SCAFFOLDING PREPARATION FOR A READING EXAM

Lyudmila A. Smirnova¹, E. Mounts²

¹Kazakh-British Technical University, Almaty, Kazakhstan
E-Mail: smirnovalyudmila@hotmail.com
²Defense Language Institute, Monterey, United States (retired)
E-Mail: eda192000@yahoo.com

Abstract. The paper describes the ambiguity and inconsistency in using the term scaffolding and outlines the main features of scaffolding as identified by different researchers. Scaffolding is viewed as a multi-layered process involving at least two active participants equally benefiting from using it. The paper demonstrates how scaffolding can be incorporated into a lesson aimed at preparing students for the Reading Module of the Academic International English Language Testing System (IELTS). A number of scaffolding techniques outlined for the pre-, during- and post-reading stages are targeted at helping learners to overcome the three main areas of difficulty in coping with the IELTS tasks: limited vocabulary, unawareness of reading strategies and time constraints.

Key words: scaffolding, IELTS, reading tasks

1. DEFINITION

After the term scaffolding was coined by Jerome Bruner and further developed in the 1970s to denote “assistance given to the learner by the teacher or more knowledgeable peer in providing comprehensible input and aimed at moving the learner into the zone of proximal development”, (i.e. the distance between his or her current and potential level of development, as defined by Vygotsky) (ESL Workshop 1996-2012, 1), it has become a buzzword in language pedagogy. A broad meaning of the word assistance made it possible to include a wide range of concepts and categories into the term scaffolding. In their definitions of this term some scholars substitute assistance by support and add such qualifying adjectives as clear, temporary, task-specific and carefully designed (Hammond and Gibbons 2001; Puntambekar and Hubscher 2005). Others understand scaffolding as any guidance, clue, directive or hint that the teacher offers the students to help them to progress in language learning (Hartman 2002). A more general understanding of scaffolding as a learning theory, a learning process, a learning strategy or a principle of effective instruction is available (Lipscomb, Swanson, and West 2004; Larkin 2002; Stuyf 2002). Scaffolding is also defined as a form of instruction, an effective practice, or supportive conditions (Larkin 2002; Donato 1994). The abundance of definitions highlighting different facets of scaffolding makes the term vague and ambiguous.

A wide use of such word combinations as scaffolding learning, scaffolding language, scaffolding approach, scaffolding strategies, scaffolding collaboration, scaffolding
techniques/activities/tools/assignments, scaffolded assistance, scaffolded prompts, etc., only further dilutes the term. In order to pinpoint the elusive phenomenon, some educational researchers prefer to identify specific features of scaffolding instead of building a comprehensive definition. McKenzie (1999), for example, states that scaffolding provides clear instructions, clarifies purpose, keeps students on task, offers assessment to clarify expectations, points students to worthy sources, reduces uncertainty, surprise and disappointment, delivers efficiency and creates momentum. For van Lier (2004, 151), scaffolding is contingent, collaborative, interactive, and, in educational settings, characterized by continuity, contextual support, intersubjectivity, contingency, handover/takeover and flow. Zhao and Orey (1999) describe a scaffolding process as sharing a specific goal, a whole task approach, immediate availability of help, intention assisting, optimal level of help and conveying an expert model. Puntambekar and Hubscher (2005, 2-3) name among theoretical features of scaffolding shared understanding, techniques to support student learning, ongoing diagnosis, calibrated support, and fading. It is noteworthy that, notwithstanding different approaches to scaffolding, almost all researchers end up associating it with challenge, participation, engagement, and collaboration leading to autonomy and independence.

In this article scaffolding is understood as “the environment the teacher creates, the instructional support, and the processes and language that are lent to the student in the context of approaching a task and developing the abilities to meet it (Wilhelm, Baker, and Dube 2001, 18). This definition encompasses a very important fact that although the main source of scaffolding is undoubtedly the teacher, the learner can also get support from his or her peers, a well-designed textbook, internet, software, and their own background knowledge. This fact plays a critical role in instructional scaffolding.

2. SCAFFOLDING AS A MULTI-LAYERED PROCESS

It is common knowledge that the term scaffolding was borrowed from the building industry and adapted to the educational context. Clearly, it is a good metaphor that promotes the meaning of a temporary support in learning facilitation. However, it is important to remember that while in construction scaffolding is done with passive material – cement, concrete, bricks, etc., in learning this process includes at least two active participants: a teacher and a learner, or a learner and a more knowledgeable peer. Scaffolding in teaching is interactive and benefits both parties.

