, 1997). Thus, this paper sets out to investigate how two elementary teachers scaffolded their students’ textual understanding and reading comprehension of English texts.

Cumming-Potvin, Renshaw, and Kraayenoord (2003) explored how bilingual and L2 students shared reading experiences through scaffolding instruction. They concluded that social spaces were constructed via scaffolding, learning and development extended through activities that entailed active participation: experimentation with language, asking questions, making suggestions, etc. Chung (2006) used a think-aloud method to study how technological university EFL students improved reading comprehension after instructional scaffolding. Findings from her study indicated that with teacher assistance, students connected prior knowledge with the current text to bolster textual understanding and thus upgrade reading comprehension. Chung further claimed that scaffolding played a more significant role
with less proficient students: they improved more in post-tests of reading comprehension. Nonetheless, Chung did not go further to compare how the teacher scaffolded more and less proficient students. With this in mind, the current research intends to explore and compare how two elementary teachers scaffold more or less proficient learners, then examine the most effective strategies used by teachers to students.

THE STUDY

Two elementary school teachers of English as a Foreign Language were invited to take part. Primary goals were to investigate and compare scaffolding strategies used by these teachers in the process of instructing more and less proficient students, as well as most effective strategies perceived by each group of students. To attain these goals, the researcher amassed data from multiple sources: instructional data, semi-structured oral interviews, and reading comprehension tests before and after the instruction. As for data analysis, episodes were first sorted out; thematic analyses were then used to group relevant episodes into themes. Four themes on scaffolding instruction were generated as discussion framework for this paper. Semi-structured oral interviewing shed more light on how more and less proficient students perceived effective strategies used on them.

Participants

Two elementary school English teachers, Joy and Sandy, took part. To become familiar with both teachers and create an environment of trust, the researcher conducted informal, one-on-one oral interviews, thereby eliciting information about each teacher’s personal background, general pedagogical beliefs, past educational/learning experiences, and current teaching situation. The session usually lasted 15-20 minutes, with the interviewer delineating goals and importance of the study in an attempt to gain their commitment and confidence. Joy and Sandy answered in Chinese or in English at their discretion.

Joy was an English major before and has been teaching English for ten years, and her school was slightly aloof from the city; thus, only one-third of her fifth graders afforded to attend cram schools. In order to arouse students’ learning motivation and interest, she loves to apply body languages or visual aids, such as pictures, images, to enhance students’ understanding and recall of words and concepts. Similarly, Sandy has been teaching at an elementary school for almost ten years. Five years ago, Sandy switched to English from Chinese, such that she intends to apply methods from Chinese classes to English instruction, which to date has worked out fairly well. However, when encountering instructional problems, she naturally looked for traditional ways of
teaching. To seek solutions, she volunteered to participate in the study. Due to the different educational background, Joy used English as an instructional medium all the time, whereas Sandy applied mostly Chinese as a medium through her scaffolding instruction.

Eight fifth graders, four more and four less proficient students from Joy’s and Sandy’s classes, took part in this study. They were all selected based upon their academic performance compared with their own classmates. Those whose academic performance ranged from 85 to 95 out of 100 points were categorized as the more proficient students (thereafter the MPSs), ranging from 65 to 75 points were classified as the less proficient students (thereafter the LPSs).

**Texts for Scaffolding Instructions**

Text selection was crucial to successful completion of this study. One important consideration is difficulty level. Joy and Sandy were advised to select three texts for their instruction, one for both groups of students, one catering to more proficient learners, and another meeting less proficient learners’ levels. To secure an appropriate level of text for instruction, Joy and Sandy decided to conduct a pilot study that ferreted out appropriate texts based on linguistic level and conceptual difficulties; four fifth graders, two less and two more proficient students, were invited to take part. Based upon results from their pilot study, Joy and Sandy each selected three texts (see Table 1) for the levels of the students they planned to teach. The three texts are all similar in length, approximately 330 words to 380 words.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Common Text</th>
<th>Text for LPSs*</th>
<th>Text for MPSs*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joy</td>
<td><em>The Prince and the Pea</em></td>
<td><em>The Little Red Hen</em></td>
<td><em>A Snake Mistake</em></td>
</tr>
<tr>
<td>Sandy</td>
<td><em>The Prince and the Pea</em></td>
<td><em>How Man and Dog Became Friends</em></td>
<td><em>How Iron Was Found</em></td>
</tr>
</tbody>
</table>

*Note: LPSs refers to less proficient students; MPSs represents more proficient students.*

