Only a person who has questions can have understanding.

Inquiry in Curriculum Design

(October 5, 1999 revision)

Inquiry is an activity we engage in every day. We ask questions of ourselves and others in our quest for understanding. In our own inquiries we seek understanding by engaging in daily activities, working on projects, or performing tasks. These are some of the ways we are constantly learning.

In curriculum design, teachers can make use of the many forms of inquiry to promote understanding for our students. What questions really engage students? What questions will help frame a course of study? What questions do students want to explore? What content is worth learning?

We use the word inquiry when discussing curriculum design to make a slight distinction from other forms of instructional planning. We wish to simply emphasize the importance of questions in the design of learning. When questions are used strategically, they help frame ideas, lead to new ideas, and promote learning.
Unit Design Work Sheets & Support Materials

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An Overview of the Planning Process

Planning Backwards

"Begin with the end in mind."

- Steven Covey

There are three big chunks to the design a unit of study. We call them the three stages of planning.

We begin by thinking about the end learning goal for students. What learning will take place as a result of this unit of study?

Then we design our assessments to align with the learning goals.

Finally, we plan instruction and classroom experiences for student learning.

Stage 1 - Identify Desired Results

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

In this stage we consider our goals and identify the understandings for a unit of study.

Stage 2 - 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?

Planning backwards 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. It is not simply content to be covered or a series of learning activities. This approach helps us develop learning activities for students that are more likely to demonstrate their understanding of the material.

Stage 3 - Design Learning Experiences and Instruction

What prerequisite knowledge and skills will students need in order to perform effectively and achieve desired results? Given the performance goals, what needs to be taught and coached? How will that be done? What materials and resources are best suited to accomplish these goals? Is the overall design coherent and effective?

With clearly identified results and appropriate evidence of understanding in mind, it is now time to plan instructional activities. The specifics of instructional planning - choices about teaching methods, sequence of lessons, resource materials, etc. - occur after the goals and assessments are identified. Teaching is a means to an end.

(Grant Wiggins & Jay McTighe, Understanding by Design)
Unit Design Blueprint

Relevant Standard(s)

Explicit Unit Goals
Essential understanding

Unit understanding

Skills

Evidence of Understanding
Performance Task(s)

Other assessments

Questions to focus instruction
Essential Question

Unit Question(s)

Description of learning experiences & activities
(Lessons that hook, engage, are iterative, build skills and organize the content around the unit question(s).)

Topic Ideas

Bay Area School Reform Collaborative
Stage 1 - Identify Desired Results

What ideas or concepts of this topic will you focus on in this unit? How does this link to the standard?
- What ideas underlie this topic?
- What issues or dilemmas are involved?
- What key concepts are part of this topic?

Topic Stickie Planning!

What will students understand about this topic?

Relevant Standard(s)
What is really important to know?

Use stickies to sort, brainstorm, and prioritize what students need to learn.

It's worth being familiar with if it...
- is really interesting and adds value to the unit
- can be a hook to a big idea
- is thematic to what is being studied
- helps you make links to other ideas or disciplines

It is important to know and do if it...
- is a key to understanding the subject
- links to essential understandings
- is something an adult might need to know & do
- is part of an adult work role
- needs to be assessed

It is an essential understanding if it...
- goes beyond facts & skills
- moves to the heart of the "discipline"
- has value beyond classroom learning
- is that nugget of learning you might take away forever and ever........

(Grant Wiggins & Jay McTighe, Understanding by Design)
Essential Question & Understanding

Essential understandings represent our personal knowledge at the deepest level. They are complex and central to our lives. It is an understanding that is at the heart of learning. It has value beyond the classroom. It is related to the topic yet transcends discipline-specific learning.

Will students remember this for the rest of their lives?

Is it an idea that reoccurs across disciplines?

Does it require ongoing reflection?

Stage 1 - Identify Desired Results

Write a declarative statement for the essential understanding that will result from teaching the unit.

Write an essential question that this unit might address. Consider questions that point to big ideas and promote deep and essential understanding.
Unit Question(s) and Understanding

Frame the unit with a question or series of questions
State the specific understanding that students will have from the topic in this unit.

Write question(s) that will frame & guide this unit.

Will it lead students to learn important things?
Will it help students develop socially, emotionally and or raise ethical questions?
Is it relevant to life outside of school?
Can it sustain an engaging inquiry?
Does it have many plausible answers?
Will it hook the students?

Write a statement about what students will understand. State it as a generalization about the content that they will explore in this unit.

What’s most important about this topic?
What do experts know?
What meaning should students take away?
Assessment: Determine Acceptable Evidence

Stage 2

When teachers use and design classroom-based assessments well, we can assess both content and process. Generally, this form of assessment is more engaging for students. Teachers can use this form of assessment to collect feedback on instruction as well.

What are classroom-based assessment tasks? Sometimes we name them performance tasks/projects or they can be academic prompts. These can be long or short student assignments that can “open a window into a student’s developmental thinking” from the beginning to the end of a unit of study.
Two different approaches to designing learning

**Thinking Like an Assessor**

Evidence of understanding
What would be sufficient and revealing evidence of understanding?

Performance tasks
What performance tasks must anchor the unit and focus the instructional work?

