Understanding by Design
Wiggins & McTighe

A Brief Introduction
Center for Technology & School Change
Teachers College, Columbia University
Ellen B. Meier, Ed. D., Co-Director
Focus on “Understanding”

- Explains common practices that interfere with understanding.
- Explains a *backward design* process to avoid common problems.
- Proposes an approach to curriculum designed to engage students in inquiry & “uncovering” ideas.
- Proposes a set of design standards for achieving quality control in curriculum & assessment designs.
Focus on Instruction or the Approach

• Grant Wiggins and Jay McTighe provide a way to move from “covering the curriculum” to “creating curriculum” and understanding with technology.
Stages of Backward Design

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Establishing Curricular Priorities

Worth being familiar with

Important to know and do

Enduring Understanding

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Filters for Selecting Understandings

• Represent a big idea having enduring value beyond the classroom.
• Reside at the heart of the discipline (involve “doing” the subject).
• Require un-coverage (of abstract or often misunderstood ideas).
• Offer potential for engaging students.
Practically speaking, this means…

• Turning content standards and outcome statements into question form.

• Designing assignments and assessment that evoke possible answers.
Some examples of Essential Questions

• Is there enough to go around (e.g., food, clothes, water)?
• Are mathematical ideas inventions or discoveries?
• Does art reflect culture or shape it?
• Who owns what and why?
• What do we fear?
# Big Picture of a Design Approach

<table>
<thead>
<tr>
<th>Key Design Question</th>
<th>Design Considerations</th>
<th>Filters (Design Criteria)</th>
<th>What the Final Design Accomplishes</th>
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</thead>
<tbody>
<tr>
<td>Stage 1: What is worthy &amp; requiring of understanding?</td>
<td>National standards</td>
<td>Enduring ideas.</td>
<td>Unit framed around enduring understandings and essential questions.</td>
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<td></td>
<td>State standards</td>
<td>Opportunities for authentic, discipline-based work.</td>
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<td></td>
<td>Teacher expertise &amp; interest</td>
<td>Uncoverage. Engaging.</td>
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<td></td>
<td>Continuum of assessment types.</td>
<td>Sufficient. Authentic work.</td>
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<td></td>
<td></td>
<td>Student friendly.</td>
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<tr>
<td>Stage 3: What learning experiences &amp; teaching promote understanding, interest, and excellence?</td>
<td>Research based repertoire of learning &amp; teaching strategies.</td>
<td>WHERE</td>
<td>Coherent learning experiences &amp; teaching that will evoke &amp; develop the desired understandings, promote interest &amp; make excellent performance more likely.</td>
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<td></td>
<td>Essential &amp; enabling knowledge &amp; skill.</td>
<td>Where is it going?</td>
<td></td>
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<td>Hook the students.</td>
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<td>Explore &amp; equip.</td>
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<td>Rethink &amp; revise.</td>
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<td>Exhibit &amp; evaluate.</td>
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Six Facets of Understanding

- Can explain
- Can interpret
- Can apply
- Has perspective
- Can empathize
- Has self-knowledge
Rubric for the Six Facets of Understanding

• Criteria for each facet:
  – Explanation – accurate
  – Interpretation – meaningful
  – Application – effective
  – Perspective – credible
  – Empathy – sensitive
  – Self-knowledge - self-aware
What the Facets Imply for Unit Design

• Uncoverage vs. coverage:
  – Text is resource vs. text is syllabus.
  – Main ideas suggest the kinds of performances vs. assessment is viewed as a test based on text.
## Two Different Approaches

<table>
<thead>
<tr>
<th>Thinking like an Assessor</th>
<th>Thinking like an Activity Designer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What would be sufficient &amp; revealing evidence of understanding?</td>
<td>What would be interesting &amp; engaging activities on this topic?</td>
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<tr>
<td>What performance tasks must anchor the unit and focus the instructional work?</td>
<td>What resources and materials are available on this topic?</td>
</tr>
<tr>
<td>How will I be able to distinguish between those who really understand and those who don’t (though they may seem to)?</td>
<td>What will students be doing in and out of class? What assignments will be given?</td>
</tr>
<tr>
<td>Against what criteria will I distinguish work?</td>
<td>How will I give students a grade (and justify it to their parents)</td>
</tr>
<tr>
<td>What misunderstandings are likely? How will I check for those?</td>
<td>Did the activities work? Why or why not?</td>
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## Implications for Teaching

<table>
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<tr>
<th>Acquisition of Organized Knowledge</th>
<th>Development of Intellectual Skills</th>
<th>Enlarged Understanding of Ideas and Values</th>
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<tbody>
<tr>
<td>Didactic Instruction</td>
<td>Coaching, Exercises, and Supervised Practice</td>
<td>Socratic Questioning and Active Participation</td>
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</table>
Design Standards are Important

• Helps us understand:
  – What is worthy of understanding in this unit?
  – What counts as evidence that students really understand and can use what we’re teaching?
  – What knowledge and skills must we teach to enable them to apply their knowledge in meaningful ways?
Ideally...

- Units would be reviewed with others in a peer review process.
- Units would be documented with all the information including handouts required and exemplars.
- Units would be made available to share.
A Process, not an Event

• Takes place over time – 3 to 5 years minimum.
• Can adapt any or all of these perspectives and incorporate others.
• Emphasis on student understanding is key.