A black and white illustration of a spiral-bound notebook. The spiral binding is on the left side. The notebook page is white with a black border. The text is centered on the page.

**Writing  
Measurable  
Outcomes**

---

**SPIRAL  
NOTEBOOK**

---

**I taught it.**

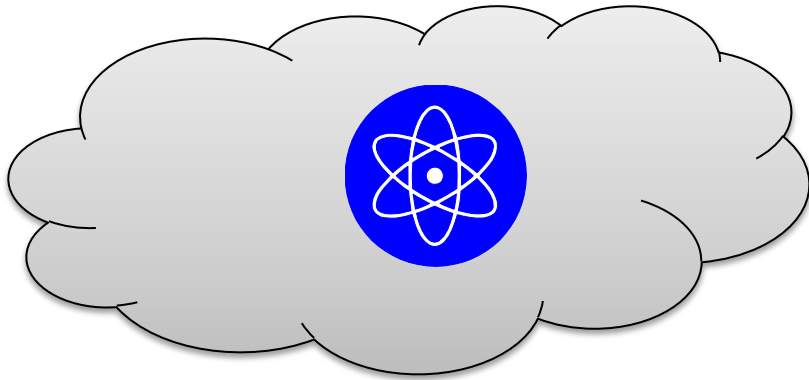
**They just didn't  
learn it.**



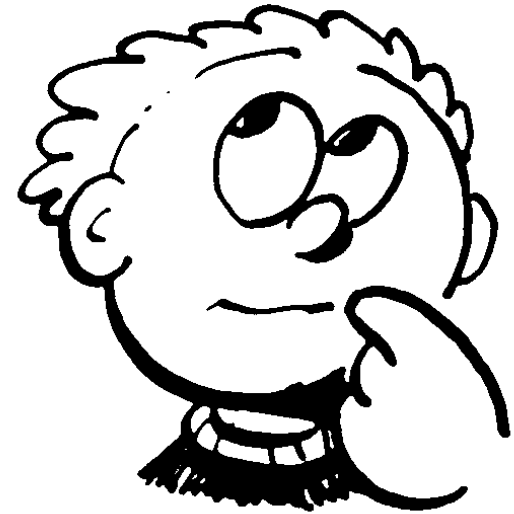
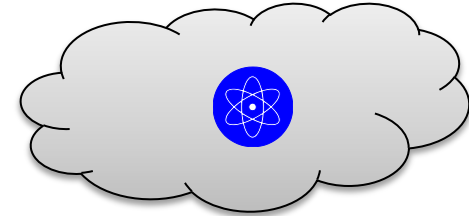
**The transmission  
or delivery model  
of education**



**Here's the stuff  
I know**



**The transmission  
or delivery model  
of education**



**I move the stuff  
into their heads**

**Here's the stuff**

**I know**

**Taking notes from lecture:**

That process whereby the words on the professor's notes magically wind up in the student's notebook

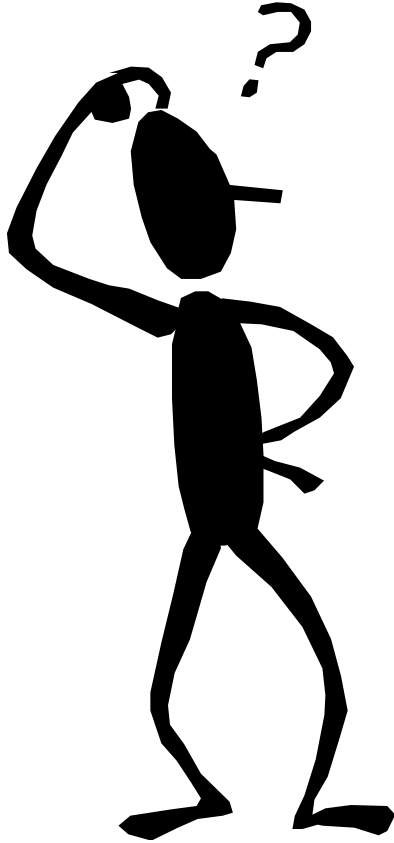
**The** without ever having passed through the mind of either.

