

## Topic 3: Developing Goals and Objectives

### Class Notes: Six Facets of Understanding

What is the enduring idea? What will they remember about the topic in five years?

### Understanding by Design by Wiggins and McTighe: A summary

In "Understanding by Design," Wiggins and McTighe (1998) lay out a conceptual framework for instructional designers. Unlike many instructional design models that come from a training background, the Wiggins and McTighe model is well suited for the academic community. Two of their biggest contributions are:

- The "backwards design" instructional design model
- The "Six Facets of Understanding"

### Six Facets of Understanding

- **explain** provide thorough and justifiable accounts of phenomena, facts, and data
- **interpret** — tell meaningful stories, offer apt translations, provide a revealing historical or personal dimension to ideas and events; make subjects personal or accessible through images, anecdotes, analogies, and models
- **apply** — effectively use and adapt what they know in diverse contexts
- **have perspective** — see and hear points of view through critical eyes and ears; see the big picture
- **empathize** — find value in what others might find odd, alien, or implausible; perceive sensitively on the basis of prior indirect experience
- **have self-knowledge** — perceive the personal style, prejudices, projections, and habits of mind that both shape and impede our own understanding; they are aware of what they do not understand and why understanding is so hard

From the Educational Research Service Web site:  
<http://www.ers.org/ERSBulletins/0399f.htm>

### Backwards Design

The backwards design model centers on the idea that the design process should begin with identifying the desired results and then "work backwards" to develop instruction rather than the traditional approach which is to define what topics need to be covered. Their framework identifies three main stages:

- Stage 1: Identify desired outcomes and results.
- Stage 2: Determine what constitutes acceptable evidence of competency in the outcomes and results (assessment).
- Stage 3: Plan instructional strategies and learning experiences that bring students to these competency levels.

### Stage 1. Identify Desired Results

In other instructional design models this is known as defining goals and objectives. Wiggins and McTighe ask instructors to consider not only the course goals and

[Table of Contents](#)

Topic 3

[Warm-up](#)

Class Notes:

[Developing Goals and Objectives](#)

[Applying vs. Knowing](#)

▶ [Six Facets of Understanding](#)

Resources: (open in new window)

[Behavioral Objectives Checklist](#)

[Rubric: Guidelines for Evaluating Behavioral Objectives](#)

[Writing Educational Goals and Objectives](#)

[Bloom's Taxonomy](#)

[Assignment](#)

Forums: (open in new window)

[Lobby](#) | [Cindy](#) | [Valerie](#) | [Robert](#) | [Tom](#) | [Diane](#) |

objectives, but the learning that should endure over the long term. This is referred to as the "enduring understanding." Wiggins and McTighe suggest that "the enduring understanding" is not just "material worth covering," but includes the following elements:

- Enduring value beyond the classroom
- Resides at the heart of the discipline
- Required uncoverage of abstract or often misunderstood ideas
- Offer potential for engaging students

"Backward design" uses a question format rather than measurable objectives. By answering key questions, students deepen their learning about content and experience an enduring understanding. The instructor sets the evidence that will be used to determine that the students have understood the content.

These questions focus on the following:

- To what extent does the idea, topic, or process reside at the heart of the discipline?
- What questions point toward the big ideas and understandings?
- What arguable questions deepen inquiry and discussion?
- What questions provide a broader intellectual focus, hence purpose, to the work?

Once the key concepts-questions are identified, develop a few questions that apply the line of inquiry to a specific topic.

Examples from Wiggins and McTight (1998)

Overall question:

- "How does an organism's structure enable it to survive in its environment?"

Specific topic question:

- "How do the structures of amphibians and reptiles support their survival?"

Asking inquiry-based questions facilitates the students "uncovering" the answer.

## **Stage 2. Determine what constitutes acceptable evidence of competency in the outcomes and results (assessment).**

The second stage in the design process is to define what forms of assessment will demonstrate that the student acquired the knowledge, understanding, and skill to answer the questions.

Wiggins and McTighe define three types of assessment:

1. Performance Task— The performance task is at the heart of the learning. A performance task is meant to be a real-world challenge in the thoughtful and effective use of knowledge and skill— an authentic test of understanding, in context.
2. Criteria Referenced Assessment (quizzes, test, prompts)  
These provide instructor and student with feedback on how well the facts and concepts are being understood.
3. Unprompted Assessment and Self-Assessment (observations, dialogues, etc.).

## **Stage 3. Plan Learning Experience and Instruction**

In this stage it is determined what sequence of teaching and learning experiences will equip students to develop and demonstrate the desired understanding.

## **Resources**

### **Understanding by Design Template**

This pdf file is a template for instructors to develop an outline of a topic or unit of instruction using the Wiggins and McTighe model.

<http://www.maine207.k12.il.us/staffdev/wiggins.pdf>

**Understanding by Design Exchange Web site**

If you join as a member (free) you can share with other faculty and develop online curriculum using their online instructional design templates.

<http://www.ubdexchange.org/>

**First two chapters of "Understanding by Design"**

<http://www.ascd.org/readingroom/books/wiggins98book.html#intro>

**PowerPoint Presentation on Basic Concepts of Wiggins and McTighe**

<http://entemet.lth1.k12.il.us/ubd/sld001.htm>

[Instructional Design Intensive Workshop](#)

All rights reserved