**Data Collection and Analysis Procedures**

Instructional data yielded pivotal data in this study. Joy and Sandy, along with these MPSs and LPSs, were invited to take part in this phase of data collection. Each student was informed to read two texts and allowed to choose whether they would like to start with Text 1 (Text 3) or Text 2. Each was first asked to read the text individually and then take a comprehension test. After the test, the teacher taught the text to the student. No specification was made regarding reading instruction; both Joy and Sandy were asked to instruct in whatever way they usually did in their regular classes, thereby
affording as natural an instructional mode and producing as naturally an occurring language as possible. After the instruction, the student was required to retake a reading comprehension test. The procedures for the second text were repeated as stated in the first one. The processes of scaffolding instruction were video and audio tape-recorded and transcribed verbatim by two research assistants. After the instruction, each student was interviewed by her teacher in a semi-structured format - i.e., a list of questions (Appendix 1) compiled in advance to guide the interview process. Interviews generally lasted 10 minutes and were audio-taped like instructional data, with Chinese data translated into English and transcribed verbatim by two research assistants. As per Silverman’s (1993) warning against early generalization, the researcher chiefly focused on the observable: acts, setting, participants, events, and gestures (LeCompete & Millory, 1992). To sum up, two distinct methods of data collection yielded two angles with reference to how Joy and Sandy scaffolded more and less proficient readers with three different texts and most effective strategies used.

As for data analysis, in the initial stage, the researcher extensively and intensively read content of transcripts, making notes as she read these numerous times. Teacher’s instructional turns were first highlighted and relevant turns were grouped together as an episode. A scaffolding episode usually began with the sentences such as “Do you understand the word …”, “Do you know why the princess….”, or “What happened?” Then, relevant episodes were grouped together as a scaffolding theme. Ultimately, the researcher utilized the computer to cut and paste relevant episodes in raw transcripts to generate themes as discussion framework: offering explanations, clarifying and verifying student understanding, linking with student background knowledge, and negotiating meaning. Comparative content analysis was applied to discuss and interpret results. Oral interview data yielded the most effective strategies. In sum, episodes referring to similar concepts were assembled into themes (Boyatzis, 1998). Data amassed from interviews answer research queries about students’ evaluation of effective strategy used by teachers. Table 2 as shown below presents a definition and example of each theme. A detailed analysis of how these four themes were used by Joy and Sandy is depicted in the Results and Discussion. A list of transcription keys are provided in Appendix 2.
Table 2: Definition and Example of Each Theme

<table>
<thead>
<tr>
<th>Theme</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
</table>
| Offering Explanation         | Teacher directly explained the meaning of the words or sentences to student or provided student with part of textual clues or cues to help him/her better understand the text or continue the reading task. | T: The…Princess, she is a princess. Ok, what is the princess?  
S: Mmm…  
T: Do you know princess? What’s a princess? You can speak in Chinese.  
S: {Shake her head.}  
T: mm…well, Ok. Princess is a… well, when a king, now here is a king, right. A king and a queen get married mm…look at the picture. A queen and a king get married …then they have a girl, a daughter, then she is a princess. Ok, the daughter, the daughter of a king and queen is a princess. So, what is princess?  
S: [Kong-tzu] (Princess.) |
| Clarifying and Verifying     | This type of scaffolding primarily focuses on how Joy and Sandy helped students attacked ambiguous part or parts of a text.                                                                                   | T: Do you know lump?  
S: {Shaking head}  
T: You don’t know. Ok. So, because she couldn’t sleep because there was a big lump in her bed. I show you what a lump is. For example, look at my back. Do you see this “a lump”? It’s a lump. It’s not flat. Ok, not flat. Understand? Ok, this is um…for example, this is a desk. Put something is a lump. This is, um…ok, this is a lump. This is flat, and this is a lump. Okay? {She used body languages with the explanations.}  
T: So, what is a lump?  
S: [The part to project out.]  
T: Right. [To project out.] |
| Student Understanding        | Teacher helped student connect his/her prior knowledge or previous life experience with the current text.                                                                                                 | T: … two little pups crying for what? [Why? Why did they cry for?]…She had just been killed by deer. What does kill mean?  
S: [Be killed?]  
T: Yea, by whom? [Did you remember the word we learned last semester? On Christmas, there is a kind of animal to drive the sled?]  
S: Deer, the deer.  
T: Yea! The deer! So, she had just be killed by whom?  
S: By deer. [The mother was killed by the deer.] |
| Linking with Student         | Teacher helped student connect his/her prior knowledge or previous life experience with the current text.                                                                                                 | T: … two little pups crying for what? [Why? Why did they cry for?]…She had just been killed by deer. What does kill mean?  
S: [Be killed?]  
T: Yea, by whom? [Did you remember the word we learned last semester? On Christmas, there is a kind of animal to drive the sled?]  
S: Deer, the deer.  
T: Yea! The deer! So, she had just be killed by whom?  
S: By deer. [The mother was killed by the deer.] |
| Background Knowledge         | This type of scaffolding involved teacher and student in the sense of collaboratively exchanging and sharing their interpretations and critical evaluation of the text read, in which sharing is the core of the conversations. | T: [What if you were the prince; would you use this way to find a real princess?]  
S: [No, I don’t think so. I will meet my prince charming in a natural way. If we have Yuan-fen, we will meet each other.]  
T: Great. [You have your own way to find someone you love.]  
S: Yea. |
To ensure credibility of analysis, transcripts were first coded by the researcher, and then by the two EFL instructors. The researcher discussed the coding system with them and provided two or three samples of each theme. Discrepancies were discussed and resolved, any data spawning disagreement between the researcher and either of the two EFL instructors was dropped from the data pool; unclear utterances on tape recordings were excluded. After long conversations and negotiations, inter-coding reliabilities eventually reached were 82% and 84% between the researcher and the two EFL teachers, 83% between the teachers themselves.