**move the stuff into their heads**

**In the transmission model,  
you start with the stuff  
you're going to move.**

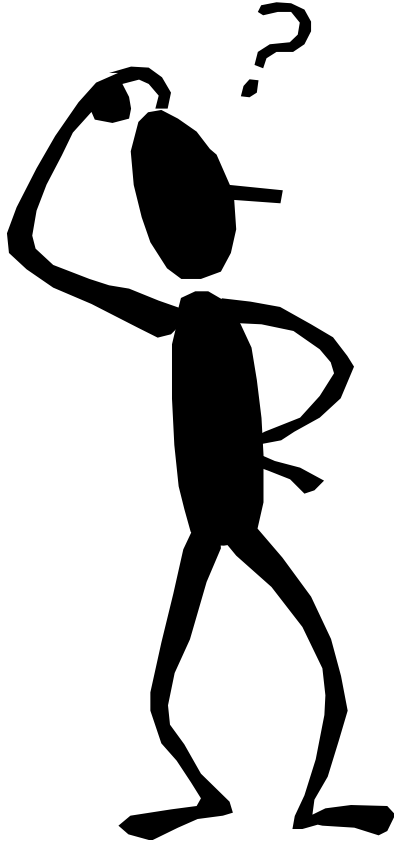


**But the transmission model is *not* the best model to help students learn.**

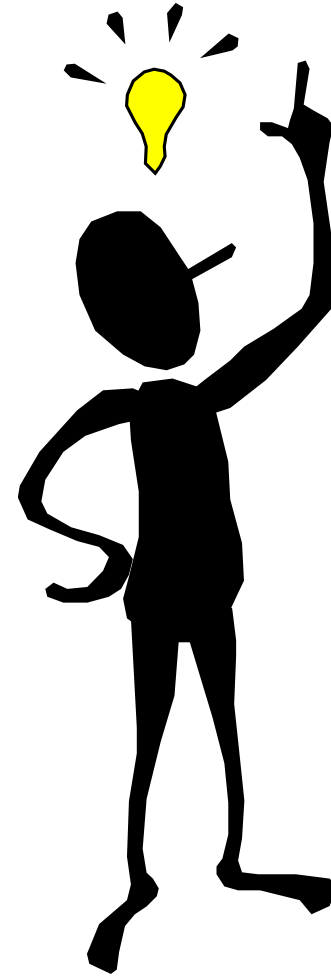


What is better?

**But the transmission model is *not* the best model to help students learn.**



What is better?



The learning paradigm.

BHAI\*

BHAI\*

**\*Big, Hairy, Audacious Idea**





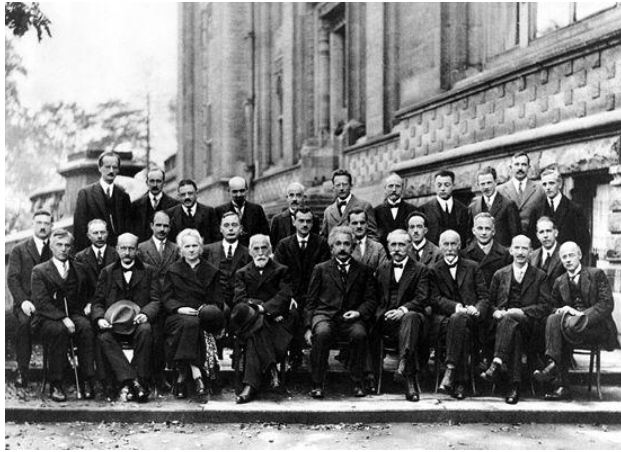
**How BHAI  
is the  
Learning  
Paradigm?**



Copernicus, 1543, *De revolutionibus orbium coelestium*: Earth-centric to heliocentric



