Scaffolding: Approaches and practices

Helping children achieve goals and deepen learning experiences is something early educators think about often: How can I help each student learn? How can I enrich the learning experience and help children reach the next stage of development? When tasks become challenging, how can I help children find success? Scaffolding may help. Although there is no single definition, scaffolding can generally be described as a concept that was first introduced in child psychology by Wood, Bruner, and Ross (1976):

"The intervention of a tutor ... involves a kind of 'scaffolding' 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)

Scaffolding is a technique (or tool) that provides support for thinking and learning, typically accomplished through social interactions and language. Scaffolding practices provide the opportunity for children to reach higher-level skills by building on and extending their existing skills. Current research shares various scaffolding theories and that scaffolding has undergone significant changes over the years. "Scaffolding embodies much of the activity that goes on in classroom teaching and teacher-learner interaction. As the metaphor of scaffolding has become popularized, it has often been adopted as a general term that is used to describe all type of support and guidance offered in the classroom." (Boblett 2012)

Teachers or peers who are considered 'expert' or more knowledgeable can provide students with tools needed for learning. Building on prior strengths and knowledge, scaffolding-type experiences assist children in understanding and in forming new connections to learning. For example, an older toddler who was attempting to play with a new set of magnetic blocks became frustrated. In observing the child, the teacher realized that he did not know how to use this type of block. She then showed the toddler that the blocks had a magnetic side that made them stick together and demonstrated how they worked.

She encouraged the child to make an attempt: "Let's see if you and I can make these blocks stick together." Through language and social interaction, she modeled how to use the blocks, which in turn helped ease the frustration of the toddler and modeled new ideas. The teacher did not simply put the blocks together for the child but rather demonstrated how, along with encouraging the child to try, which helped shift learning to the child.

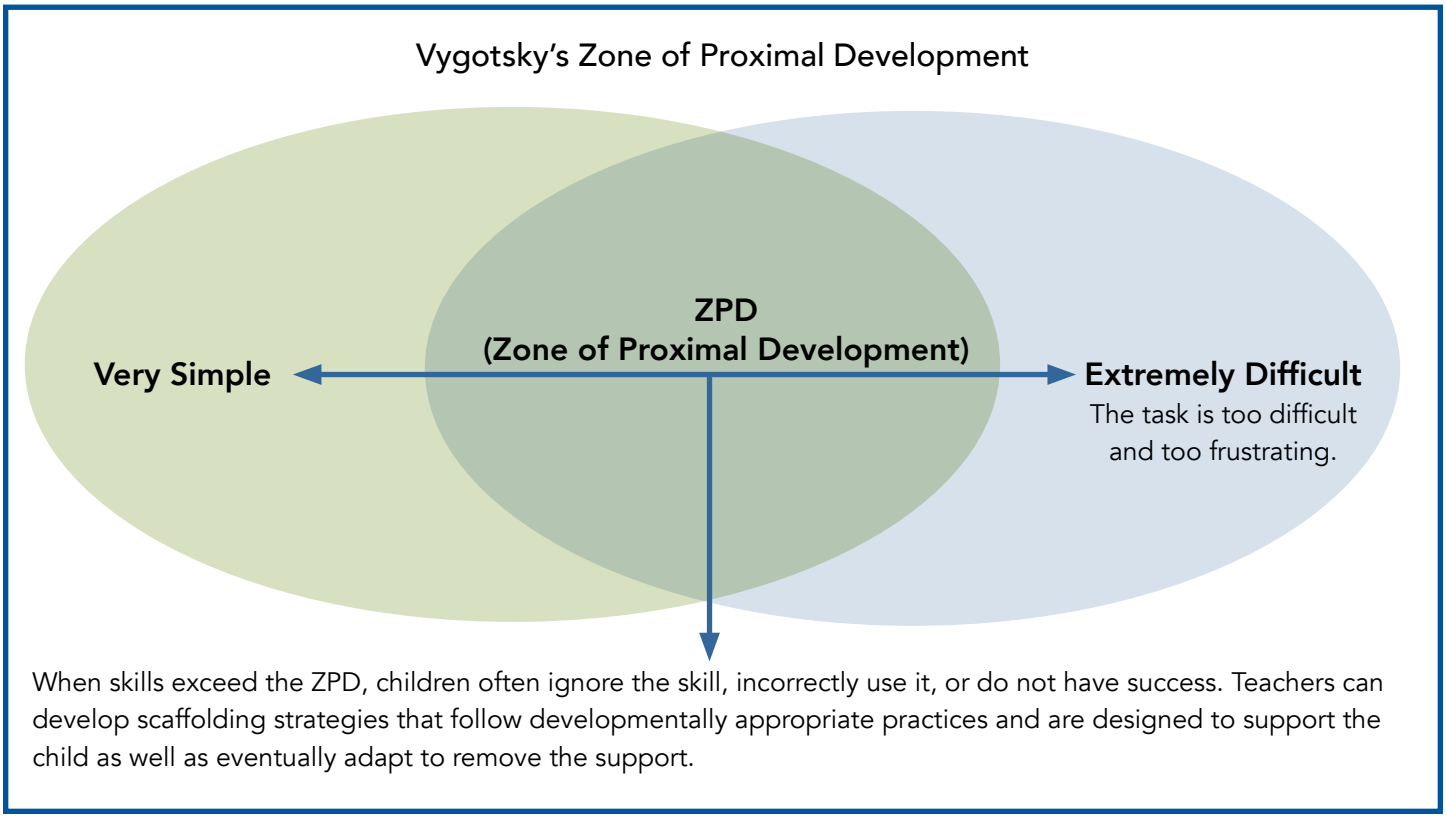
Just as with constructing a building, scaffolding is considered to be temporary. The long term goal is for learners to 'stand on their own' – to transition from assistance to independence. Once children are competent and able to master more challenging tasks, the scaffolding assistance can be removed. The intention of scaffolding is twofold: it supports learners in accomplishing a task, and it enables them to learn from the experience and hopefully carry those skills into future learning.