Some researchers point out that scaffolding includes micro and macro levels. The former occurs in the ongoing interaction between teacher and students, and the latter is related to program goals, selecting and sequencing of tasks (Hammond and Gibbons 2001, 18). Since macro-scaffolding is planned by teachers, it is also called designed-in scaffolding and is opposed to point-of-need (Sharpe 2001, 32) or interactional scaffolding (Hammond and Gibbons 2005, 20) maximizing learners’ potential at a particular moment. Scaffolding is also viewed as a three related pedagogical ‘scales’ showing the transition from macro to micro-scaffolding. The first provides a support structure to develop certain activities and skills, the second deals with the carrying out of particular activities in class, and the third is realized through the assistance offered in moment-to-moment interaction (Walqui 2006, 166).

We assume that in most educational contexts scaffolding can be thought of as a multi-layered process. The first layer is curriculum development. The curriculum contains
officially adopted educational standards and general ideas about the subject matter. The curriculum is in fact a base for planning a course, or, in other words, a scaffold that the teacher uses to design a course syllabus. The second layer of scaffolding – the syllabus – is shaped by the objectives and the expected outcomes of the course and is beneficial for both the teacher and the student. The third layer is lesson planning. The lesson outline is a guide for the teacher to conduct a lesson, that is, a scaffold in achieving the goal/s. There is another layer of scaffolding in the lesson plan – teacher-designed tasks or goal-oriented activities. Along with helping the teacher to manage the process holistically, the lesson plan and properly sequenced tasks and activities serve as a steering mechanism for the student. Up to this point the teacher-student interaction remains, though mutually advantageous, passive and indirect. When the plans and tasks are implemented in class, scaffolding becomes crucial for learners since the primary purpose of teaching at this stage is to provide them with skills in solving different linguistic and communicative problems that are ‘beyond their knowledge base’. The scaffolding process does not end up here, it is followed by the assessment stage, which can also be scaffolded to streamline the monitoring of student progress and identification of weak areas. The fact that instructional scaffolding is a multi-layered phenomenon that can be used at any point of teacher-student interaction underlies the difficulty of encapsulating it in a definition.

The most commonly used techniques of scaffolding are simplifying language, asking students to complete rather than generate something, and using visuals and gestures (Bradley and Bradley 2004). Scholars also offer more detailed lists of scaffolding tools that include explaining new concepts through a concept map, making deliberate comparisons with the first language and culture, providing examples, highlighting patterns, using questions, using feedback, etc. (Scarino and Liddicoat 2009, 54). Breaking the task into smaller parts, using think-alouds, cooperative learning, concrete prompts, hints, cue cards, modeling, and activating the background knowledge are also mentioned as facilitative techniques utilized in scaffolding student learning (Lipscomb, Swanson, and West 2004). Hartman (2002, 26) adds to that partial solutions and direct instruction.

3. IMPLEMENTING SCAFFOLDING

3.1. Background

This article describes the application of scaffolding in “The Academic International English Language Testing System (IELTS)” course designed for students whose English language varies from intermediate to upper-intermediate. However, the suggested approach can be used in any other course aimed at developing learners’ reading skills or preparing them for a reading exam.

The IELTS test consists of four modules measuring the listening, reading, writing and speaking skills necessary to perform at the university level. The Reading Module, which includes three authentic reading passages and 40 reading tasks, appears to be the most complicated section of the test. The difficulties are caused by the lack of sufficient vocabulary to comprehend the text, scarce knowledge of reading strategies to complete various reading tasks and the inability to meet the time constraints.

Using the text “Miracle Cure” (Milton, Bell, and Neville 2003, 32-33) as an example, we will illustrate how these difficulties can be minimized by applying deep scaffolding, i.e. multiple sustained scaffolding throughout the entire reading process (Brown and
The text consists of seven paragraphs and sheds light on combretastin, a product of the African Bush Willow bark that, allegedly, can cure cancer.

