# Scaffolding Academic Learning for Second Language Learners 

Karen Sue Bradley \& Jack Alden Bradley<br>kfksb00 [at] tamuk.edu<br>Texas A\&M University (Kingsville, Texas, USA)

## Introduction

What is meant by the term scaffolding? "Scaffolding refers to providing contextual supports for meaning through the use of simplified language, teacher modeling, visuals and graphics, cooperative learning and hands-on learning" (Ovando, Collier, \& Combs, 2003, p. 345). The teacher of second language learners has to facilitate that support. Then, "as students become more proficient, the scaffold is gradually removed" (Diaz-Rico \& Weed, 2002, p. 85). Three types of scaffolding have been identified as being especially effective for second language learners.

1. Simplifying the language: The teacher can simplify the language by shortening selections, speaking in the present tense, and avoiding the use of idioms.
2. Asking for completion, not generation: The teacher can have students choose answers from a list or complete a partially finished outline or paragraph.
3. Using visuals: The teacher can present information and ask for students to respond through the use of graphic organizers, tables, charts, outlines, and graphs.

The development of academic language is vital to student success in the classroom. Each of the content area subjects contain a unique and demanding technical vocabulary. In addition, familiar words are used in completely different ways. The purpose of this paper is to share strategies that can facilitate a teacher's scaffolding of difficult academic vocabulary. Active student involvement is the key to success.
"The overriding drive in current changes occurring in second language teaching is the need to teach language through something essential and meaningful to the student. When the goal is to prepare students for academic success in classes taught in English, then ESL is best taught through lessons that teach meaningful mathematics, science, social studies, and language arts concepts simultaneously with second language objectives" (Ovando, Collier, \& Combs, 2003, p. 310). This drive supports efforts toward planning thematic instruction. Theme studies provide a meaningful context for learning technical, academic vocabulary. In the sequence of activities described, a group of fifth graders are involved in the theme of great inventions.

The lesson design format integrates reading and writing and leads students from the pre-reading stage through the post-writing reflection stage.

## I. Overview

Helping second language learners master academic content can be challenging. Scaffolding reading/writing lessons emphasizing active student involvement provides the setting for success in this area.

- Theme: Great Inventions
- Using the book: Great Inventions
- Demonstration Lesson: Transportation and Under Water
- Overview: After a study of great inventions related to the history of transportation, students will research a topic, create a poster, and orally present it to the class.
- Connect student background by making predictions about text.
- Predict text content through pictures.
- Make connections through personal experiences to text content.
- Interrelate concepts using a structured overview and visuals.
- Keep notes in margins while reading.
- Self-question as sections of the text are read.
- Work collaboratively in a group.
- Create a poster to present the most important information about your group's selected topic.


## III. Pre-reading Activities

## 1. Pre-Reading \#1 - Think About the Title:

- Ask student to think about what they already know about transportation on and under water. Give them a couple of minutes to share their predictions of the content of the text with a partner. Debrief as a total class, writing the responses on the board.
- Ask students to look at the pictures in the text (The text has vivid pictures of a sailboat, an aqualung, a submarine, a propeller, and several types of ships, as well as a lighthouse. Ask students to write down what they think the text is about, based on the pictures. Debrief as a class and add those ideas to the list on the board.
- Before actually reading the text, ask students if anyone has ever traveled anywhere in a boat or ship. Then ask the class if anyone has had any experiences in a boat. Students share their stories.


## 2. Pre-Reading \#2:

Provide a structured overview that previews and highlights important information and the interrelationships of ideas.


For this activity, students can be placed in groups and given a set of index cards containing the inventions related to the reading selection. If inventions for land and air transportation have been previously studied, they could be included. Students sort the inventions under the appropriate category as shown in the structured overview. This can be done as a prediction prior to reading.

## IV. During-Reading: Monitoring Comprehension

English language learners need to have an established purpose for reading something so they can evaluate whether they are successful readers. The purpose of during-reading strategies revolves around the teacher's modeling of questioning techniques in order to develop the self-questioning ability of students. For example, the purpose for reading the selection "On or Under the Water," which was established during the pre-reading phase, was to find out what inventions promoted the development of different types of boats throughout history.

Two during-reading strategies that effectively assist students in monitoring their own comprehension are using subheadings and headings and analyzing captions.

## During Reading \#1: Analyzing Captions

For example: One caption from "On and Under the Water" says, "Finding the Way." The pictures surrounding the text are of a lighthouse, which might be within the students' background knowledge, and a gold, circular object that they probably will not be able to identify (It is a mariner's ASTROLABE).

The teacher's role is to discuss the purpose of the lighthouse (or something students already know about) and then suggest that perhaps the other object is also something that will help ships "find their way," as the text says.