RESULTS AND DISCUSSION

Discussion of themes should not be construed as representing necessarily diverse entities. Separation of a particular sequence of these themes, then, reflects more of the researcher’s rhetorical needs than of natural processes Joy and Sandy underwent along the path of scaffolding instruction. Some episodes were only two or three instructional turns long without any further responses; others lasted several turns, with multiple layers of voices intertwined as one piece of data. Thus, both quantitative and qualitative analysis were applied to carefully examine how Joy and Sandy scaffolded MPSs and LPSs. Tables 3 and 4 present frequency use of the four themes by Joy and Sandy, and a qualitative analysis of how the four themes were employed follows.

Table 3: Joy’s Frequency Use of Four Themes

<table>
<thead>
<tr>
<th>Theme</th>
<th>Student</th>
<th>Less Proficient Students</th>
<th>More Proficient Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Text 1</td>
<td>Text 2</td>
</tr>
<tr>
<td>Offering explanations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarifying &amp; verifying student understanding</td>
<td></td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Linking with student background knowledge</td>
<td></td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Negotiating meaning</td>
<td></td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>21</td>
<td>22</td>
</tr>
</tbody>
</table>
Table 4: Sandy’s Frequency Use of Four Themes

<table>
<thead>
<tr>
<th>Theme</th>
<th>Less Proficient Students</th>
<th>More Proficient Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Text 1</td>
<td>Text 2</td>
</tr>
<tr>
<td>Offering Explanation</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Clarifying &amp; Verifying Student Understanding</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Linking with Student Background Knowledge</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Negotiating Meaning</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>22</td>
</tr>
</tbody>
</table>

Comparing the total numbers of episodes employed by Joy and Sandy with the four themes, the researcher found no marked difference of episodes in either teacher’s instructional data: 87 episodes for Joy versus 88 for Sandy. That means both teachers showed considerable involvement not only in explaining ambiguous concepts and clarifying difficult parts of the story, but also in evaluating students’ opinions. Such situations explain why offering explanation is most frequently used among themes (52% for Joy and 51% for Sandy). Likewise, Joy and Sandy were mildly engaged in helping students link their personal life stories and previous literacy experiences. Autobiographical experiences helped both groups of students better understand and even learn more from the reading text.

Given these data in Tables 3 and 4, we can say that Joy and Sandy spent more number episode on comprehension level, offering explanations and clarifying and verifying understanding (34 vs. 23 episodes in Joy’s cases; 34 vs. 27 episodes in Sandy’s cases) in aiding less proficient students’ comprehension. With such students, each teacher more often focused on the story lines, gathering information in an attempt to scaffold these students to build a textual world, which involved understanding the direct and literal meaning of the text; whereas with more proficient students, Joy and Sandy more often stressed helping them integrate their opinions to judge or even to criticize what was being read (9 vs. 20 episodes in Joy’s cases; 9 vs. 18 episodes in Sandy’s cases). Most importantly, Joy and Sandy helped both groups of students recursively move between these four different themes.
Table 5:  
Results of students’ reading comprehension tests before and after scaffolding