3.2. The pre-reading stage

As the text contains a number of medical terms that the students are not cognizant of, at the pre-reading stage it is expedient to highlight as many medical words as possible. The content of the text makes it logical to group these words into three categories: the human body organs, the names of diseases and the treatment procedures including the names of drugs and the types of therapy. The upper-intermediate students are likely to name such organs as heart, lungs, stomach, etc. At this level of language proficiency the learners are undoubtedly aware of such diseases and physical conditions as headache, stomachache, sore throat, heart attack, cancer, etc. They are also familiar with such drugs as aspirin, painkillers, and such medical procedures as massage and therapy. After listing all these words on the whiteboard or Smart Board, the teacher provides a scaffold in the form of an additional list of non-categorized vocabulary from the text. This list includes the following words: thyroid, bowel, respiratory organs, malaria, skin pain, diarrhoea, ulcer, purgatives, quinine, combretastin, radiotherapy and chemotherapy. The students are asked to guess the meaning of the given words and place them under the appropriate heading. The words malaria, respiratory organs, radiotherapy, chemotherapy and quinine rarely cause problems as they are either complete cognates or bear significant visual and oral resemblance to their equivalents in the students’ native language. There is no need to explain what skin pain means since it is a combination of two elements the learners already know. For the remaining words, the teacher should provide either a visual support (showing, for example, a picture of a human anatomy with some internal organs labeled), or a verbal scaffold - giving a definition of the word or contextualizing it (for example, “People with weak stomachs usually have diarrhoea”) or asking a question that helps to figure out the meaning (for example, “Does combretastin seem to be a body organ, a medicine or a treatment procedure?”). In the text there are also several key words which are crucial for global comprehension. They are: a willow, bark and gum (in the meaning of a viscous secretion of trees and shrubs). A visual scaffold promptly leads the students to grasping the meaning of these words. It can be a ready-made picture of a willow, with its parts labeled, or a drawing on the whiteboard done by one of the students. After all the words have been manipulated this way, the students are able to predict the topic of the text. The next possible scaffolding step is to give the students a word cluster: research – ingredients – pharmaceutical trial – success – mass production and ask them to brainstorm additional ideas about the content of the text. At this point most of the students figure out that some part of the text explains how a certain drug is created. The teacher can proceed with an inquiry that would eventually direct the learners to defining the main idea of the reading passage. This can be achieved by asking the students about what new drugs are being currently developed, what diseases are considered to be the most dangerous ones nowadays, etc. At the end of the pre-reading stage the students are ready to be exposed to the text, since the applied scaffolding efforts helped them to decode unknown words, activate the schemata relevant to the text topic and predict what the text is about.
3.3. The during-reading stage

It is not by chance that the during-reading stage is sometimes called navigating. It is at this point that the teacher provides scaffolding to assist the learners in finding their way through the text by modeling effective reading strategies. The teacher also supports the students as they use the strategies and acquired knowledge during their own reading (Brown and Broemmel 2011, 38). This stage is divided into several steps. Initially the teacher, through direct instruction, makes the students aware of several major rules that they will have to follow while working with the reading passage. First, there is no time to read the text word for word. Second, instructions should be read very carefully. Third, different types of reading tasks require different skills and strategies. And finally, skimming, scanning, understanding the main and supporting ideas, differentiating facts from opinions, etc., are extremely helpful in locating the relevant section in the reading passage and completing the tasks. The last two statements are clarified with the help of prompts, examples and definitions.

The second step is to engage the learners in appropriately structured activities critical for their progress in completing the tasks. The text under consideration is followed by 13 reading tasks of different types: matching a title to the text, selecting a short answer from the provided options, sentence completion and matching headings to paragraphs.

While looking at the reading passage for the first time, the students are asked to write out all the initial sentences from each paragraph. The result is as follows:

Paragraph A. The search for cures to treat common diseases is not new, nor is it unusual to find the cures for such diseases in tree bark.
Paragraph B. The African Bush Willow, which grows in South Africa, has been recognized as a medicinal plant by local tribe people for many years.
Paragraph C. Combretastin, the active ingredient in the bark, was originally isolated from the stems and branches in the 1970s by South African researcher, Dr Gordon Cragg.
Paragraph D. Combretastin appears to work very quickly, often reducing the blood flow to a tumor within four to six hours after its first application.
Paragraph E. Initial trials have been carried out on twenty-five patients in the USA.
Paragraph F. Trials in the UK have met with similar success, but have reported significant side effects, including diarrhoea and skin pain.
Paragraph G. The drug has been greeted with enthusiasm by professionals and patients alike despite some of the experiments having limited success.

