LOWNDES COUNTY PROFESSIONAL LEARNING COMMUNITIES

UbD and Assessment

STUDY MODULE 9 APRIL, 2011

THOUGHTS ON BACKWARD DESIGN AND ASSESSMENT

"To begin with the end in mind means to start with a clear understanding of your destination. It means to know where you're going so that you better understand where you are now so that the steps you take are always in the right direction." (Stephen Covey)

"That's what I find so exciting about this process: it is so much better for me and the students… I know what my students know, I know what they don't know, and I know what I need to do. How liberating." (A teacher reflecting on using UbD)

Backward Design—A Planning Model and Process

Backward design planning (Wiggins & McTighe, 1998) is becoming the preferred long-range planning method for teachers. It approaches planning by stating that if learning programs are to be effective for students, they must be designed with the final destination in mind. The teacher must be able to answer the question: "By the end of the term, what critical things do I want my students to know and be able to do?"

Teachers need clarity about (1) the learning targets that will be set for students and (2) the formative and culminating assessments that will provide evidence that students have mastered these learning targets. Students need to be informed about (1) the culminating assessments at the beginning of their learning so they have a clear sense of their learning destination and (2) why they are being asked to complete specific formative assessments along the way. Finally, the lessons must be designed so that they prepare students for both the formative and culminating assessments.

Effective backward design planning does take time, but starting small can be a good way to begin. Start by focusing on only one unit. After you have learned the principles of the backward design model you can begin to transfer your new learning to other planning as time permits.

Clarifying a lesson's learning goal is the critical first step in lesson planning. By asking what you want your students to know and be able to do by the end of this lesson, you are taking the first step to ensuring that class time will be well spent.

Understanding by Design is not a prescriptive program. It is a way of thinking more purposefully and carefully about the nature of any design that has understanding as the goal. UbD provides a way to design or redesign any curriculum to make student understanding (and desire results generally) more likely.

There is a three-stage approach to planning "backward design."

Stage 1: Identify desired results What should students know, understand, and be able to do? What content is worthy of understanding? What enduring understandings are desired?

Stage 2: Determine acceptable evidence How will we know if students have achieved the desired results? What will we accept as evidence of student understanding and proficiency? The backward design approach suggests that we think about a unit or course in terms of the collected assessment evidence needed to document and validate that the desired learning has been achieved, not simply as content to be covered or as a series of learning activities. This approach encourages teachers to first "think like an assessor" before designing specific units and lessons, and thus to consider up front how they will determine if students have attained the desired understandings.

Stage 3: Plan learning experiences and instruction With clearly identified results and appropriate evidence of understanding in mind, it is now the time to fully think through the most appropriate instructional activities. Several key questions must be considered at this stage of backward design: What enabling knowledge (facts, concepts, principles) and skills (processes, procedures, strategies) will students need in order to perform effectively and achieve the desired results? What activities will equip students with the needed knowledge and skills? What will need to be taught and coached, and how should it best be taught, in light of performance goals? What materials and resources are best suited to accomplish these goals?

Note that the specifics of instructional planning—choices about teaching methods, sequence of lessons, and resource materials—can be successfully completed only after we identify desired results and assessments and consider what they imply.

From *Talk About Assessment: Strategies and Tools to Improve Learning* by Damian Cooper, 2007 and *Understanding by Design* by Grant Wiggins and Jay McTighe, 2005.

Two Approaches to Thinking About Assessment

From *Understanding by Design* by Wiggins and McTighe, 2005

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 I will require to know that students have achieved the desired results (knowledge of state standards)?	• 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?

Thinking like an assessor boils down to a few basic questions. The first question is "What kinds of evidence do we need to find hallmarks of our goals, including that of understanding?" Before we design a particular test or task, it's important to consider the general types of performances that are implied. The second question assumes that some particular task has been developed, about which we then ask, "What specific characteristics in student responses, products, or performances should we examine to determine the extent to which the desired results were achieved?" This is where criteria, rubrics, and exemplars come into play. The third question has to do with a test for validity and reliability of the assessment: "Does the proposed evidence enable us to infer a student's knowledge, skill, or understanding? In other words, does the evidence align with our goals, and are the results sufficiently unambiguous? Few teachers are in the habit of testing their designs once the assessments have been fleshed out, but such self-testing is key to better results and to fairness.

Guiding PLC Discussion Questions

1. How can you work together to develop different types of assessments (performance tasks, academic prompts, quiz and test items, and informal checks for understanding)?
2. Describe assessments you've used or developed that are aligned with the principles of Understanding by Design.
3. Discuss the process of backward design described on page 4—beginning your curriculum planning with standards and then deciding upon and creating appropriate assessments before planning lessons.
4. How can you adopt or modify a current common assessment to be more aligned with Understanding by Design?
5. Do you tend to think like an assessor or an activity designer? How could you think more like an assessor?
6. Discuss the three basic assessment questions described in the box above.