## During-reading \#2: Turn Headings and Subheadings into Questions

Using the same example, one of the subheadings reads, "Beneath the Surface." The teacher should guide students in the process of changing the subheadings into questions. The question should be a prediction of what the text will say below that subheading. For "Beneath the Surface," the question might be, "What invention made it possible to take a boat beneath the surface, or under the water?" Because expository, or non-fiction texts usually have headings and subheadings, determining where to ask questions is easier. Good readers use those signals and self-question as they read.

## During Reading \#3:

Read "On or Under Water" aloud, asking students to join in as they are able. (This is a short, two pages of text) Students have a copy of the chosen text so they can write notes as the selection is studied. During the reading, specific vocabulary words are identified as follows: navigation, invention, lighthouse, relied, chronometer, accurate, and satellite signals. Students write the words in the margin. Before having students reread the text silently, pre-teach this key vocabulary using a variety of techniques.

## Examples:

a. Clustering -- In clustering, students guess the words meaning by the context of its use.

From "On or Under the Water" the cluster might look like this:


## b. Word Scroll or Graphic



Completing the graphic helps readers visually see relationships that they might otherwise overlook. When completing a vocabulary graphic, a portion of the visual should include personal connections to the word, as in the previous example.

## During Reading \#4: Students Should Reread Either Silently, in Partners, or in Groups.

## V. Post-reading

The goal of this activity is to have students actually participate in a process that has traditionally been used by teachers to modify text for English language learners. Through the use of simplification, expansions, direct explanations, and comparisons, comprehension is built in to create a clearer, more understandable text, as in the following example:

Simplification: The government's funds were depleted. (It was almost out of money.)
Expansion of ideas: The government funds were depleted. (It had spent a lot of money on things; equipment, help of the poor. It did not have any more money to spend on anything else.)

Direct definition: The government's funds were depleted. (This means that the government had spent all of its money. (Diaz-Rico, \& Weed, 2003, p. 230).

For this activity, the teacher models the first work after creating a bulletin board which is labeled as follows:

| Word | Original <br> Sentence | Simplification | Expansion <br> Or Ideas | Direct <br> Definition |
| :--- | :--- | :--- | :--- | :--- |
| Relied | Early sailors <br> relied on the sun, <br> the moon, and the <br> stars to navigate. | Looking up at <br> the sun and the <br> stars helped <br> sailors find <br> their way. | Navigation in the <br> open ocean is <br> difficult. Long ago, <br> sailors were <br> dependent on the sun <br> and the stars to find <br> their way. New <br> inventions make <br> navigating more <br> accurate. | relied <br> Early sailors <br> relied on the sun, <br> the moon, and <br> the stars to <br> navigate. |

The end goal of this activity is to have students do this activity in groups, with the teacher circulating as facilitator. The amount of teacher-directed instruction is going to vary depending on the students involved. Organize students into small groups and have them brainstorm ideas about the history of inventions related to transportation. Then, have them share with the whole class. As ideas are shared, create a graphic on the board or overhead. Each cooperative group is to select an area for further research. An example of a graphic which might culminate study of transportation inventions follows:


## VI. Writing

Each group is to create a poster "showing" their topic in an organized fashion.

## 1. Planning

The group has to decide how best to organize their information.
For example, a group who selects a study of inventions used throughout history to guide ships in the open sea, might present their information using a time line as a focus.


Students select materials to use to best present their topic. (A variety of art materials should be made available as well as magazine pictures)

## 2. Writing

The first draft is produced.

## 3. Sharing

Posters are shared with the rest of the class. Each person in the group tells what his/her part was in the creation of the project.

## 4. Revising

The first draft is reshaped, incorporating the feedback from the sharing.

## 5. Editing

Students proofread for conformity to the conventions of the English language.

## 6. Evaluation

The writing is judged to determine if it meets the criteria on the evaluation or rubric and if it satisfies the writer and the reader.

## 7. Writing Log Reflection

Students write in their individual logs. Give them a guided question to get them started.
Example: Review the activities you have participated in during our study of great inventions. Which of the activities do you think most helped you understand the information? Why?

## References

- Diaz-Rico, L.T., \& Weed, K.Z. (2002). The crosscultural, language, and academic development handbook: A complete K12 reference guide (2nd ed.). Boston: Ally \& Bacon.
- Herrell, A. (2000). Fifty strategies for teaching English language learners. Upper Saddle River, NJ: Prentice-Hall.
- Olson, C.B. (2003). The reading/writing connection. New York: Allyn \& Bacon.
- Ovando, C., Collier, V., \& Combs, M. (2003). Bilingual and ESL classrooms: Teaching multicultural contexts (3rd ed.). Boston: McGraw-Hill.
- Peregoy, S. Boyle, O. (2001). Reading, writing, and learning in ESL (3rd ed.). New York: Addison Wesley Longman.
- Spangenberg-Urbschat, K., \& Prichart, R. (eds.). (1994). Kids come in all languages: Reading instruction for ESL students. Newark, DE: International Reading Association.
- Wood, R. (2003). Great inventions. New York: Barnes \& Noble.
http://iteslj.org/Articles/Bradley-Scaffolding/

