Backward Design

What is it?

Backward Design is an instructional design method used by educators to create instruction. It originated with Wiggins and McTighe in their book *Understanding by Design* (Grant P. Wiggins and Jay McTighe, most recent edition 2005, Association for Supervision and Curriculum Development).

The backward design process for designing instruction has three main stages:

1. Identify desired results
2. Determine acceptable evidence
3. Plan learning experiences and instruction

Very simply put, it differs from the more beginning-to-end approach to instructional design where one decides what content to teach and then how to assess the resulting learning. Backward design begins the course creation process with the desired end in mind and focuses on what the learner will learn, not on what the teacher will teach.

- First, write the learning objectives that learners should achieve through instruction (identify the desired results)
- Second, create the assessments that will act as proof that the learners met the objectives (determine the acceptable evidence)
- Third, create the activities and assignments that lead the learner to perform well on the assessments (plan learning experiences and instruction).

Why this design method?

Instructional designers may choose the backward design process for several reasons:

- It is well supported by learning theory.
- The three steps are simple and straightforward, easy to remember, and transferable to almost any instructional situation.
- Backward design is a process that is well known and widely accepted by educators. No matter who you are designing for, this method should be applicable, and the educators you are working with will probably be able to immediately relate to the framework you are using. If they aren’t, it’s very easy to explain.
- It is based on common sense, it works consistently, and it meshes perfectly with the frameworks of authentic learning and quality assurance in online course design.

What else should I know?

Chapter 1 of Wigging and McTighe's *Understanding by Design* is available online at http://books.google.com/books?id=N2EfKJyUN4QC&printsec=frontcover. (Google “google books Understanding by Design.”) Read pages 13-19, at a minimum, for more information.
Alignment and Bloom’s Taxonomy

Your learning objectives, assessments, and activities should be appropriate for the level at which your audience is learning. Are they freshman just starting out with their general education requirements? Seniors in an advanced major course who might be expected to use a great deal of already-acquired background knowledge to make evaluations and judgments? Perhaps they are a mixed audience with varying degrees of prior knowledge.

Why does it matter?

You want your learning objectives to match the level at which you are teaching your students to perform. To write an objective that says "the student will memorize the steps in a procedure" is probably not appropriate for an advanced-level course in which they should be evaluating the efficacy of a variety of procedures and choosing the one that fits the circumstance best.

If the objective says "the student will make a judgment about ethics in a complex situation," that objective might not be appropriate for a 100-level general education course in study skills. This does not mean that more advanced courses won’t use objectives the fit in the lower Bloom's taxonomy levels or that introductory courses won’t use objectives in the upper levels of Bloom’s. It's up to you to decide what your students need to accomplish in the course and write the objectives at the appropriate level.

How is Benjamin Bloom going to help me with this?

Bloom’s Taxonomy is a classification of the goals of the educational process. Here are some resources for using Bloom’s in a practical way to help with course design:

- Bloom's verb wheel and alignment (Arizona State)
- Penn State Learning Design Community Hub - Bloom's Taxonomy
- An extensive list of action verbs for each level of Bloom's from University of West Florida
- Bloom's levels, corresponding verbs, and potential student products
- How to write test questions that fit a given Bloom's level (University of Illinois)
- Bloom's in Action (more suggestions for aligning activities/assessments with objectives)

Let’s summarize:

Start with the end in mind, follow the backward design process, and align your three elements!

- Identify the desired results: Start with your course goals and learning objectives: What do you want students to know when they finish your course?

- Determine the acceptable evidence: Then, consider your assessments: How are you going to prove that your students know what you want them to know when they finish your course? What will be your evidence?

- Plan the learning experience and instruction: Now, consider the course activities that lead them to the knowledge and the evidence of that knowledge.

Three simple steps; it really is that easy.