

Understanding by Design: *A Course planning approach*

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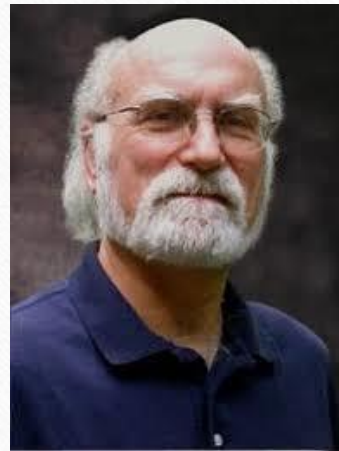
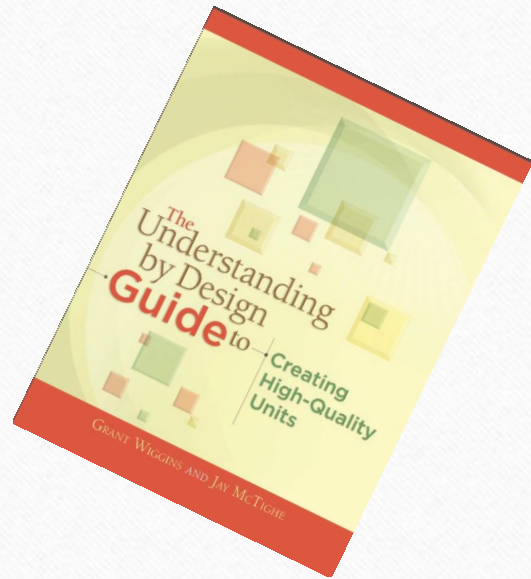
CHECK- if this training matches your needs

- My students:
 - A) Perform poorly on tasks that require in-depth understanding and transfer ability
 - B) Seem to have no sense of what really matters in my course
 - C) Have problems solving their own problems, asking questions, and thinking critically
 - D) Do not like it when I ask them to dig deeper instead of waiting for me to spoon-feed them

CHECK...

- We, instructors,
 - A) Tend to cover contents and activities more superficially than we should
 - B) May have activities and field/lab works in our courses; but, they often are fragmented and lack clear overarching goals that are clear to learners
 - C) Ask students to do too many drills and works, and not enough “playing the games”
 - D) Our exams focus mostly on recall, recognition, or plugging in of previous learning

The Understanding by Design Guide to Creating High-quality Units (2005)



Grant Wiggins & Jay McTighe

Workshop Agenda

- What is “Understanding”?
- What is UbD?
- The Eight basic tenets of UbD
- The Basics of UbD: Backward Design
- Developing an Initial Sketch of a Unit
- Using the UbD Template for unit planning

Activity

- What is understanding? What is the difference when students *understand* a content, really *get it*, and when they simply *know* it?

Think-pair-share:

1. Write down your definition(s)
2. Compare it with someone sitting close to you and come up with synthesized definition
3. We will see a few of them as a large group