Know who really understands or doesn’t
How will I be able to distinguish between those who really understand and those who don’t (though they may seem to)?

Criteria to distinguish understandings
Against what criteria will I distinguish?

Likely misunderstandings and checks
What misunderstandings are likely? How will I check for them?

**Thinking Like an Activity Designer**

Interesting activities
What would be interesting and engaging activities on this topic?

Resources & materials
What resources and materials are available on this topic?

Assignments in and out of class
What will students be doing in and out of class? What assignments will be given?

Grades on the activity
How will I give students a grade (and justify it to their parents)?

Know if the activities worked or not
Did the activities work? Why or why not?

Adapted from *Understanding by Design*, Wiggins & McTighe
Collecting Evidence of Understanding

“Thinking like an assessor.”
What would count as evidence of successful teaching of this unit?

More stickie planning!
Use the stickie planning process to brainstorm types of assessment that would qualify as sufficient evidence of understanding.

Other forms of assessment
- formal interviews/observations of students
- public performances
- written/oral/visual products in response to prompts
- student exhibits/models
- short-answer quizzes & tests
- student self-assessments, logs, and peer reviews

Prioritize your learning goals
Consider the multiple learning goals you’ve identified and discuss which you want to assess:
- intellectual understanding
- ethical
- social
- skills
- content

Use this sheet to write what students should understand and be able to do. Then brainstorm what other types of assessment evidence will be useful.
Construction of a Performance Task

“Thinking like an assessor.”
What is the task students will engage in?

Performance Tasks/Projects
These are often challenges that, at least in part, mirror the challenges faced by adults or connect to the real world, then, they are “authentic”.

Performance tasks and projects can be both short-term and long-term. Like prompts, they are complex, require productions or performance, and have more than one right answer or solution path. They differ from prompts in the following ways:

They require the student to address a specific purpose for an identified audience.
The setting is real or simulated and involves the kind of constraints, background “noise,” incentives, and opportunities to personalize the task an adult might encounter.

Introduction
What is this lesson about?

The Task
What are the activities students will be engaged in?

The Process
Specifically describe each step in the project

Advise
What advice do you believe students need to complete the unit?

Evaluation
How will you measure learning?

Closure
What can students expect to have gained from this project? What “BiG” questions can you leave students to ponder?
Stage 2 - Determine Acceptable Evidence

Academic Prompts
These are complex content-focused questions that require the student to think critically, not just recall knowledge, and to prepare a product or performance, typically under exam or homework conditions and constraints.

Good prompts tend to be more open - there is generally more than one right answer and/or solution approach. This assessment category includes questions and problems that:

- Require the student to make connections among concepts and subjects
- Have more than one best strategy for answering
- Call for an explanation or defense of the ideas
- Require the development of a strategy ("ill-structured")

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Construction of an Academic Prompt
"Thinking like an assessor."
What is the question students will center their investigation on?
Scoring Rubrics

A rubric is a tool for evaluating a product or performance. The rubric communicates the important qualities and levels of achievement.

Characteristics of a rubric might include:
- the evaluative criteria
- a fixed scale
- descriptive terms

Rubrics can be task-specific or generic.

Scoring rubrics can be holistic, analytic, or primary trait.

(Grant Wiggins & Jay McTighe, Understanding by Design Workshop, March 1999)

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Learning Experiences & Activities

"WHERE"

Considerations for Lessons and Activities

How will you help students know **WHERE** they are headed and **WHY**, e.g., major assignments, performance tasks & standards to be addressed and criteria by which the work will be judged?

How will you **HOOK** students through engaging and thought provoking experiences (issues, oddities, problems, challenges) that point toward big ideas, essential questions, & performance tasks?

What learning experiences will engage students in **EXPLORING** the big ideas and essential questions? What instruction is needed to **EQUIP** students for the final performance(s)?

How will you cause students to **REFLECT & RETHINK** to dig deeper into the core ideas? How will you guide students in **REVISING & REFINING** their work based on feedback and self-assessment?

How will students **EXHIBIT** their understanding through final performances and products? How will you guide them in self-evaluation to identify the strengths/weaknesses in their work and set future goals?

(Grant Wiggins & Jay McTighe, *Understanding by Design*)
Learning Experiences & Stickie Planning!

Given the performance goals, what needs to be taught and coached?
How will that be done?
What materials and resources are best suited to accomplish these goals?
Is the overall design coherent and effective?
Print Resources


Online Resources

Ask Dr. Rubric
http://www.classnj.org/cgi-bin/idea_exchange/Ultimate.cgi
Dr. Wiggins will answer questions about rubrics in this online forum. Previously asked questions are archived and available for perusal.

CLASS: Center on Learning, Assessment, and School Structure
http://www.classnj.org/
Grant Wiggins’ extensive treatment of lesson design, assessment and use of rubrics.

Developing a Rubric
http://cotf.edu/ete/teacher/rubricdev.html
Donna Szpyrka and Ellyn B. Smith of Florida’s State wide Systemic Initiative provide simplified, practical advice for creating rubrics.

Empowering Students through Negotiable Contracting to Draft Rubrics for Authentic Assessment
http://www.interactiveclassroom.com/neg-cont.html
Department of Education, an article on working with students to create meaningful rubrics.

From Now On
http://fno.org/nov97/toolkit.html