FOR-PD’s Reading Strategy of the Month

(Developed by Smith, L. & Zygouris-Coe, V., 2006)

Rationale:

“A set of training wheels on a bicycle is a classic example of scaffolding. It is adjustable and temporary, providing the young rider with the support he or she needs while learning to ride a two-wheeler. Without an aid of this sort, the complex tasks of learning to pedal, balance, and steer all at one time would be extremely difficult, if not impossible, for many youngsters. This scaffold—training wheels—allows the learners to accomplish a goal, riding a bicycle successfully, and then to happily pedal his or her way into the wider world.” ~Michael F. Graves, Bonnie Graves, and Sheldon Braaten, “Scaffolded Reading Experiences for Inclusive Classes”

Over the years, instructional scaffolding has been compared to many things. There have been thoughts that scaffolding was comparable to the braces used by workers construct a new building. Or, as you read in the quote above, like the training wheels on a bike that help ensure the rider has help even if mom or dad are not there to hold the seat as they ride down the sidewalk. Teachers and parents have been using scaffolding perhaps even before the term was named. And, while analogies may differ, the basic premise that scaffolding is one of the most effective instructional strategies available to teachers still remains true (Graves, Graves, & Braaten, 1996).

The term scaffolding was first used, in instructional context, by Wood, Bruner, and Ross in their 1976 article, “The Role of Tutoring in Problem Solving”. They used the term “scaffolding” as a metaphor to describe a “process that enables a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his unassisted efforts” (p. 90). Graves and Graves expanded on the definition to note that, “in addition to helping children complete tasks they could not otherwise complete, scaffolding can aid students by helping them to better complete a task, to complete a task with less stress or in less time, or to learn more fully than they would have otherwise” (2003, p.30). Scaffolding should be seen as a technique that is flexible and temporary. Once the students are able to successfully accomplish the task, the scaffold should be gradually decreased and removed.

The concept of scaffolding takes root from Lev Vygotsky’s theoretical concept, the Zone of Proximal Development or ZPD. The ZPD is the “area between what children can do independently and what they can do with assistance” (Clark & Graves, 2005, p. 571). This area must be considered when initiating scaffolding techniques. Research has shown that scaffolds are only useful within the student’s own ZPD (Rosenshine & Meister, 1992). Students’ background should be considered to ensure they are able to learn a new strategy or grasp a new tool. Teachers should use scaffolding to help students navigate their ZPD and extend current knowledge and skills (Wiseman, Elish-Piper, & Wiseman, 2005).

Scaffolding should not be seen as only one specific instructional technique. It is a broad term that encompasses many useful and thoughtful strategies that allows the teacher to break down a task into smaller, more manageable parts in order for the student to understand the full concept. If used effectively, over a period of time, scaffolding has the ability to help students cope with the complexity of a task, process how they can accomplish a task, and actually complete the given task, independently.

How to Use the Strategy:

Rodgers and Rodgers (2004) titles one of the sections in the book, Scaffolding Literacy Instruction, “All Teaching Is Not Scaffolding, But All Scaffolding is Teaching” (p.3). As we ponder if this title is more of a riddle than a heading, we must also look at how scaffolding is more than teaching. Scaffolding implies that the teacher considered particular components when designing the instruction for the lesson. The teacher decided if help should be given, how much help should be given, the timing of giving the help, and the goal of the instruction (Rodgers & Rodgers, 2004). When scaffolding a lesson, we must always keep our learners and their ZPD in mind.

Principles of Scaffolding Literacy Learning

When thinking about how to scaffold literacy instruction, teachers should consider the following principles (Rodgers & Rodgers, 2004):
Scaffolding is informed by careful observation. Observing the needs of the student helps guide what should be taught and when. Teachers should use observation logs or an observation matrix to write about student behaviors and changes they have noticed regarding their students’ use of strategies and skills.

Respond to what you see the student actually trying to do. If you observe a student struggling with a concept or task, even after you have taught it several times, this is a clue that the student still needs support. Having a student read aloud and observing the strategies that are used, used properly, or not used at all are very helpful in guiding scaffolding.

Teach today’s student. A students’ ZPD is always changing. Take time to monitor and observe students on a regular basis. Base instruction on what the student can do currently, not what they could do last month or last week.

Put the right book in the right student’s hand. It is not always easy to help students pick the book that is right for their level. While schools often use specific textbooks on a particular grade level, teachers should provide opportunities for students to work with texts that are neither too easy nor too challenging. This will offer the most opportunity to scaffold instruction.

Strategies

Along with principles for scaffolding, there are also strategies and graphic organizers that have become an important part of reading instruction. We know that KWL charts, anticipation guides, activating prior knowledge, making connections and questioning are representative of the many ways to scaffold students learning. The following are some selected techniques that you may want to consider when scaffolding literacy instruction in your classroom.

Moment-to-Moment Verbal Scaffolding (Clark & Graves, 2005)

During moment-to-moment verbal scaffolding, teachers will prompt students by asking questions and spend time elaborating on the students’ responses. Teachers will have to be knowledgeable about the ZPD of each student to determine how much scaffolding to offer them. The example below shows how the teacher uses questioning to help guide students’ thoughts, how the students’ own ideas spark new questions, and how the teacher affirms the question and uses it to set purpose for further exploration and reading.