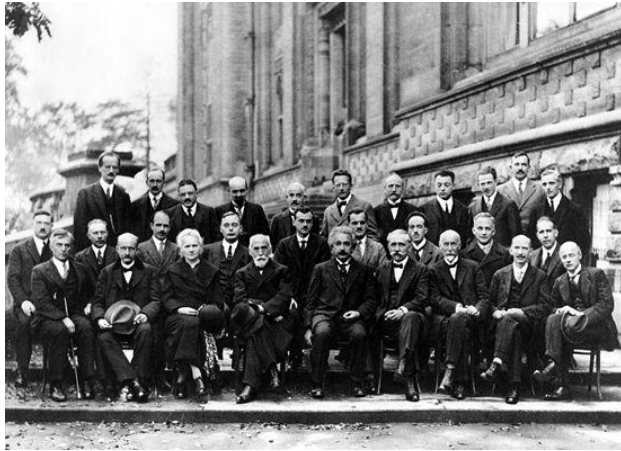
Copernicus, 1543, *De revolutionibus orbium coelestium*: Earth-centric to heliocentric



Early 20<sup>th</sup> Century,  
Newtonian to quantum  
model shift

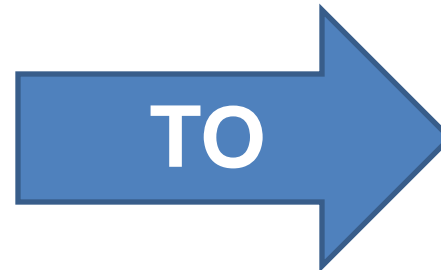


Copernicus, 1543, *De revolutionibus orbium coelestium*: Earth-centric to heliocentric



Early 20<sup>th</sup> Century,  
Newtonian to quantum  
model shift

**From transmitting  
information**



**Producing  
learning**

# **BACKWARD DESIGN**

MERRILL EDUCATION/ASCD COLLEGE TEXTBOOK SERIES

Expanded 2nd Edition

# U N D E R S T A N D I N G by D E S I G N

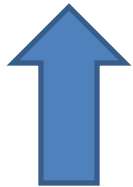


GRANT WIGGINS AND JAY MCTIGHE

**OUTCOMES**



**ASSIGNMENTS**



**SYLLABUS**



**TEXTBOOK**

**What are the benefits to the student for taking the course?**



**OUTCOMES**



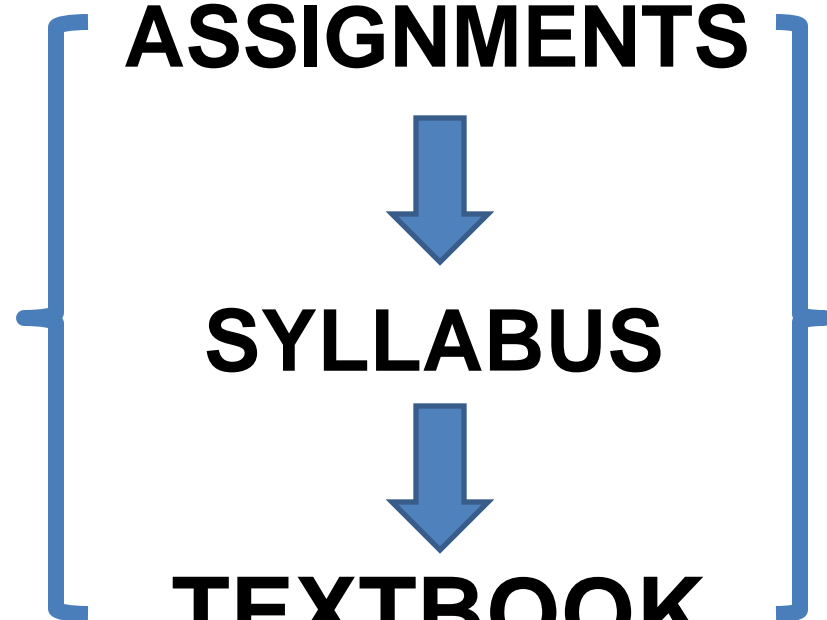
**ASSIGNMENTS**



**SYLLABUS**



**TEXTBOOK**



What are the biggest questions that your course will help students begin to answer, and how can you raise those questions in ways that they will find intriguing?

--Ken Bain, *What the Best College Teachers Do*

The PERFECT way to start thinking about your course outcomes!