<table>
<thead>
<tr>
<th>Student*</th>
<th>Text 1 (LPSs)</th>
<th>Text 2 (Common Text)</th>
<th>Text 3 (MPSs)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>post-test</td>
<td>Pre-test</td>
</tr>
<tr>
<td></td>
<td>LPSs</td>
<td></td>
<td>MPSs</td>
</tr>
<tr>
<td>S1</td>
<td>1/5</td>
<td>5/5</td>
<td>5/5</td>
</tr>
<tr>
<td>S2</td>
<td>1/5</td>
<td>4/5</td>
<td>5/5</td>
</tr>
<tr>
<td>S3</td>
<td>1/5</td>
<td>4/5</td>
<td>4/5</td>
</tr>
<tr>
<td>S4</td>
<td>2/5</td>
<td>4/5</td>
<td>4/5</td>
</tr>
<tr>
<td>S5</td>
<td>2/5</td>
<td></td>
<td>5/5</td>
</tr>
<tr>
<td>S6</td>
<td></td>
<td></td>
<td>3/5</td>
</tr>
<tr>
<td>S7</td>
<td></td>
<td></td>
<td>3/5</td>
</tr>
<tr>
<td>S8</td>
<td></td>
<td></td>
<td>3/5</td>
</tr>
<tr>
<td>Mean</td>
<td>1.25</td>
<td>4.25</td>
<td>1.75</td>
</tr>
</tbody>
</table>

Note: S1 to S4 refers to the LPSs; S5 to S8 refers to MPSs.

When the reading comprehension tests before and after the scaffoldings are compared, both groups of students’ reading comprehension as shown in Table 5 was quite obviously enhanced through the use of scaffolding instruction. Results from the current study confirm Chung’s study (2006) that scaffolding played a more significant role with the LPSs than with the MPSs. In addition, the impact of scaffolding instruction to both groups of students improved slightly more with the easier texts, Text 1 to the LPSs and Text 2 to the MPSs. That the text factor may play a crucial role in the process of scaffolding for students needs to be further investigated. Results in Table 5 indicate that scaffolding indeed has promoted students’ reading comprehension. The following presents a detailed explanation of how these four themes were used among both groups of students, and thus in turn promoted their reading comprehension.

**Theme 1: Offering Explanations**

Explanations are lucid statements adjusted to fit students’ immediate understanding about what is being read. Prompting and probing were typical approaches used by Joy and Sandy during the instructional process, since they offered direct (prompting) and indirect explanations (probing) of texts. Scaffolding explanations included making frequent repetitions of key words and ideas, explaining the meaning of words through illustrations and using gestures, body language and facial expressions to convey main ideas of the story. Yet such explanations to MPSs and LPSs differ somewhat, as shown in Examples 1a and 1b.

**Example 1a: Joy’s data to MPS**

T: The…Princess, she is a princess. Ok, what is a princess?
S: Mmm…
T: Do you know princess? What’s a princess? You can speak in Chinese.
S: (Shake her head.)
T: mm...well, Ok. Princess is a... well, when a king, now here is a king, right. A king and a queen get married mm...look at the picture. A queen and a king get married ...then they have a girl, a daughter, then she is a princess. Ok, the daughter, the daughter of a king and queen is a princess. So, what is princess?
S: [Kong-zu.] (Princess.)

Example 1b: Joy’s data to LPS

T: She was drippy. So, what is drippy? Drippy means wet. W-e-t.
S: W-e-t. We...
T: [Wet.] Understand? She is wet, [wet].

Joy in Example 1a offered elaborate explanations that signaled she had made connections in a student’s knowledge. Joy explained the word “princess” with a concrete example that helped the student to offer her own response or comments. Unlike Example 1a, Example 1b demonstrates that when the LPSs struggled with the meaning of the word “drippy,” Joy immediately offered assistance without offering this student opportunities to explore the meaning of the word. As with Example 1b, without any request for assistance from the student, Joy and Sandy to the LPSs automatically provided direct support, especially concerning vocabulary use.

Joy and Sandy were obviously responsible for the aggregate instruction, using elaborate comments and questions that lent opportunities for students to respond. At times they invited students to contribute clues for reasoning through their scaffolding. Sandy (Example 1c) initially asked a sequence of what and why questions. Since this student responded with silence, she switched to asking predominantly yes/no questions, thinking how “force of switches” could result in more scaffolding than required, thereby failing to propel the student toward greater autonomy, stated by Sandy in her oral interview. To offer concrete instances of scaffolding that support students’ comprehension of the text, Sandy’s and Joy’s roles here are to prompt students by asking and probing questions and elaborating student responses during the course of instruction.

Example 1c: Sandy’s data to the LPS

T: [What happened to the prince?] What did he want?
S: {Silence.}
T: Why why they didn’t think she was a princess? Why?
S: {Silence.}
T: Why didn’t they why didn’t they think she’s a princess?
S: {Silence.}
T: [What happened to her?]
T: [Were they happy? Were the king queen happy?]
S: No.
T: [Was the queen happy?]
S: No.
T: Yes. [They were not happy because the prince wants to have a real princess.]
Did he [did the prince find a real princess?]
S: No.