<table>
<thead>
<tr>
<th>Moment-to-Moment Example Dialogue</th>
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<tbody>
<tr>
<td>Teacher: What is gravity?</td>
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<tr>
<td>Student 1: Gravity is a force you can’t see. It’s what pulls us down.</td>
</tr>
<tr>
<td>Student 2: It’s a force that pushes or pulls.</td>
</tr>
<tr>
<td>Teacher: How do you know that if you can’t see it?</td>
</tr>
<tr>
<td>Student 2: Every piece of matter has a force.</td>
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<tr>
<td>Teacher: Right, but how do you know there is a force called gravity?</td>
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<tr>
<td>Student 2: One way is that I’ve seen a movie about astronauts in space. There isn’t gravity like ours. They float. So, there must be a force, something I can’t see, keeping me on the ground.</td>
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<td>Teacher: That’s some good thinking! I liked how you remembered seeing the astronauts and thought about how they do not have gravity like ours in space. The gravitation on Earth is referred to simply as gravity. Gravity pulls us toward the center of the Earth. Is it just us, or is it other things too?</td>
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<tr>
<td>Student 1: I read that gravity not only pushes and pulls us, but also pulls the oceans to Earth. If there weren’t gravity, it would float away too. It has something to do with mass. What was mass?</td>
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<tr>
<td>Teacher: Excellent question! Let’s talk about the role mass plays on gravity. Let’s continue to read today about mass and then we’re going to do an experiment I think will answer some of our questions.</td>
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Instructional Frameworks
Frameworks like "Questioning the Author" and the "Scaffolded Reading Experience" can help students be guided through a literacy lesson and improve understanding of what was read in a text. The teacher's role during this kind of instruction is to structure and arrange the experience for the learners.

- **Questioning the Author (QtA)**

The Questioning the Author (QtA) strategy was originally developed by Beck, McKeown, Hamilton, and Kucan. The goal of QtA is to help students "understand, interpret, and elaborate on the author’s meaning as they read the text" (Clark & Graves, 2005, p. 574). This during-reading technique is useful for teachers as a way to ask specific questions of students that will help them construct meaning and reflect on the text that they read. Teachers first begin by letting students in on the "secret" that books and materials are written by regular people that can make mistakes. Students should always be aware that they need to consider what the author is trying to tell them and judge if they are doing a good job or not. Although usually considered a verbal form of scaffolding, the following chart will provide your students with an outline for note taking.

- **Scaffolded Reading Frameworks (SRE) (Fournier & Graves, 2002).**

Developed by Graves and Graves (1994), this particular framework has both specific planning and implementation phases. During the planning phase, teachers consider the student, the text, and the purpose for reading. In the implementation phase, the teacher selects from a list of pre, during, and post reading activities that will help students reach a level of success in their literacy experience (Fournier & Graves, 2002). This scaffold should be considered flexible and adaptable; teachers should choose from the options based on the needs of their students, the text they are reading, and their particular purpose for reading.

The chart below is a list of the optional strategies in an SRE.

<table>
<thead>
<tr>
<th>Pre Reading Activities</th>
<th>During Reading Activities</th>
<th>After Reading Activities</th>
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<tbody>
<tr>
<td>Relating to students lives</td>
<td>Silent Reading</td>
<td>Questioning</td>
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<tr>
<td>Motivating</td>
<td>Reading to students</td>
<td>Discussion</td>
</tr>
<tr>
<td>Activating prior knowledge</td>
<td>Guided reading</td>
<td>Writing</td>
</tr>
<tr>
<td>Building text-specific knowledge</td>
<td>Oral reading by students</td>
<td>Drama</td>
</tr>
<tr>
<td>Pre teaching concepts</td>
<td>Modifying the text</td>
<td>Artistic activities</td>
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<td>Pre teaching vocabulary</td>
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<td>Application activities</td>
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<tr>
<td>Predicting</td>
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<td>Reteaching</td>
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<tr>
<td>Suggesting strategies</td>
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Assessment:

Assessing scaffolding can take many shapes and forms. Assessing the students’ understanding and mastery of the different types of strategies used can be done with a rubric or checklist. Assessing a final product or demonstration can also be done by rubric. A running record can provide information on the effects of scaffolding by judging which cueing systems a student is using and with which systems the student may need support. When looking at the principles of scaffolding we see how observation can become a huge part in assessing scaffolded instruction. Observation, to determine what kind and how much scaffolding is needed, is a type of ongoing assessment and, when used within a matrix, can become a useful way to analyze students progress.

The following PDF is a checklist teachers can use to self-check their own instruction for appropriate scaffolding criteria.

Resources:

Using Scaffolded Instruction To Optimize Learning
http://www.vtaide.com/png/ERIC/Scaffolding.htm
This ERIC document provides a definition, guidelines, how-to, and challenges of scaffolding instruction.

Scaffolding in the Zone of Proximal Development
http://naecs.crc.uiuc.edu/newsletter/volume3/number4.html#1
This short article by Bodrova and Leong help provides readers with insights on how understanding the ZPD of their students will help them scaffold instruction.

Scaffolding
http://www.ncrel.org/sdrs/areas/issues/students/learning/lr1scaf.htm
This site focus on scaffolding strategies including metacognition and guided practice.

WebQuests: A Strategy for Scaffolding Higher Level Learning
http://webquest.sdsu.edu/necc98.htm
The authors of this site provide insight on how WebQuests can help scaffold learning.

Scaffolding Comprehension Strategies Using Graphic Organizers
http://www.readwritethink.org/lessons/lesson_view.asp?id=95
This lesson, by Susan Ruckdeschel, offers procedures on how to use the Collaborative Strategic Reading strategy to scaffold comprehension in middle school students.

Teaching Diverse Learners: Scaffolding Instruction
This site offers ideas for scaffolding instruction for diverse learners.

Question the Author
http://wilearns.state.wi.us/apps/default.asp?cid=124
A high school teacher gives step-by-step instructions for using the Questioning the Author strategy.

Reading Strategies: Scaffolding Students' Interactions with Texts
This site offers many wonderful reading strategies that will help scaffold student interactions with text.

References:


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Go to Adobe PDF instruction page.

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