# STUDENT LEARNING OUTCOMES ARE STATEMENTS OF WHAT STUDENTS WILL

**KNOW**



Cognitive



**BE ABLE TO DO**



Psychomotor



**VALUE**

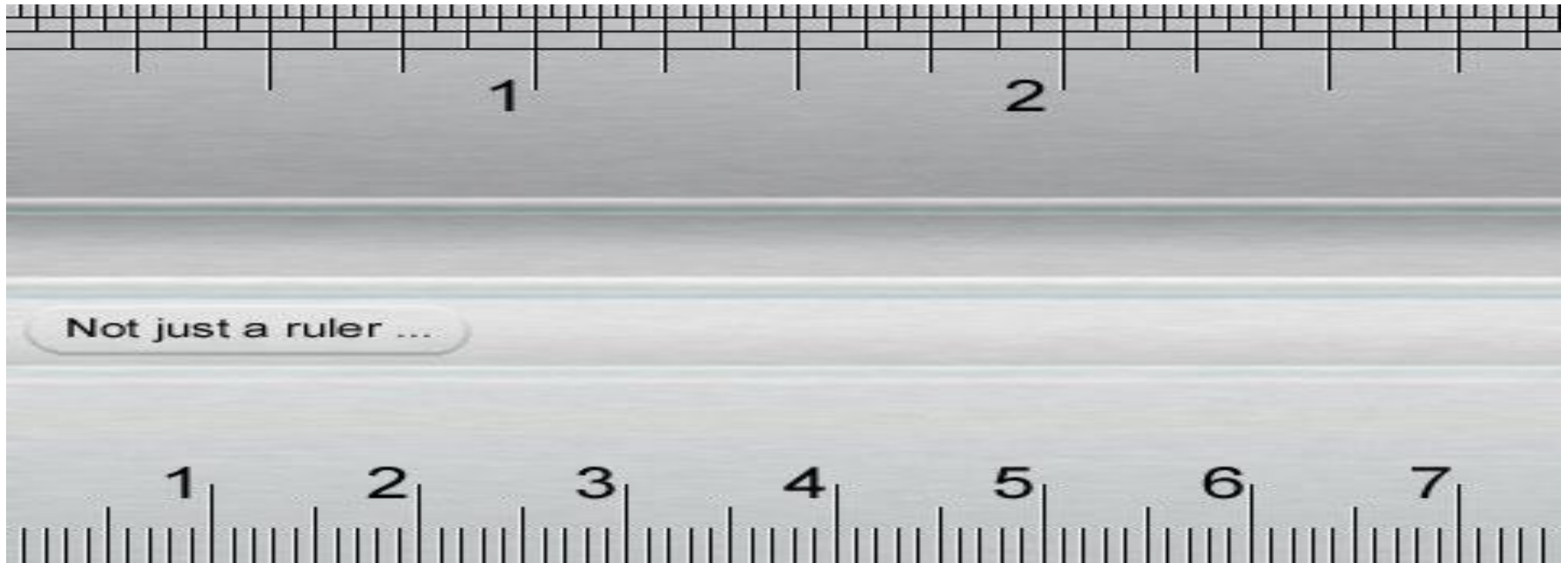


Affective

**AT THE END OF THE COURSE.**

# STUDENT LEARNING OUTCOMES MUST BE:

**MEASURABLE**



# STUDENT LEARNING OUTCOMES MUST BE:

**MEASURABLE**

How will you know if students achieve the outcomes if you can't measure them?

?



Not just a ruler ...