Effective explanations could guide students toward a deep, integrated understanding of words and must be concentrated and repetitive, as shown in Examples 1a and 1c. For Joy and Sandy, scaffolding that facilitates vocabulary learning and textual understanding includes the use of the integration of words with world knowledge. However, for the LPS, effective scaffoldings needed to include more elements such as the critical components of phonemic decoding skills, fluency in word recognition and text processing, and spelling.

**Theme 2: Clarifying and verifying student understanding**

Primary focus here was how Joy and Sandy helped students attack ambiguous parts of a text. While encountering instructional difficulties, Sandy seemed very interested in adopting story maps as scaffolding framework to aid (especially less) proficient students, in clarifying ambiguous parts or verifying textual understanding, as shown in Example 2a.

**Example 2a: Sandy’s data to the LPS**

T: [Then tell me? What happened? ]
S: {Silence.}
T: [What happened? Okay, [try to look for the main character? Then see what happened? Then the problem and the solution? Follow my instruction, the character, the event, the problem, and then the solution.]
S: Mm….
T: [Then? Then what? What happened? Who is the character? Hurry up! Just guess! You don’ have to understand every single word. Simply look at the character, the event, ..tell me who was the character?]

Sandy as shown in Example 2a intended to urge the student to identify four story elements (characters, events, problems, and solutions) by encouraging her to select some chunks of text, then by splicing those chunks into a whole so as to re-organize/reconstruct the text. Sandy applied story maps as an instructional framework to foster students’ reading comprehension, guiding and improving students’ understanding as they read texts. In the process of scaffolding, Sandy’s role was obviously to structure
and orchestrate a story so that students optimally profit from it. Therefore, a story map functioned as a reading framework enabling Sandy to guide and facilitate students’ comprehension as they progressed through successive sections of text.

In fact, as both groups of students’ reading problems surfaced, Sandy usually provided them with a carefully crafted set of story elements (character, events, problems, and solutions) to support their initial understanding of the story. In doing so, Sandy usually described the strategy and how it should be used, works with students as they employ the strategy, gradually gave them more responsibility for using it independently. Sometimes, Sandy would remind students to use the strategy over time. Sandy used story maps as instructional guidelines, leading the students step by step from comprehending to organizing their thoughts about what they had read. In her four scaffolding cases, she instructed both groups of students with similar processes; that is, she guides students with the use of story maps to a step by step framework. With the story map, Sandy was able to guide students as they practiced so they could stretch even further. Joy, on the other hand, favored steering learners toward pictures or body language, as in Example 2b.

**Example 2b: Joy’s data the LPS**

T: Do you know lump?
S: {Shaking head}

T: You don’t know. Ok. So, because she couldn’t sleep because there was a big lump in her bed. I show you what a lump is. For example, look at my back. Do you see this “a lump”? It’s a lump. It’s not flat. Ok, not flat. Understand? Ok, this is um…for example, this is a desk. Put something is a lump. This is, um…ok, this is a lump. This is flat, and this is a lump. Okay? {She used body languages with the explanations.}

T: So, what is a lump?
S: [The part to project out.]
T: Right. [To project out.]

The intent of prediction with the pictures was to help students understand, interpret, and elaborate the meaning of the words when reading passages. The student in Example 2b already had an initial understanding of the story, so she was able to evolve understanding of a passage as she moved toward complete understanding of the text. For this student to sustain her understood perspectives, Joy’s body languages were re-symbolized as vehicles to transport her from interpreting text via speculation, analytical hypothesis, and rigorous risk-taking to drawing conclusions or making generalizations. In addition to using body languages, Joy quite frequently applied pictures from the sorties to get students engaged in making learning more sensible and memorable.
Example 2c: Joy’s data to the MPS

T: Yea, this is mattress. And she first, the queen put a tiny…. Tiny. What is tiny? Is it big?
S: No, small.
T: Yea, small. Ok. She put a small, a tiny pea under…ok, under the mattress.
S: Then…Then she put one two three four five six seven, eight, nine, ten.
T: Ten more mattresses on top of them. So, how many mattresses did she put on the bed? How many?
   Ten? Or twenty?
S: Ten.
S: [Because she piled the mattresses up. Do you mean to add them altogether?]
T: Oh, plus. The queen, one more time, put one two three four five six seven eight nine ten mattresses
   on top of the pea. So, how many mattresses?
S: Twenty? [Should be twenty.] Wow, so many.

This type of strategy involved teachers in checking students’ budding understanding. If emerging understanding was reasonable, the teacher verified students’ responses; if not, the teacher would clarify. Clarification and verification often function as communicative strategies that involve teacher and student in give-and-take in meaning construction, bringing students into discussion wherein anticipated answers are embedded. In Example 2c, by clarification and verification processes, Joy helped this student derive meaning and took her into account another perspective. Essentially, she re-organized her comprehension based on what they wanted to understand and what had been unclear to them. In a word, a key characteristic of clarifying and verifying student understanding was dialogical scaffolding, The teacher not only did ‘reporting’ but also performed other functions- ‘requesting’, ‘evaluating’, ‘predicting’, and ‘giving directions’.