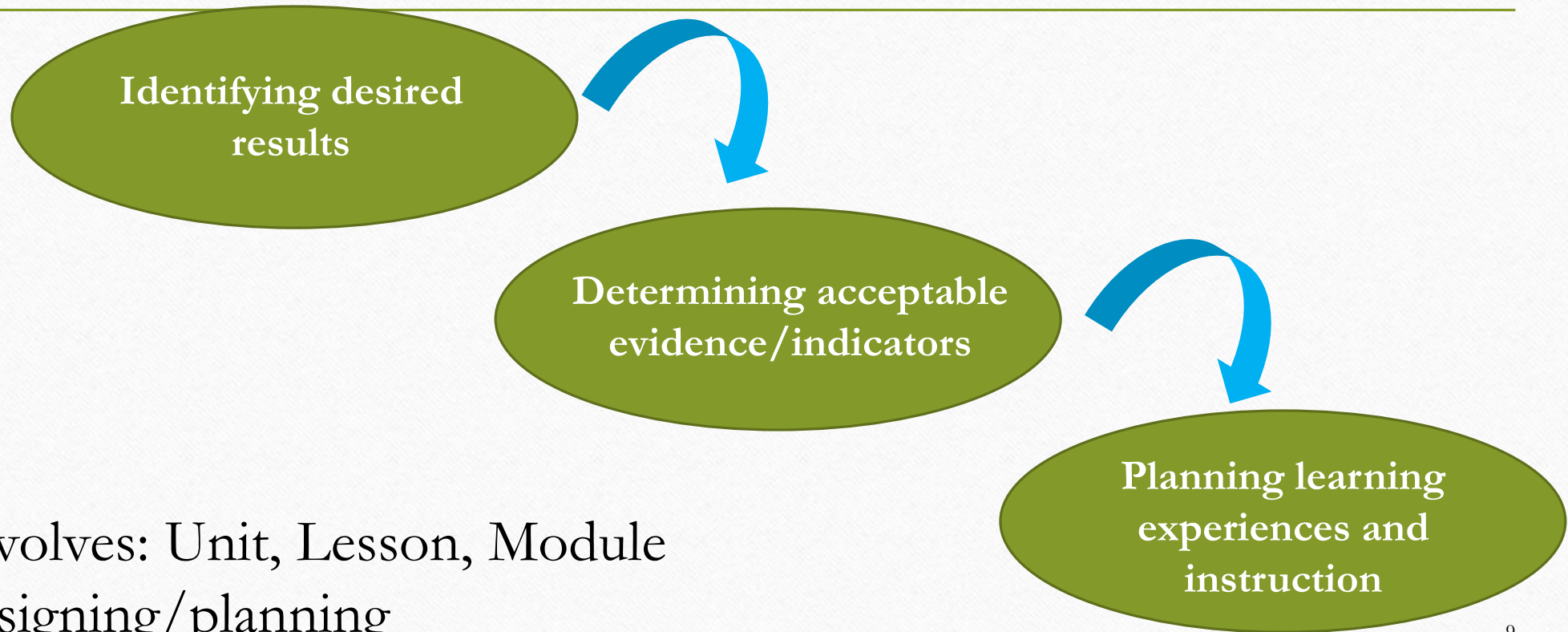
Understanding ...

- Is multifaceted
- Is different from mere “knowing,”
- Its goal involves more sophisticated instruction and assessment than teaching and testing for knowledge and skill alone.

What is UbD?

- It is a curriculum design framework for planning units of study/course
 - The focus is on the unit
 - Its central logic is backward design
- It can be used to develop new courses or modify existing ones and make them more alive, focused, and goal-oriented
 - Very well liked approach across the U.S.—all levels

The Basics of UbD: Backward Planning



Involves: Unit, Lesson, Module
designing/planning

The Eight basic tenets of UbD:

- 1) UbD is thinking purposefully about curriculum planning
- 2) A primary goal of UbD is developing and deepening student understanding “big ideas” and to transfer learning.
- 3) UbD unpacks and transforms content standards and mission-related goals into “desired results” and “Determining acceptable evidence learning”).

Eight tenets...

- 4) Understanding as students' ability to autonomously make sense of and transfer their learning through authentic performance.

Six facets that serve as indicators of understanding are the capacities to:

- *explain, interpret, apply, shift perspective, empathize, and self-assess*

5. Effective curriculum is planned “backward” from **long-term** desired results: Tries to avoid “textbook coverage” problem and “Activity-oriented teaching” which have no apparent purpose.

Eight tenets...

6. Teachers are coaches of understanding, not mere purveyors of content or activity.
7. Regular reviews of units and curriculum against design standards enhance curricular quality and effectiveness.
8. UbD reflects a continuous-improvement approach to achievement. Student performance informs adjustments BOTH in the curriculum as well as instruction.

