

CORE LANGUAGE OF UNDERSTANDING BY DESIGN

Understanding By Design Units: Units that are specifically designed and planned to support greater understanding, in depth learning, and connections to the real world.

Design: As a verb, means to “plan the form and structure” of something; as a noun, the “pattern or motif” of a work of art. In education, teachers are designers in both senses, aiming to develop purposeful, coherent, effective, and engaging lessons, units, and courses of study and accompanying assessments to achieve identified results.

Something that happens by design occurs through thoughtful planning as opposed to by accident or by winging it. At the heart of Understanding by Design is the idea that the planning a teacher does before teaching is as important as the teaching itself.

Backward Design: A process for designing a curriculum or unit by beginning with the end in mind and designing toward that end. Why is such a view backward when it seems logical? Many teachers begin their unit design with textbooks, favored lessons, and time-honored activities rather than deriving it from targeted goals or standards. In backward design, one starts with the end – the desired results – and then identifies the evidence necessary to determine that the results have been achieved – the assessments. With the results and assessments clearly specified, one can determine the necessary (enabling) knowledge and skill, and then the teaching needed to equip students to understand and to perform.

Three stages of backward design: The logical planning sequence for an understanding by design curriculum includes three stages:

1. **Identify Desired Results** – Consider goals, content standards, curriculum expectations and “big ideas” in order to plan enduring understandings and essential questions. Also plan for the background knowledge, processes and skills necessary to understand and answer questions effectively.
2. **Determine Acceptable Evidence** – How will we know if students have achieved the desired results and met standards? What will we accept as evidence of student understanding and proficiency? Uses a balanced assessment model to develop a plan for the collection of evidence needed to document and validate that the desired learning has been achieved. Emphasis is placed on performance assessments that apply learning in authentic situations.
3. **Plan Learning Experiences and Instruction** – Asks the following questions: What enabling knowledge and skills will students need to understand, perform effectively, and achieve desired results? What activities will equip students with needed knowledge and skills? What activities and experiences will provide

students with a way to successfully master understandings and perform effectively?

In Stage 3, the **WHERE TO** model provides a way to plan learning experiences and instruction in order to achieve these goals (see below for further description).

Big Ideas: A “big idea” that goes beyond discrete facts or skills to focus on larger concepts, principles, theories, issues, paradoxes, themes. The “big ideas” should serve as the focal point of curriculums, instruction, and assessment. Big ideas are important, enduring, and transferable beyond the scope of a particular unit. They are helpful in developing enduring understandings.

Enduring Understandings: Important generalizations that have lasting value beyond the classroom. Such generalizations are generally abstract in nature, so they require uncoverage through sustained inquiry. To determine enduring understandings for a unit or course, teachers are encouraged to ask, what do we want students to understand and be able to use several years from now, after they have forgotten the details? Enduring understandings generally start with the phrase: Students will understand that...

Essential Questions: Provocative questions designed to engage student interest and guide inquiry into the important ideas in a field of study. Are designed to engage students in uncovering important ideas and guide our teaching. Rather than yielding pat answers, essential questions are intended to stimulate discussion and rethinking over time. They are designed to provoke interest and thoughtfulness, are multilayered, and reveal the richness and complexities of a subject. They often recur in the curriculum, go to the heart of a discipline, and raise other important questions.

Facets of Understanding: The six different kinds of understanding identified in Understanding by Design. They are ways of describing what makes up mature understanding, a six sided view of the concept of understanding. They are ways to unpack student thinking as it relates to understanding. The facets help to clarify and reveal understanding by emphasizing:

- Explanation – provide thorough, supported and justifiable accounts of phenomena, using facts and data.
- Interpretation–make sense of facts and data in ways that promote understanding, tells meaningful stories that illustrate key understandings, uses analogies and models to illustrate understanding.
- Application – Effectively use and adapt what is known in diverse contexts.
- Perspective– See and hear points of view through critical eyes and ears; express and understand diverse opinions and points of view.
- Empathy – take on a different point of view, perspective – get inside the shoes of another person, a thing, an event.
- Self-knowledge – perceive ones own personal style, prejudices, projects and habits of mind – we are aware of what we do and do not understand and why understanding is so hard; become wiser, uncover our own humility.

Understanding (or lack of it) reveals itself in different, mutually reinforcing ways. In other words, the more a student is able to explain, apply, or offer multiple points of view on the same idea, the more likely it is that the student understands that idea. Understanding means that a student can transfer and use knowledge and skills in unique and different ways.

The facets help us to design understandings, create assessments, and plan for teaching and learning. They are primarily used to help plan evidence of understanding and learning experiences and instruction.

Balanced Assessment System: Suggests the need for a continuum of types of assessments, including informal checks for understanding, observation and dialogue with students, quizzes and tests, academic prompts and performance tasks and projects.

Performance Task: An “authentic” task that uses one’s knowledge to effectively act or bring to fruition a complex product in which one’s knowledge and expertise are revealed. Music recitals, oral presentations, art displays, simulations of real events, and auto mechanic competitions are performance tasks. Performance tasks are generally more appropriate for determining student understanding.

Performance tasks are different from multiple-choice or short-answer tests. In a performance task, a student must put everything together in the context of ill-structured, open-ended, non-routine, or unpredictable problems or challenges. By contrast, most conventional short-answer or multiple-choice tests are more like the drills in sports than tests of performance. Real performers – whether they are athletes, debaters, dancers, scientists, or actors – must learn to innovate and use their judgment as well as their knowledge. Multiple-choice tests items merely ask a student to recall, recognize, or plug in isolated, discrete knowledge or skill, one at a time. Performance tasks typically require the creation of a product. Such a requirement ensures adequate documentation and the possibility of appropriate review and oversight in scoring the performance.

WHERE TO model of instruction: Acronym for instructional planning model – the five components of this model are the following:

Where the work is headed, **what** the students know in advance of instruction;

Hook and hold student interest throughout the unit;

Explore the understandings and essential questions and equip students with required knowledge and skill to perform successfully on final tasks;

Rethink with students the ideas and answers as students rehearse and revise;

Evaluate results and reflect through self-assessment of results;

Tailoring instruction to meet individual needs and interests;

Organizing and sequencing unit lessons and strategies.