**To measure something, you have to be able to see, hear, or touch it.**

**You can't measure:**

**KNOW**

**UNDERSTAND**

**LEARN**

**But you can measure:**

**COMPARE**

**LIST**

**DESCRIBE**

**ANALYZE**

**SELECT**

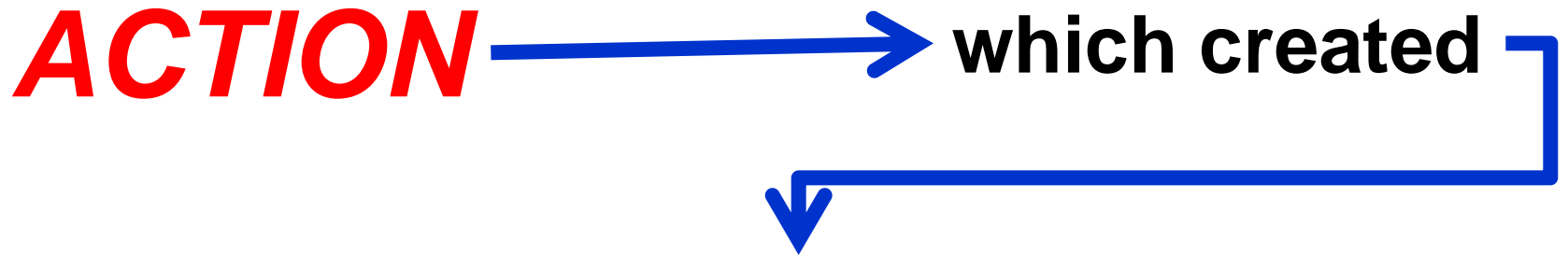
**BUILD**

**PRODUCE**

**DEFEND**

**etc., because . . .**

... they are artifacts of student work which you can see or hear or touch because the work produced an



written analyses

debates

essays

portfolios

projects

written exams

. . . so this means you must use

# ACTION

verbs in your outcome statements.

**Students will be able to . . .**

- **Define** the underlying \_\_\_\_\_
- **Defend** their positions on \_\_\_\_\_
- **Create** a representative \_\_\_\_\_
- **Present** \_\_\_\_\_
- **Choose** the best \_\_\_\_\_