Types of Evidence/Assessment

From *Understanding by Design* by Wiggins and McTighe, 2005

Performance Tasks

Complex challenges that mirror the issues and problems faced by adults. Ranging in length from short-term tasks to long-term, multistaged projects, they yield one or more tangible products and performances. They differ from academic prompts in the following ways:

- Involve a real or simulated setting and the kind of constraints, background "noise," incentives, and opportunities and adult would find in a similar situation (i.e., they are authentic)
- Typically require the student to address an identified audience (real or simulated)
- Are based on a specific purpose that relates to the audience
- Allow students greater opportunity to personalize the task
- Are not secure: the task, evaluative criteria, and performance standards are known in advance and guide student work

Academic Prompts

Open-ended questions or problems that require the student to think critically, not just recall knowledge, and to prepare a specific academic response, produce, or performance. Such questions or problems

- Require constructed responses to specific prompts under school and exam conditions
- Are "open," with no single best answer or strategy expected for solving them
- Are often "ill structured," requiring the development of a strategy
- Involve analysis, synthesis, and evaluation
- Typically require an explanation or defense of the answer given and methods used
- Require judgment-based scoring based on criteria and performance standards
- May or may not be secure
- Involve questions typically only asked of students in school

Quiz and Test Items

Familiar assessment formats consisting of simple, content-focused items that

- Assess for factual information, concepts, and discrete skill
- Use selected-response (e.g., multiple-choice, true-false, matching) or short-answer formats
- Are convergent, typically have a single, best answer
- May be easily scored using an answer key or machine
- Are typically secure (i.e., items are not known in advance)

Informal Checks for Understanding

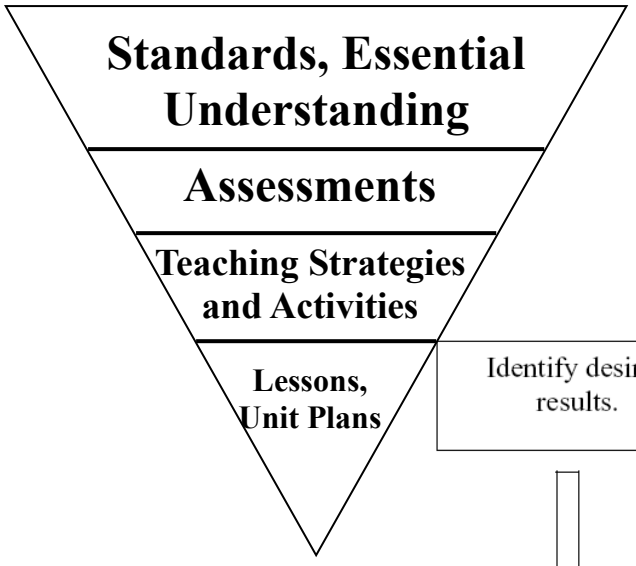
Ongoing assessments used as part of the instructional process. Examples include teacher questioning, observations, examining student work, and think-alouds. These assessments provide feedback to the teacher and the student. They are not typically scored or

From Snapshot to Scrapbook...

Effective assessment is more like a scrapbook of mementos and pictures than a single snapshot. Rather than using a single test, of one type, at the end of teaching, effective teacher-assessors gather lots of evidence along the way, using a variety of methods and formats. Thus, when planning to collect evidence, consider a range of assessment methods such as those described above. This continuum of assessments includes checks of understanding; traditional quizzes, tests, and open-ended prompts; and performance tasks and projects. They vary in terms of scope (from simple to complex), time frame (from short– to long-term), setting (from decontextualized to authentic contexts), and structure (from highly directive to unstructured). Because understanding develops as a result of ongoing inquiry and rethinking, the assessment of understanding should be thought of in terms of a collection of evidence over time instead of an "event" - a single moment-in-time test at the end of instruction—as so often happens in practice.

Given a focus on understanding, a unit or course will naturally be anchored by performance tasks or projects, because these provide evidence that students are able to use their knowledge in context. The UbD theory of understanding contends that contextualized application is the appropriate means of evoking and assessing ***enduring*** understandings. More traditional assessments (quizzes, tests, academic prompts, problem sets) round out the picture by assessing essential knowledge and skills that contribute to the culminating performances.

The Backward Design Process



Adapted from *Understanding by Design* by Wiggins and McTighe, 2005.

Identify desired results.

What should students know, understand, and be able to do? What is worthy of understanding? What enduring understandings are desired?

- Consider goals
- Examine content standards (district, state & nat.)
- Review curric. Expectations
- Teacher/students interests

Determine acceptable evidence.

How will we know if students have achieved the desired results and met the standards? What will we accept as evidence of student understanding and proficiency?

- Consider a range of assessment methods – informal and formal assessments during a unit
- Think like assessors before designing specific units and lessons to determine how/whether students have attained desired understandings

Plan learning experiences and instruction.

- What enabling knowledge (facts, concepts, and principles) and skills(procedures) will students need to perform effectively and achieve desired results?
- What activities will equip students with the needed knowledge and skills?
- What will need to be taught and coached, and how should it best be taught in light of performance goals?
- What materials and resources are best suited to accomplish these goals?
- Is the overall design coherent and effective?