

Scaffolding assignments

What it is: Scaffolding assignments involves structuring parts of a single assignment or designing a sequence of assignments so that they gradually increase in cognitive complexity. For example, the first part of an assignment might ask students to summarize an argument; the second might ask students to identify assumptions anchoring the argument; and the third might ask them to compare and evaluate several arguments on the same topic.

Why it might be worth trying: Recent studies focusing on the development of expertise suggest the importance of “deliberate practice.” One important feature of deliberate practice is its graduated structure: it involves mastering easier tasks before tackling more difficult ones. Importantly, deliberate practice also gives the student ample opportunity to receive and act on feedback.

Examples:

- Breaking up an assignment into several parts. For example, rather than handing in one research project at the term’s end, students are asked to write three short papers. In the first they define a problem and identify two or more positions on the problem; the second asks them to evaluate the evidence and assumptions behind each position; the third asks them to draft an argument endorsing an existing position or creating a new one.
- Keeping assignment constant but increasing the difficulty of material (readings, arguments, problems, etc.). For example, students are asked to summarize articles for each week’s readings, but the readings themselves increase in complexity and abstraction.
- Creating a scaffold within a single assignment. An art history professor teaching a freshman class assigns a paper asking students to 1) Describe DeKooning’s painting *Woman, I*; 2) Explain how it is that the painting represents a woman (or all women); 3) Connect specific formal properties of the painting to ideas about women; and 4). Reflect on their own arguments in numbers 2 and 3 and identify some assumptions about art or creativity.
- For an example of a sequence of assignments that gradually increase in complexity, visit Dartmouth’s Writing Center:
www.dartmouth.edu/~writing/materials/faculty/forum/assignments/Spengemann.shtml

Resources:

Bean, J.C. (1996). *Engaging ideas: The professor's guide to integrating writing, critical thinking, and active learning in the classroom*. San Francisco: Jossey-Bass.

Bloom, B.S. (1956). *Taxonomy of educational objectives: Handbook*. New York: McKay.

Ericsson, K.A. & Charness, N. (1994). Expert performance. *American psychologist* 49, 725-47.

Bloom's Taxonomy

Competence	Skills Demonstrated	Related prompts
Knowledge	<ul style="list-style-type: none"> • observation and recall of information • knowledge of dates, events, places • knowledge of major ideas • mastery of subject matter 	list, define, tell, describe, identify, show, label, collect, examine, tabulate, quote, name, who, when, where, etc.
Comprehension	<ul style="list-style-type: none"> • understanding information • grasp meaning • translate knowledge into new context • interpret facts, compare, contrast • order, group, infer causes • predict consequences 	summarize, describe, interpret, contrast, predict, associate, distinguish, estimate, differentiate, discuss, extend
Application	<ul style="list-style-type: none"> • use information • use methods, concepts, theories in new situations • solve problems using required skills or knowledge 	apply, demonstrate, calculate, complete, illustrate, show, solve, examine, modify, relate, change, classify, experiment, discover
Analysis	<ul style="list-style-type: none"> • seeing patterns • organization of parts • recognition of hidden meanings • identification of components 	analyze, separate, order, explain, connect, classify, arrange, divide, compare, select, explain, infer
Synthesis	<ul style="list-style-type: none"> • use old ideas to create new ones • generalize from given facts • relate knowledge from several areas • predict, draw conclusions 	combine, integrate, modify, rearrange, substitute, plan, create, design, invent, compose, formulate, prepare, generalize, rewrite
Evaluation	<ul style="list-style-type: none"> • compare and discriminate between ideas • assess value of theories, presentations • make choices based on reasoned argument • verify value of evidence • recognize subjectivity 	assess, decide, rank, grade, test, measure, recommend, convince, select, judge, explain, discriminate, support, conclude, compare, summarize