Tech Snacks: Backward Design

Do you ever feel like you're just marching through the textbook without a great sense of what students are and aren't understanding? Are there times when you feel more like an activity designer or entertainer than a teacher? Backward Design -- based on Wiggins and McTighe's often-cited work *Understanding by Design*[1] -- is a curriculum building concept that can guide you through some of these common pitfalls and dilemmas.

Stages of Backward Design

Wiggins and Jay McTighe present a three-stage approach to using the backward design model when creating a course or unit.[2]

Stage 1: Identify desired results

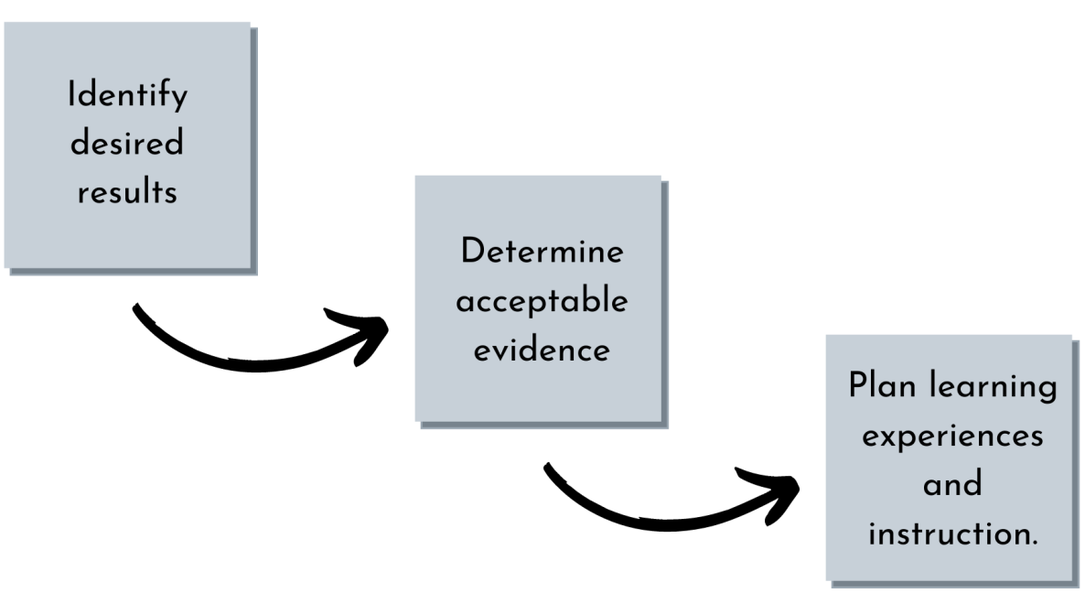
In Stage 1, consider your goals for the students – i.e., what you want them to know, understand, and be able to do by the end of the course or unit. In this stage, you are encouraged to articulate learning outcomes that describe the results you expect to see. These outcomes will help you ensure your students are learning what you want them to learn.

Stage 2: Determine acceptable evidence

In Stage 2, ask yourself these questions: how will I know if my students achieve the desired results? What evidence is needed to prove student understanding and proficiency? What are the key performance tasks for this unit? This stage encourages you to consider the types of assessments you will need to use to test whether students have successfully achieved your desired learning outcomes.

Stage 3: Plan learning experiences and instruction

In Stage 3, after clearly identifying the types of assessments you will need as evidence of understanding, it is time to develop teaching and learning activities that will most effectively guide students to the skills and understanding necessary to achieve those outcomes.



[1] Wiggins, G. & McTighe, J. (2005). *Understanding by design* (2nd edition). ASCD.
[2] Wiggins, G. & McTighe, p. 18.

Backward Design and Alignment

Quality Matters, OCSR, and other course quality standards frameworks use the concept of "alignment," and the backward design process can help instructors ensure that their courses and lessons are appropriately aligned. Alignment means that content and learning experiences and activities promote the achievement of the stated learning outcomes and that assessments actually measure the stated learning outcomes.

Examples of misalignment: The outcome requires learners to deliver a speech, but course activities do not include practice of that skill; The outcome is "Prepare a budget," but students only observe existing budgets, and never create a budget themselves.

Table 1: Unit Plan using Backward Design (Soccer Unit)		
Learning Goals or Outcomes	**Key Assessments**	**Activities/Experiences**
Students will be able to perform individual offensive and defensive skills in 11-a-side games.	Students perform offensive and defensive skill tests in small group drills. Students use individual offensive and defensive skills during an 11-a-side scrimmage.	Students watch video demonstrations of skills and strategies. Instructor demonstrates offensive and defensive drills. Students practice offensive and defensive skills in groups.

Thinking like an Assessor

Backward design teaches us to "think like an assessor" rather than an activity designer.

Table 2: Two Approaches to Thinking about Assessment[3]	
When thinking like an assessor, we ask –	***When thinking like an activity designer (only), we ask –***
What would be sufficient and revealing evidence of understanding?	What would be fun and interesting activities on this topic?
Given the goals, what performance tasks must anchor the unit and focus the instructional work?	What projects might students wish to do on this topic?
What are the different types of evidence required by Stage 1 desired results?	What tests should I give, based on the content I taught?
Against what criteria will we appropriately consider work and assess levels of quality?	How will I give students a grade (and justify it to their parents)?
Did the assessments reveal and distinguish those who really understood from those who only seemed to? Am I clear on the reasons behind learner mistakes?	How well did the activities work? How did students do on the test?

[3] Wiggins, G. & McTighe, p. 151. Note this diagram is taken verbatim from the book.