Backward Planning

- Begins from clarifying the targeted learning outcome
- It results in:
 - more clearly defined and wisely blended short-term and long-term goals,
 - more appropriate assessments, and
 - more purposeful teaching than typical planning



Exercise – 1 : Designing a unit backward (Example)

Stage 1	Stage 2	Stage 3
If the desired end result is for learners to . . . →	then you need evidence of the learners' ability to . . . →	then the learning events need to . . .
Drive in heavy traffic with aggressive and inattentive drivers without accident or anger.	Handle real as well as simulated driving conditions in which defensive driving is required by traffic and behavior of other drivers.	Help novices become skilled in handling the automobile; help them learn and practice defensive driving in a variety of situations; help them learn to defuse anger using humor and different thought patterns, etc.

Your turn: Sketch a Unit

- *Directions:* Sketch out a unit idea in the three stages of backward design. Use the driving example as a model.

Using the UbD Template to Develop a Unit

UbD Template is:

- A tool that guides backward design in a unit plan
- Helps make that unit goals, assessments, and instructional plans are coherent and aligned.
- Backward design is a way of thinking; it is not about filling in boxes in a template
 - So, you can start from any “box” you feel more comfortable with

UbD Template (version 2.0)

Stage 1 Desired Results			
ESTABLISHED GOALS	<i>Transfer</i>		
	<i>Students will be able to independently use their learning to</i>		
	<i>Meaning</i>		
	<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;"> UNDERSTANDINGS <i>Students will understand that...</i> </td> <td style="width: 50%;"> ESSENTIAL QUESTIONS <i>Students will keep considering/asking...</i> </td> </tr> </table>	UNDERSTANDINGS <i>Students will understand that...</i>	ESSENTIAL QUESTIONS <i>Students will keep considering/asking...</i>
	UNDERSTANDINGS <i>Students will understand that...</i>	ESSENTIAL QUESTIONS <i>Students will keep considering/asking...</i>	
<i>Acquisition</i>			
<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;"> <i>Students will know...</i> </td> <td style="width: 50%;"> <i>Students will be skilled at...</i> </td> </tr> </table>	<i>Students will know...</i>	<i>Students will be skilled at...</i>	
<i>Students will know...</i>	<i>Students will be skilled at...</i>		
Stage 2 - Evidence			
Evaluative Criteria	Assessment Evidence		
	PERFORMANCE TASK(S):		
	OTHER EVIDENCE:		
Stage 3 – Learning Plan			
<i>Summary of Key Learning Events and Instruction</i>			

What else is in the UBD package?

- The guide book
- Online resources to practice with
 - <http://jaymctighe.com/resources/downloads/>
 - Exercises, worksheets, unit examples, etc.
- Resources are like “the training wheels on a bicycle” – they serve until your skill becomes automatic



Exercise 2: What makes the UbD Template “different”?

Comparing a Unit Plan before and after UbD

Direction: Carefully study the two plans for a unit titled “Physical Geography of the Horn of Africa.” The first is constructed following the typical way teachers/instructors follow to design a unit. The second is what the unit could look like after UbD approach is applied.

- How are the two targeted learning outcomes qualitatively different?
- How are the two assessment mechanisms qualitatively different?
- How are the learning experiences (learning plans) qualitatively different?

Stage 1- Identifying Desired Results

- What long-term transfer goals are targeted?
- What meanings should students make to arrive at important understandings?
- What essential questions will students keep considering?
- What knowledge and skill will students acquire? (Acquisition)
- What established goals/standards are targeted?

Transfer, Meaning, and EQs

Come out of BIG IDEAS!

- Transferable concepts and processes (p. 5)
 - Not just facts for rote memory
 - Encourage actively constructing meaning (meaning-making)
 - Encourage applying those concepts and processes in multiple authentic contexts
- Generalizable principles (p. 6)
 - NOT just diligent drills and practices
- Schemas, models, theories, and themes
 - Not just correct formulas and perfect answers they can apply everywhere

Exercise 3- Identify Learning Goals

Direction- Refer to page 13 of your handout. Which of the learning goals listed for the subjects do you think are:

- transfer goals (**T**)?
- meaning making (understanding) goals (**M**)?
- Knowledge or skill acquisition goals (**A**)?