# Practice . . .

Learning outcome for informed voting

Learning outcome for writing well

Learning outcome for celestial mechanics

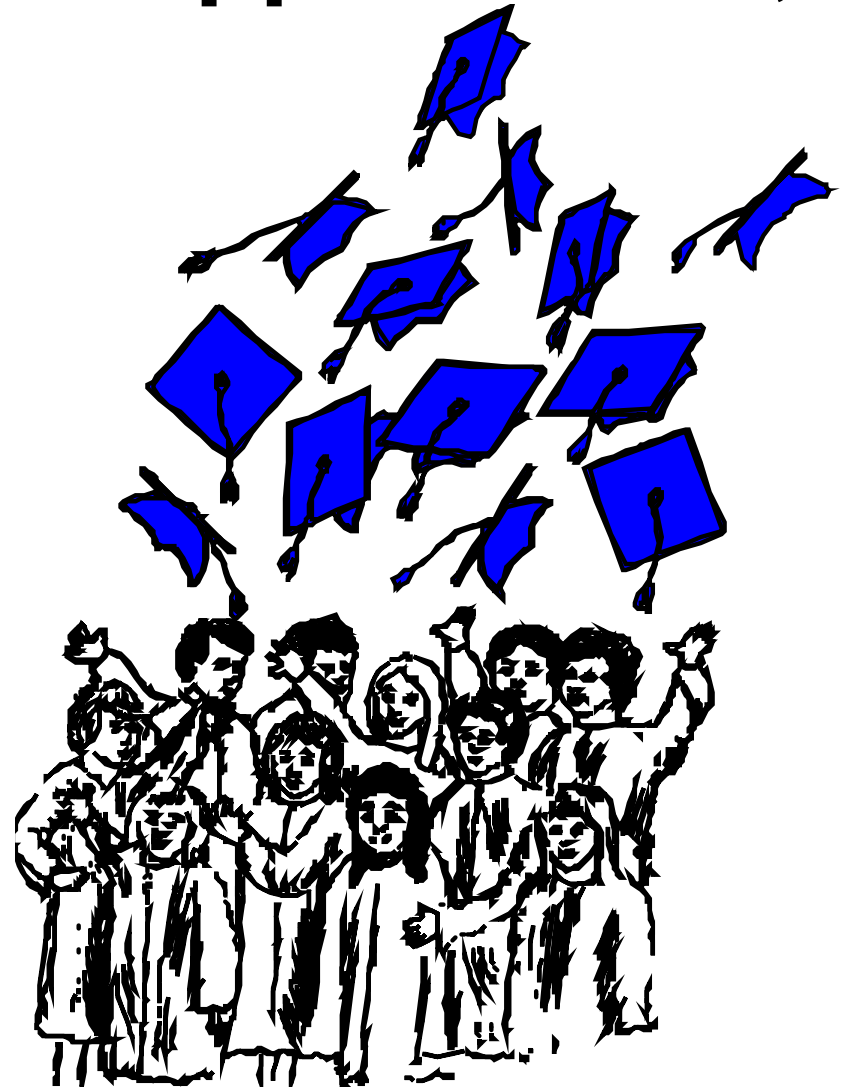
Learning outcome for sewing

Learning outcome for psychology

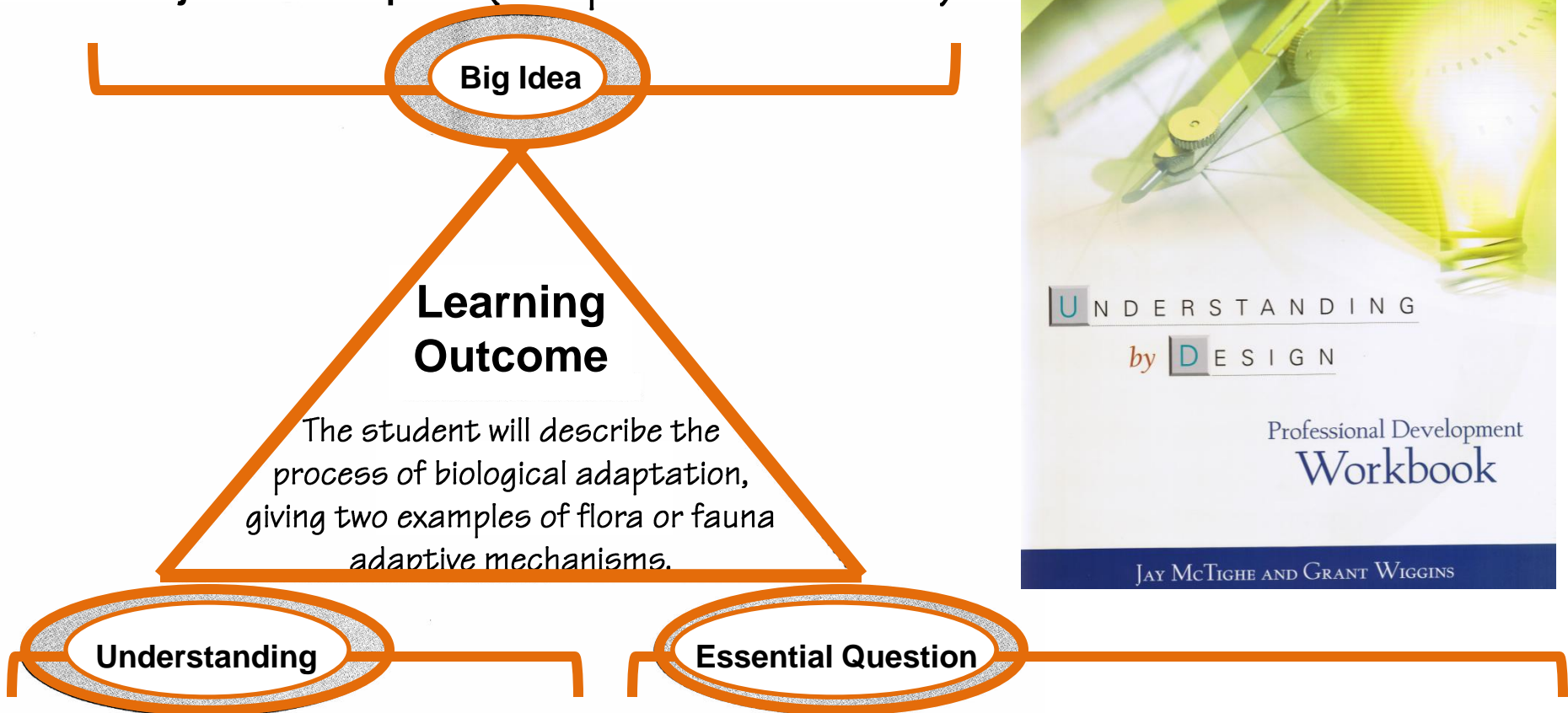
Learning outcome for kindergarten math

**Even for humanities classes,  
critical thinking, art appreciation,  
philosophy, . . . ?**

**YOU  
BETCHA!**



**Big Idea:** an abstract & transferable concept, theme, or process at the heart of a subject or topic. (*adaptation, survival*)