The information extracted from these seven sentences is sufficient for the students to complete four IELTS tasks out of thirteen, which underscores the informative relevance of the first sentence of a paragraph. For example, paragraph C begins with the sentence containing the word ‘bark’ and it helps to identify the correct answer ‘the branches’ to the question “The active ingredient of combretastin was found in which part of the tree?” It is not difficult either to choose the headline “Universal Approval” to paragraph G, since it is a contextual synonym to ‘greeted with enthusiasm by professionals and patients’ used in its first sentence.

During the third step the students skim paragraph after paragraph, identify their main idea and write it in the margins. This reduces to a minimum the time spent later on locating the paragraph relevant to the answer. After that is done, the students work with the remaining tasks in groups. If there is no agreement among them regarding the correct answer, they have to negotiate and then select one option that appears to be the most
appropriate. In case this option is still not correct, the teacher steps in using think-aloud modeling to show how the correct answer to a particular question can be found. The following is a sample of the teacher’s possible mode of reasoning: “The question is about the condition that has been cured by the medicine not derived from the bark of the African Bush Willow. (The given options are sores, malaria, cancer, migraine). We know that the African Bush Willow properties are described in paragraph B, so let us skim through it. The second sentence of this paragraph says that the roots of the plant were used as purgatives and its gum was used to treat sores and ulcers. Since purgative and ulcers are not given as options in this task, the correct answer is sores.”

The during-reading scaffolding techniques are not limited to analyzing the first sentence of a paragraph and defining its main idea. The students can be asked to underline all the capitalized words in the text. As a result, the African Bush Willow is by all means within the scope of their attention. After that, using the information from paragraph B, the teacher, together with the students, constructs a semantic map describing the parts of the plant, its size and properties (the plant is prolific, requires warmth, rich soil and abundant water, resistant to drought and frost, is used to treat sores and ulcers). This graphic scaffold facilitates the completion of several IELTS tasks.

The scaffolding techniques described above are used at the beginning of the course. As the course progresses, some of the scaffolds are gradually removed. There is no need for the students to write out the first sentences of each paragraph in the second week, since it is a very time-consuming process and, more importantly, by this time they begin to intuitively absorb the meaning of the initial part of every paragraph of any text they work on. During the third or the fourth week they start identifying the topic of each paragraph after skimming it without the teacher’s prompt. At the same time, as they run across new types of IELTS tasks, other scaffolding techniques should be applied by the teacher. In a matching-opinions-to-their-sources type of the task it is important to focus on personal names. During the first encounter with this task the students underline all the names, compress the opinions these people express into one sentence and write it next to the name. If the reading passage describes the development of a project, idea, etc. and the dates are mentioned, the drawing of the chronological line might help with the tasks related to this process, such as table completion, sentence completion or multiple-choice. In order to scaffold a summary-completion task, the teacher explains how to compose a brief (three to four sentences) summary of the passage and provides an example. Then, the students write their own summaries, with one notional word deleted in each sentence, and their partners are encouraged to fill in the blanks.

3.4. The post-reading stage

The post-reading stage is reflective. The students go back to the IELTS tasks, revise the techniques and strategies used, determine which of them works best, discuss the most challenging points and generate (with the teacher’s help, if necessary) the guidelines for completing different types of tasks.

By the end of the course the learners are familiar with all types of IELTS reading tasks and equipped with a few scaffolding tools to successfully complete them. These tools, together with the increased vocabulary and the benefits of experience they acquire after analyzing a number of reading passages, are key to overcoming the time constraints. The teacher might also want to provide the students with scaffolding techniques specifically
aimed at reducing the pressure of time constraints. For example, time limit might be set and gradually reduced for the completion of a particular task. Another option is to work out a general timing pattern at the beginning of the course specifying an amount of time to be spent on each stage of work with the text. In addition to helping the students to meet the time limit, time patterning and the way the students comply with it will make it easier for the teacher and the learners to identify areas for improvement.

4. CONCLUSION

In the “The Academic International English Language Testing System” course learners take three IELTS-format tests: diagnostic Test 1 before the start of the course, Test 2 in the middle, and Test 3 at the end of the course. The results of the tests, as well as the student comments, make it possible to claim that the step-by-step task-oriented scaffolding described in the article provides the learners with enough support and guidance in managing the main areas of difficulty in the exam reading section. It also equips the learners with the skills and strategies necessary to facilitate their language development.

REFERENCES