Theme 3: Linking with Student Background Knowledge and Life Experiences

This theme concerns how Joy and Sandy helped learners connect their existing knowledge with the text being read, and in turn facilitated their textual understanding. Results indicate such linkage helped both groups zero in on what they were reading within a broader framework that went beyond merely reading the text itself. Linking with prior knowledge not only supplied another perspective for students to reshape a text, but also assisted them to learn a language in a more sensible and meaningful way. Example 3a illustrates such a situation.

Example 3a: Sandy’s data to the LPS

T: … two little pups crying for what? [Why? Why did they cry for?]…She had just been killed by
deer. [What does “kill” mean?]
Example 3b: Joy’s data to the MPS

T: The farmer put the fake eggs… What does fake mean? Do you know?
S: {Shaking her head.}
T: Fake means not real. Not real eggs. The farmers put the unreal, not real eggs, like the bulbs in chicken coop. Do you know fake?
S: No.
T: Well, we just talked about the prince who wants to marry with a Real princess, not a fake princess. So, what does fake mean? What is fake?
S: [Not real.]

As stated in Examples 3a, while instructing *The Princess and the Pea*, Sandy helped a student link with her background knowledge; thus her attention was shifted away from the text and toward personal resources. Such shift enables her student to make up her own mind. That is, by using her previous acquired knowledge to attain personal, sensible, and significant meaning, she was put in a position to refresh what had already been committed to memory and even in turn shed new light on her previous understanding. These moves functioned as resources to engage her in making assertions and associating ideas as she came to understand a passage. To scaffold effectively in this way, Sandy called to mind the knowledge of students’ instructional histories and ability to apply reading processes. In a word, Sandy’s intended use of broader clues as resources in turn promoted textual understanding.

Such a situation also occurred to Joy as stated in Example 3b. The use of background knowledge as sources had become a stepping stone for some students to inquire more and learn further. In Example 3b, Joy assisted a more proficient student to modify his initial assertions, stating that his textual understanding of the story had changed toward the end of reading. In sum, connecting with students’ background knowledge enabled them to channel their energy in the right direction and, for students in Examples 3a and 3b, blossomed into an experience of discovery, of uncovering the range of meaning in the reading text. In this sense, their background knowledge functioned as a time machine to help them mentally or even physically return to the
previous story taught. This allowed them to refresh their memory, modify their thoughts, and reframe their interpretation, hence assisting them in further inquiry.

This theme demonstrates how Joy and Sandy aided their students to link with prior knowledge, assisting students to relate to, verify, and interpret texts, to link what they do know with what they are required to know, but do not. Results from Joy’s and Sandy’s strategies used via the application of students’ existed knowledge confirm results of prior research (Chi, 1998, 2001), which indicate that the application of background knowledge allowed both groups of students to engage in private and hypothesis-generating responses. They thought about relationships and connections in their own lives as they tried to relate to the meaning in stories being read. Help in linking personal experiences naturally put them in a position to draw upon their own autobiographical experiences as an interpretive middle ground for sharing and exchanging. Connecting with students’ background knowledge would sometimes even lead to interesting conversations which supplied students with a vehicle for critical exploration, as shown in Theme 4.

**Theme 4: Negotiating Meaning**

This theme involved teacher and student in the sense of collaboratively exchanging their textual understandings and interpretations, in which sharing was the core of their communications. If reading is regarded as a means by which to enjoy textual conversations between teacher and student, both parties could stretch their own knowledge boundaries. Through the process of meaning negotiation, Sandy and Joy helped students add richness and possibilities of various perceptions to texts. While conversing with teachers, students became more involved in making in-depth and sophisticated interpretative connections. As a result, they not only tended to bring their own judgments, decisions, values, and concerns to texts, but also to bring new thoughts, self-realizations, or redefinitions to enrich their interpretations. The following two examples demonstrate such situations.

**Example 4a: Sandy’s data to the LPS**

T: Like you, [what if you were the dog, and your mom were killed, what would you do?]
S: [Cry out loud.]
T: [Yea, cry out loud, and then? He was a little dog now. He hasn’t grown up yet.]
S: [N… the little dog was very innocent.]
T: [Yea, innocent. He didn’t know what to do, so then what would happen to him?]
S: [He then looked for his mom.]
T: [Look for his mom? But his mom was dead. What happened next?]
S: N…[Thinking.]
T: What if you were lost in Taipei, what would you do?
S: [Find some to ask for help.]
T: Yes, ask for help from people. [Thus, he tried to ask for help. Do they ask for help from people?]  
S: No, they are too small.
T: Right. [Look at the second paragraph.] They realize they were too small; they were too small to  
catch the deer. They were too small so they could not catch the deer.

