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Unravelling Scaffolding for Classroom Practitioners

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Do we really know how scaffolding works or why it is necessary? This article shows how scaffolding can be useful for teachers.



Quality teaching involves not only effective use of teaching strategies but also the implementation of techniques to frame and support those strategies. All too often, the terminology used to describe and justify instructional strategies is vague or poorly understood. This can create confusion and misconceptions, especially about the origin and intent of educational theories and practices.

For example, the term **scaffolding** is used to refer to classroom interactions that range from teachers introducing pre-planned worksheets to giving spur-of-the-moment feedback to students.

For most, the essence of scaffolding is in assisting students to learn. But do we really know how scaffolding works or why it is necessary?

If scaffolding is to be effective, it must be used in a strategic, informed way; otherwise its use will not be as meaningful or as purposeful as teachers would like it to be.

In this article, we attempt to unravel scaffolding for classroom practitioners. First, we trace the origins of scaffolding and outline some of the perspectives that are directly and indirectly derived from that origin. We then raise and respond to a number of practical issues related to scaffolding in classroom contexts.

Origins and evolving perspectives

Scaffolding was first used by researchers to describe the role adults could play in helping children or novices solve problems in tutoring situations (Wood, Bruner, & Ross, 1976). The scaffolding phenomenon is frequently associated with Vygotsky's zone of proximal development (Kozulin, 1986). In line with Vygotsky's theory of social and cognitive development, Bruner (1985) expanded the notion of scaffolding to include "competent" peers:

If the child is enabled to advance by being under the tutelage of an adult or a more competent peer, then the tutor or the aiding peer serves the learner as a vicarious form of consciousness until such a time as the learner is able to master his own action through his own consciousness and control.

When the child achieves that conscious control over a new function or conceptual system, it is then that he is able to use it as a tool. Up to that point, the tutor in effect performs the critical function of "scaffolding" the learning task to make it possible for the child, in Vygotsky's word, to

internalize external knowledge and convert it into a tool for conscious control. (pp. 24-25)

Thus scaffolding is a tool that is crafted by the tutor for the tutee to use. Importantly, this is done by controlling those elements of a task that are considered to be beyond the learner's current capacity.

Within the context of the classroom, scaffolding usually involves the teacher providing expert assistance based on the perceived needs of students as they work on tasks. This assistance should be temporary—as students become better able to do the work without assistance, support can be gradually withdrawn.

Scaffolding could also be conceived as the degree of support, guidance and direction a teacher provides when students set out to complete a task (Nitko, 2004). A general rule, especially in assessment practices, is that the degree of structure in a task (what is possible and how this is achieved) is determined by the amount of scaffolding provided. Therefore, highly structured tasks are considered to be scaffolded strongly and explicitly and vice versa.

In Singapore, one classroom coding scheme identifies three main scaffold types that a teacher can provide in classroom teaching and assessment contexts (Koh, 2004; Luke, Freebody, Cazden, & Lin, 2004):

- 1. Content
- 2. Procedural
- 3. Strategic

In **content scaffolding**, the teacher provides students with guidance on the possible sources of relevant knowledge and information that can be used to complete a task. **Procedural scaffolding** provides guidance on how to utilise available resources, materials and tools to complete a task. With **strategic scaffolding**, the teacher provides guidance and structure about alternative solutions, strategies or options to complete a task.

In certain circumstances, a **language scaffold** can also be provided (Silver & Kogut, 2006). Here, the teacher provides information or guidance about linguistic knowledge and the use of language to facilitate task completion. This includes feedback, modelling, explanation, and the use of metalanguage.

Questions arising

Many of the concerns about scaffolding in classrooms arise out of use of materials, activity structures and sequences where an expert (usually the teacher) is involved. For example, teachers may ask:

- · What are the best kinds of scaffolds?
- Does scaffolding necessarily result in learning?
- · Does it always need an expert or more capable peer?
- Can students scaffold their own learning without the teacher's intervention?
- How is scaffolding different from other types of guidance provided to students when they embark on a new task?

Contemporary views of scaffolding emphasise its ongoing, interactional nature. Learning scaffolds, unlike those used by workers on a building site (see picture below) are constantly erected and dismantled as new, systematic knowledge is crafted in social, activity-based contexts.



If this view is accepted, it is possible for assistance to be derived from a variety of sources, making three kinds of scaffolded interaction possible:

- 1. Expert to novice
- 2. Novice to expert
- 3. Novice to novice

With respect to the dialogue that occurs when students are working together, Wells (2002) notes:

It is not necessary for there to be a clear difference in expertise for participants to assist each other...whenever the dialogue that occurs in joint activity leads to an increase in individual as well as collective understanding, there is an opportunity for each participant to appropriate new ways of doing, speaking, and thinking, and thus to augment the... resources they can draw on, both in the present and in their future activities. (p. 61)

Therefore, dialogic exchanges among students can also be a scaffold. This is shown, for example, when students discuss what a task involves and how they can complete it. If this kind of talk is common in the classroom, students can learn how to produce procedural and strategic scaffolds for themselves.

Conclusion

Scaffolding is an instructional practice that has evolved from a formal and narrow conception of expert-novice interactions to one that is potentially peer-based and highly situational. Scaffolding can be used for a variety of purposes, using diverse resources in order to respond to learners' needs. Given this, what then is the best way to understand the term "scaffolding"?

It is useful to make a distinction between a scaffold (the material resource or assistance provided) and scaffolding (the method and/or process through which the resource is presented and used). For instance, advanced graphic organisers (a scaffold) can help bridge the gap between what learners already know and what they need to know before a task can be completed.

However, a particular risk with any kind of scaffold is when its use becomes habituated.

If students are not given the opportunity to sometimes organise information using their own categories, the practice of using predetermined graphic organisers can be



constraining and uncreative.

When the support provided by teachers is fixed and constantly expected, it can no longer be considered temporary. In extreme circumstances of overuse, scaffolds become buttresses (see picture above), cannot be removed without everything toppling down.

In contrast, focusing on scaffolding helps draw our attention to what happens between teachers and students so students can work more independently, to their maximum potential. This view is consistent with the original spirit and intent of scaffolding first articulated 3 decades ago.

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> For more references, click here to download a selected bibliography on scaffolding.

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