***BIG Ideas* come in different forms:**

- Unifying concepts (e.g., *the modern “flat” world of interdependence*)
- Key strategies and rules of thumb (e.g., *turn complex quantities into the more familiar and simple to work with mathematical equivalences*)
- Endless debates or issues (e.g., *nature versus nurture*)
- Striking paradox (e.g., *poverty amid plenty*)
- Dilemmas (e.g., *we simplify reality in math and science models—with some loss and possible oversight of important detail*)
- Key differing perspectives (e.g., *“terrorist” versus “freedom fighter”*)

Aha! My BIG Ideas:

- Unifying concepts (e.g., *Teaching—the most visible profession*)
- Organizing themes (e.g., *Everyone thinks they know how to teach*)
- Endless debates or issues (e.g., *Are teachers born or made?*)
- Striking paradox (e.g., *Teaching—the most disliked profession at the age of desperate call for quality*)
- Major theories (e.g., *Modelling- people tend to teach the way they were taught*)
- Key differing perspectives (e.g., *“position-based” Vs “Career-based” teacher recruitment*)

Exercise 4- What's your BIG Idea?

- 1) Choose a BIG Idea you want students to get out of your Unit!
- 2) Then write one or two TRANSFERABLE goals for the unit based on the BIG idea you want students to get.

Transfer – requires applying those concepts and processes in multiple authentic [but different] contexts

Understanding

- Stated as full-sentence generalizations that we want our students to “come to”
- Are the specific insights, inferences, or conclusions about the big idea you want your students to leave with.
- Should be enduring to be central in the unit design. They are like “the moral of the story”
 - E.g., BIG IDEA- an important theory in geography called “*Geography as destiny*”

EQ- “*Why is that there?*”

UNDERSTANDING – specific meanings such as:

“Human needs for food, work, commerce, and transportation often determine where people settle and cities grow”

Essential Questions (EQs)

- Questions that frame on-going and important queries about a big idea
- They are explicitly and frequently referred back to throughout the unit
- They should be genuine, relevant, and thought provoking
- They should be sustained **BEYOND** the unit
- Should lead students to new understandings and **MORE** questions!
- They should **NOT** be itching to the right answer

Examples of EQs:

- How much power should leaders have?
- Which parts of me and my life are fixed, and which parts of me am I free to change?
- Who is a true friend?
- How can I turn this unfamiliar problem into something more familiar and easier to work with?
- What does this (e.g., picture, text, play) mean?
- Why do people move?
- Where did it go? (energy conservation)

Exercise 5- What meaning do you want students to make?

- 1) Write two enduring meanings (understandings) you want students to make out of your unit.
- 2) Write two essential questions you want your students to keep considering throughout your unit.

Exercise 6- What Skills and Knowledge do Students need to understand the unit?

- 1) Write two knowledge acquisition goals that students need to engage in meaning-making and inquiries in your unit.
- 2) Write two skill acquisition goals you want students to meet to be able to do .

Stage 2- Determining Acceptable Evidence

- *What performances and products will reveal evidence of meaning-making and transfer?*
- *By what criteria will performance be assessed, in light of Stage 1 desired results?*
- *What additional evidence will be collected for all Stage 1 desired results?*
- *Are the assessments aligned to all Stage 1 elements?*

Stage 3—Plan Learning Experiences and Instruction Accordingly

- *What activities, experiences, and lessons will lead to achievement of the desired results and success at the assessments?*
- *How will the learning plan help students achieve transfer, and meaning and acquisition, with increasing independence?*
- *How will progress be monitored?*
- *How will the unit be sequenced and differentiated to optimize achievement for all learners?*
- *Are the learning events in Stage 3 aligned with Stage 1 goals and Stage 2 assessments?*

Assignment

- 1) Sketch the units of your current course using the sketching table.
- 2) Develop an elaborate plan for one or two of your units using the UbD template.

Thank you!