**Learning Outcome**

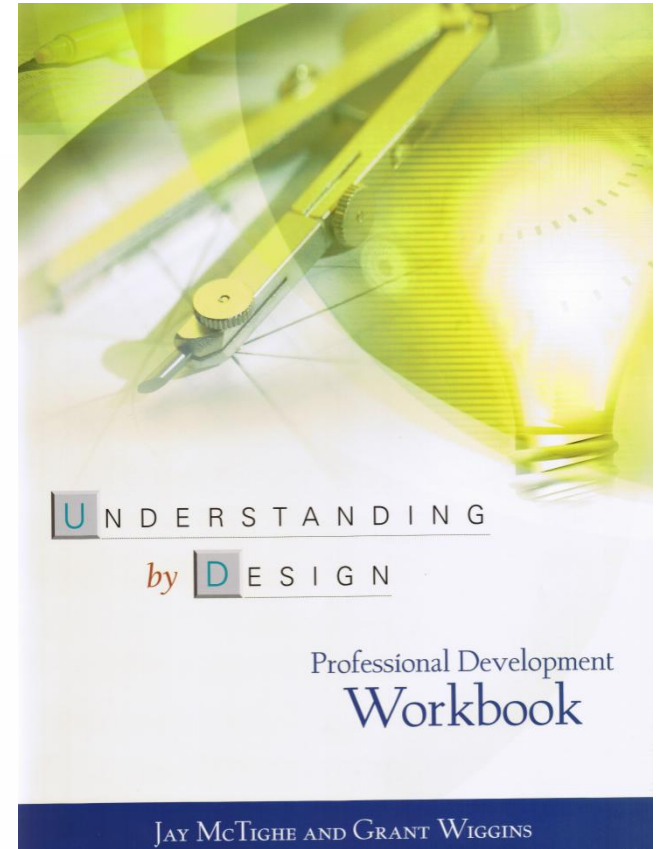
*The student will describe the process of biological adaptation, giving two examples of flora or fauna adaptive mechanisms.*

**Understanding**

**Understanding:** Full-sentence generalization specifying what we want students to come to understand about the Big Idea (*Living organisms adapt to survive harsh or changing environments.*)

**Essential Question**

**Essential Question:** Provocative & arguable question designed to guide inquiry into the Big Idea. By actively exploring the Essential Questions, students develop & deepen their understanding. (*In what ways do living organisms survive harsh or changing environments?*)



What are the biggest questions that your course will help students begin to answer, and how can you raise those questions in ways that they will find intriguing?

--Ken Bain, *What the Best College Teachers Do*

The PERFECT way to start thinking about your course outcomes!

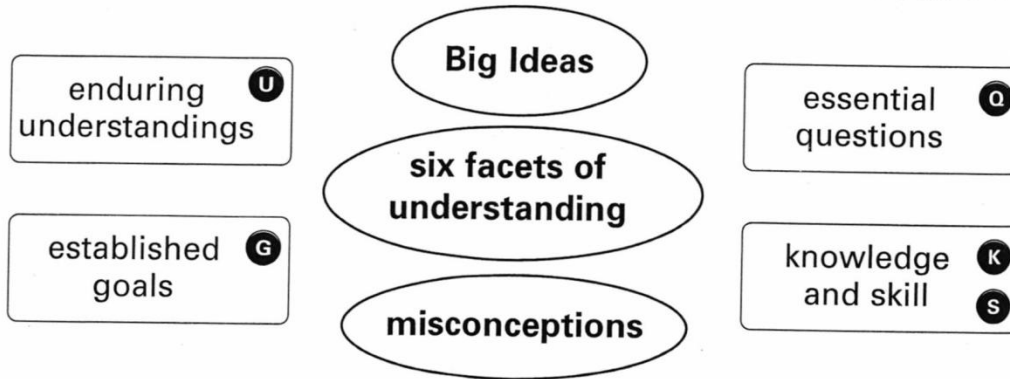
What would I like the impact of this course to be on students 2-3 years after the course?  
What will distinguish students who have taken the course from students who have not?