Example 4b: Joy’s data to MPS

T: We must...operate him right away. Right away means now. Okay? Operate? Do you know  
operate?
S: {Shaking her head.}
T: Operate means ... When you are sick or I am sick. I have a heart heart attack, heart attack. My  
heart bump bump bump bump. “Oh, help! Help! I have heart heart attack.” {body languages} So I  
need to have an operation on my heart. The doctor will get a pair of scissors and knife and Ka ka ka  
ka, so ...
S: [Operate.]
T: Then, this is operation room. Okay?
S: [Operation Room. I was put in the operation room before and I heard ka ka ka. It was really  
terrible.]
{S continues to talk about his experience in the hospital for a while.}

Example 4c: Sandy’s data to MPS

T: [He finally found] a real princess. So they go…
S: [married.]
T: Yea, get married. Then, [where did they put the pea?]  
S: [Under the mattress.]
T: No, where? [In the museum.]
S: [Should be under the mattress.] Why? [Why museum?]
T: Strange? Right?
S: Yea. [In the museum? Why?]
T: [What if you go to Taipei Palace Museum, what do you like to see?]  
S: [Oh, I see. So the citizens will see the pea in the museum.]
T: [In the museum.] [The pea has become something to be displayed.]
S: [I know.]

Joy and Sandy in Examples 4a and 4b directed their students’ reading attention to  
integrate their voices, define their knowledge on the page, and bring themselves to text  
discussion while integrating their own views and sense with them. In this way, the self  
was a means of outgrowing their current selves. Reflection functioning as meaning
negotiation was itself an experience, not an end but a re-constructive and re-productive process whereby students had chances to intentionally examine and share their reading events, beliefs, and behaviors, as well as make more of each experience. In this sense, reflective thinking served as a vehicle for better story comprehension. Such a situation elicits co-operative spirit in understanding texts. In a word, reflection provided participants with opportunities to revisit the text just read and discussed, then to re-examine their comprehension and interpretation.

Moreover, as demonstrated in Examples 4b and 4c, Joy and Sandy shifted their scaffolding stance from the author’s point of view to that of students’ themselves. At this moment, these two students were requested to seek possibilities to look at the text in new ways, to make the familiar strange and the strange familiar, to consider another alternative by negotiation with the teacher. In fact, such a stance may not have necessarily facilitated reading comprehension, but at least it propelled their reading paths more smoothly. Such changes definitely needed support from teacher scaffolding. In this sense, scaffolding instruction has demonstrated not only a way to read and talk about texts, but also a way to challenge their traditional ways of reading and thinking.

An interesting phenomenon suggested by this theme is that, in negotiating meaning with students, Joy and Sandy, no matter whom the MPSs or the LPSs they were addressed to, always generated more sophisticated and dialogical talks than usual. Such a phenomenon is especially significant to the LPSs. Example 4b contains several characteristic discourse moves that indicate the complex process of scaffolding with the LPSs by Joy. Joy’s explanation of the text, and the student’s evaluation of previous life experiences were both interwoven as one episode. That is, meaning negotiation even enabled this group of students to get more actively involved in dialogue as shared inquiry with the teacher. To sum up, both Joy in Example 4b and Sandy in Example 4c employed their own student’s prior life experiences as scaffolding sources to mesh past and current literary experiences into a whole, in that these two students used not only the text but also their previous life experiences as sources for better textual understanding.

Students’ Evaluation of the most effective scaffolding strategies

In analyzing the responses with reference to how students’ evaluations of the most effective scaffolding strategies teacher used with them, the LPSs responded unanimously that vocabulary explanations not only promoted their textual understanding, but also enhanced their reading interests and confidence. In their reflections during oral interviews, it is evident that scaffolding instruction helped them gain confidence in their abilities to interpret texts, feel good about themselves as
readers, and that they were thoughtful about what they had accomplished. Their enthusiasm and pleasure in reading these two stories with Joy and Sandy was obvious in their interview data, illustrating how powerful and supportive social interactions can be in the process of scaffolding instruction. The following examples are extracted from two LPSs.

**Extract 1: Joy’s Data**

T: [Do you think these two stories are difficult to read?]
S: [A little bit. Some words. But I learned them after your teaching. I think this teaching is very interesting, more like talking.]