As shared above, scaffolding does not simplify the task, but rather presents ways to achieve the task through

gradual interventions and varied amounts of assistance. By being provided individualized support, learners can be successful when moving through experiences that are unfamiliar or highly challenging. Typically scaffolding is done within one-to-one experiences, such as a parent or teacher and child, but can also transfer to group settings (the term "collective scaffolding" relates to the collaboration between peers).

Scaffolding and ZPD (Zone of Proximal Development)

A key factor in understanding scaffolding is the Zone of Proximal Development, or what the Russian psychologist Lev Vygotsky refers to as what children can do independently and what they can do with assistance. Vygotsky describes this as a "distance between the actual developmental level as determined by independent problem solving under adult guidance or in collaboration with more capable peers." (Vygotsky 1978)



When skills exceed the ZPD, children often ignore the skill, incorrectly use it, or do not have success. Teachers can develop scaffolding strategies that follow developmentally appropriate practices and are designed to support the child as well as eventually adapt to remove the support.

Scaffolding practices

Authentic scaffolding practices begin with the learner. Through observation and authentic assessments, adults come to know children's strengths, interests, and abilities. They offer scaffolding practices that suit the child and that engage him in the process, which adds to attention, enjoyment, and learning. Environments and tasks can be adjusted to be both developmentally appropriate and flexible, so they can move within a child's learning continuum (not too easy, not too hard). For example, a teacher tapes blocks onto the pedals of the tricycles or puts out ten sets of a matching card activity as opposed to all 100 cards.

Scaffolding practices are broad and consist of many approaches. Finding what works best may take time and may change with each type of experience and with each child. Adults can carefully observe what scaffolding assistance works and what does not. You may even come up with many of your own scaffolding practices.

The following are a few scaffolding practices to try:

Model & demonstrate (show & tell) – Demonstrate what children need to learn and observe. Show children possibilities for using materials, tools, etc., especially during meeting times which can help to provoke thought and skills to be used later, such as during self-directed (free) play.

Use mediators – Use physical objects, visuals (pictures, charts), and actions/signals (clap hands) to remind children how to recall or do a task and to add focus. An example is a picture of hands being washed placed above a sink or a song with reminders in it when it's time to wash hands. Mediators help shape the thinking process, but eventually can be removed.

Hint, nudge, and provoke – Invite children to explore and get excited! Asking open-ended questions and 'what if' questions help connect to ideas, skills, and problem solving. Nudge children with play-back talk. Hint at making connections to peers, materials, etc., so children can make self-discoveries versus the adult solving the problem for them. For instance, "You added blue and white paint to mix together and got a light blue, but you wanted to get purple. What other color might you add with the blue? Do you remember when we read the story about the mice that mixed colors together – did they mix colors to make purple? Let's get the book from our library to see."

Encourage reflection and metacognition (thinking about thinking) – Children don't automatically use self-reflection practices. Reflection helps children to become more self-aware. The adult can reflect and comment on experiences, which in itself can be a scaffold by reviewing what happened and how. Adults can also guide children in reflecting through open ended and attention focused questions, for example: "Tell me what happened when you added the water."

Use documentation – Help children see their thinking and learning. Gather documentation of children's ideas, questions, and experiences by using photographs, written descriptions, and even video of their exact conversations and experiences. This provides children opportunities to look back at themselves and review. They can see what has changed or how they might think differently in the future. Documentation also shows children's accomplishments and abilities.

Scaffolding practices help each child reach his fullest potential. Learning about scaffolding can benefit quality practices in teaching and learning. Scaffolding becomes not only an application to try in guiding children's learning, but also provides a base for thinking about teaching. Not only do children grow, but teachers grow in their capabilities as well.

"The interaction between the adult and the child (for Vygotsky) is like a dance – the child leads and the adult follows, always closely in tune with the child's actions." *(Berk and Winsler 1995)*

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