# INSTRUCTIONAL SCAFFOLDING

Scaffolding is an instructional method that progressively moves students toward greater independence and understanding during the learning process (Belland, Walker, Kim, & Lefler, 2017). Bruner (1978) defines scaffolding as "the steps taken to reduce the degrees of freedom taken in carrying out some task so that students can concentrate on the difficult skill s/he is in the process of acquiring" (p. 19)

Instructional scaffolding as a strategy for supporting learners begins with Lev Vygotsky's sociocultural theory and his learning concept of the Zone of Proximal Development (ZPD) which is based on three points of the learning process:

❖ What the learner **cannot do**

❖ What the learner **can do with help**

❖ What the learner **can do without help**

The instructor scaffolds by systematically building on learners' experiences and knowledge as they are learning new skills. The support mechanisms are temporary and adjustable just like the scaffold in the picture on the left. As learners master the assigned tasks, the instructor gradually removes the support s/he offers. There are several forms that scaffolding can take. Scaffolding can come from the instructor, peers, content presentation, task and materials that support thinking and analyzing the content. The main purpose of scaffolding is to provide support during learning in order to **gradually remove the support** when learning becomes solidified or when the learner becomes more independent and able to transfer learned skills to new situations.

Alibali (2006) suggests that as students progress through a task, faculty can use a variety of scaffolds to accommodate students' different levels of knowledge. The table below presents scaffolding techniques instructors could use in an instructional setting.

**Scaffolding Techniques**

| Questioning | You can provide incomplete sentences which students complete which helps to encourage deep thinking by using higher order 'What if' questions. |
| --- | --- |
| Explanation | You can provide more detailed information to move students along on a task or in their thinking of a concept such as written instructions for a task, or verbal explanation of how a process works. |
| Modeling | You can verbally or non-verbally demonstrate for the students how to complete a task. |
| Hint | You can provide suggestions and clues to move students along. |
| Feedback | You can provide confirmation, corrections, positive comment or constructive criticism. |
| Examples | You can provide samples, specimens, illustrations and problems. |
| Concept Map | You can provide partially completed maps for students to complete; students can create their own maps based on their current knowledge of the task or concept. |
| Visual Clues | Pointing, diagrams, charts and graphs highlight visual information. |

Below are some key issues about instructional scaffolding:

☐ Scaffolding can be applied to any academic task.

☐ Scaffolding is most useful for teaching new tasks or strategies with multiple steps.

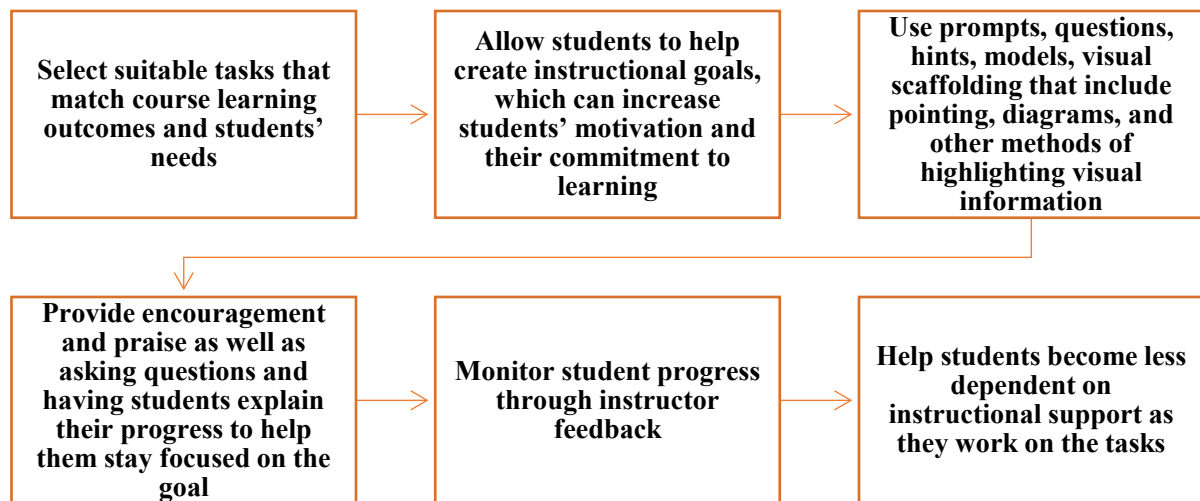☐ All students, regardless of their grade or major, can benefit from instructional scaffolding.

> *Tell me and I forget, teach me and I remember, involve me and I learn.*
>
> *Benjamin Franklin*

## Guidelines for Implementing Scaffolding

The following points can be used as guidelines when implementing instructional scaffolding (adapted from Hogan and Pressley, 1997).

| | | |
|---|---|---|
| **Select suitable tasks that match course learning outcomes and students' needs** | **Allow students to help create instructional goals, which can increase students' motivation and their commitment to learning** | **Use prompts, questions, hints, models, visual scaffolding that include pointing, diagrams, and other methods of highlighting visual information** |
| **Provide encouragement and praise as well as asking questions and having students explain their progress to help them stay focused on the goal** | **Monitor student progress through instructor feedback** | **Help students become less dependent on instructional support as they work on the tasks** |

Scaffolding in the classroom can follow a pattern similar to the one below;

1. *The instructor does it:* The instructor models how to perform a new or difficult task, such as how to create a mind map.

2. *The class does it:* The instructor and students work together to perform the task.

3. *The group does it:* Students work with a partner or a small group to create a mind map.

4. *The individual does it:* This is the independent practice stage.

Also, in *What Readers Really Do: Teaching the Process of Meaning Making* Barnhouse and

Vinton (2012) provide the difference between prompts and scaffolds;

| Prompt | Scaffold |
|---|---|
| Leads students to notice what the teacher notices | Guides students to become aware of what there is to be noticed |
| Leads students to draw the same conclusions as the teacher from what they notice | Honors the conclusions students draw from what they notice |
| Does the thinking for the students | Allow students to do the thinking for themselves |
| Solves the problems for the students | Facilitates problem solving |
| Teaches the text | Teaches the thinking around the text |

The table above displays the fact that the difference between a

prompt and a scaffold is a bit like the old Chinese proverb:

*Give a man a fish and you feed him for a day. Teach a man to fish*

*and you feed him for a lifetime.*

# References

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https://www.niu.edu/citl/resources/guides/instructional-guide/instructional-scaffolding-to-improve-learning.shtml

## Further Reading and Resources

- Scaffolding. University at Buffalo, Center for Educational Innovation.
- 6 Scaffolding Strategies to Use with Your Students. Edutopia.
- Scaffolding Discussion Skills with a Socratic Circle. Edutopia.