**Extract 2: Sandy’s Data**

T: [What do you think of these two stories? Difficult or easy to read?]
S: [The second one is difficult to read, but I applied the strategies that you taught me at the first story.]
T: [Which strategies?] The character, the event, ---
S: Yes, yes. [But, also, guess, just guess. I think it’s interesting to guess in reading, too. I have never done this before. I always looked up the dictionary. So, although the story is difficult, it’s interesting to read and to guess.]
T: [You had fun guessing?]
S: Yea, yea.

The above examples suggest that scaffolding should be viewed as part of the social and interpersonal dynamics in a learning community. Reading creates a world of things, whereas scaffolding creates a world of happening. That is, the reciprocal exchange in scaffolding instruction involved unfolding, tentative responses, responses that encouraged students to express opinions and challenge their independent reading of the texts. More importantly, both groups of students took positive attitudes toward Joy’s use of visual aids and Sandy’s use of the story map as instructional scaffolding as indicated in Extracts 3 and 4.

**Extract 3: Joy’s data**

T: [In the process of my instruction, which method helped you better understand the story?]
S: [Your body languages. Teacher, you used many body languages. Yes, body languages made me easily understand the meanings]
T: [My body languages. For example, ---]
S: [For example, water, beat the wheat, and your actions, very interesting and very impressive.]
T: What else?
S: [The pictures. You asked me to look at the pictures and guessed the meaning of the words.]

**Extract 4: Sandy’s data**

T: [In the process of my instruction, which method helped you better understand the story?]
S: [To get the main idea. You taught me to get the main idea by using time, place, and character. If I can find out these answers, I can get the main ideas.]

T: [What else?]

S: [Then, I have to find out the main character, the event, what happened to the character, then the problem and the solution. I also used this method to read the second story although the second one is quite difficult to understand.]

To sum up, scaffolding provides immediate assistance to help promote students’ textual understanding and reading comprehension. Results from interview data also called for caution about the fact that teachers need to know more about what produces effective scaffolding based upon students’ needs, since some students might not know its benefits and could in turn show no concern about collaboration with teachers. Most important of all, the scaffolding process should be open to inquiry, exploration, and change. Inquiry should be the core of scaffolding, just as it is the core of learning. Effective learning takes place within a collaborative inquiry, with teacher and student as partners of textual understanding.

CONCLUSION AND IMPLICATIONS

In this paper, the researcher explored how two elementary school teachers, Joy and Sandy, employed four themes to scaffold more and less proficient readers to comprehend texts. Themes are offering explanations, clarifying and verifying student understanding, linking with student background knowledge, and negotiating meaning. Results from the current study indicate no significant difference in total number use of the four themes used by Sandy and Joy. When students encountered comprehension problems, Sandy adopted story maps as scaffolding framework to help students build the story structures, whereas Joy was in favor of using pictures or body languages as scaffolding sources for instruction. For both groups, the connection with background knowledge and/or prior life experience played a facilitating role in reading comprehension. More proficient readers better negotiated meaning with the teacher, whereas Joy and Sandy, while instructing less proficient ones, primarily focused more on “what happened in the text?”

This study has implications for both research and instruction. As with all qualitative research, episodes and themes hereby generated merit further investigation with larger numbers of ESL/EFL students at different levels. Yet some pedagogical implications do surface immediately. First, not just Taiwanese but perhaps all EFL teachers should be urged to focus both on absorbing the greatest amount of text information or acquiring the bare meaning of text, and on understanding how proper
use of background knowledge and personal life experiences can expand on interpretation.

Scaffolding augments textual understanding and reading comprehension. In order to promote their use of effective scaffolding strategies, it is crucial for teachers to decide what to scaffold. A primary goal in mind for each interaction will be more effective to scaffolding instruction. Effective scaffolders also need to stimulate curiosity, self-esteem, self-confidence. A good scaffold ought to be sensitive to individual difficulties. To provide more collaborative scaffolding, teachers are highly recommended to ask reflective questions and prompt deep reasoning rather than just reaction, such as using “What if…” questions and providing tailored assistance. Explain as needed: direct instruction is essential and can help students during scaffolding—e.g., to explain difficult words or concepts. An effective scaffold takes students’ questions seriously and uses them as material for moving their thinking along.

REFERENCES
Lutz, S. L., Guthrie J. T., & Davis M. H. (2006). Scaffolding for engagement in


**Appendix 1: Interview Questions**

1. Do you think the teacher’s instruction promote your understanding of the text? In what way?
2. What do you learn most from this instruction? Which instruction do you think most useful to you?
3. Do you think the text is easy or difficult to you? Explain reasons.
4. Do you think the text is difficult or easy to you? Explain reasons.

**Appendix 2: Transcription Key**

--- Incomplete utterances are shown by three hyphens in the end of the segment that was not completed.

{} Square brackets enclose descriptions of the relevant non-verbal behaviors by the researcher from video tapings.

[] English translation from Chinese.