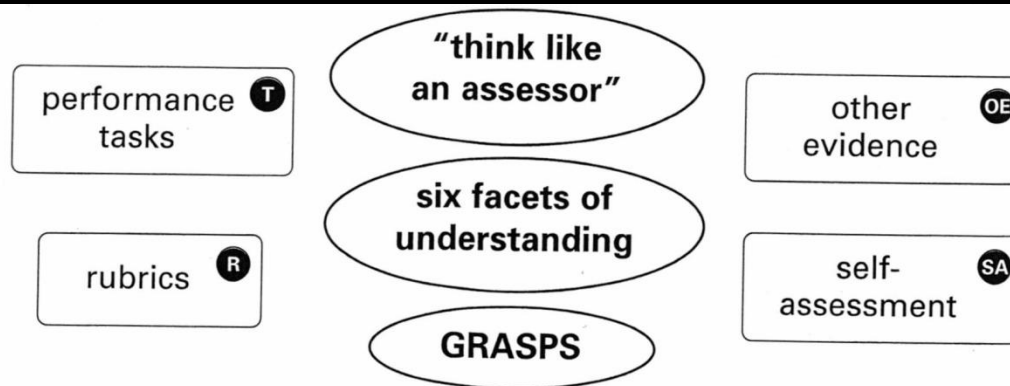
--Dee Fink, *Creating Significant Learning Experiences*

***Another*** PERFECT way to start thinking about course outcomes!

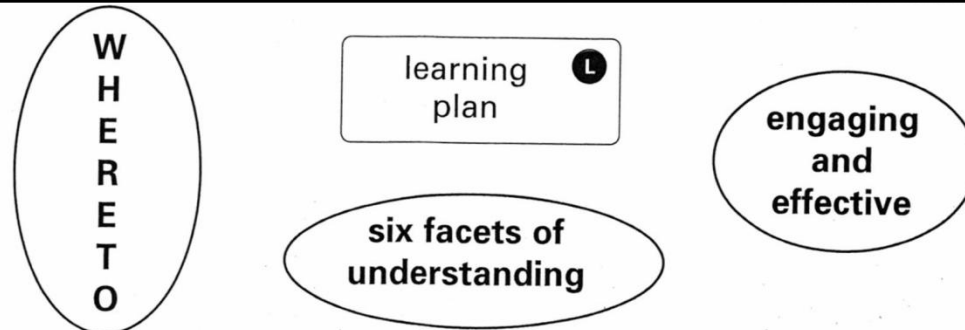
# Stage 1: Identify Desired Results



# Stage 2: Determine Acceptable Evidence



# Stage 3: Plan Learning Experiences, Instruction



Alignment

# Drafting a Design from Big Ideas

History

## Learning Outcome:

The student will describe the causes and effects of the Civil War with emphasis on slavery, states' rights, leadership, settlement of the West, secession, and military events.

G

## Understandings:

- There is rarely a single, obvious cause to a complex historical event.
- History is "story," and who tells the story affects how it is presented.
- States' rights disagreements, differences in the cultures and economies of North and South, and disputes over slavery were key causes of the Civil War.
- The legacy of the Civil War is still felt in regional differences, in national and regional politics, and matters of cultural values.

U

## Essential Questions:

- What were the obvious (and unobvious) causes of the Civil War?
- Whose "story" is it?
- Is there ever a "just" war?
- Why would a brother kill a brother?
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## Big Ideas:

- Slavery (as economic, political, and moral issue)
  - Federal control vs. states' rights
  - "Just" cause

## Predictable Misunderstandings and Errors:

- The war was fought over the morality of slavery, and the "good guys" won.
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## Goals or Rationale:

I want students to learn that the Civil War was complex, and that its meaning has changed over time, varies by place and still affects us and our views. I also want them to be aware of the horror of war and to empathize with the effects on families and sense of self (as conveyed so well in Ken Burns's *Civil War* video series).

McTighe & Wiggins' *Understanding By Design* provides a useful structure to help faculty conceive of learning outcomes (this graphic adapted from the *UbD Prof'l Development Workbook*)

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## Understandings:

- Rarely a single, obvious cause for complex historical events
- History = "story"; who tells the story affects how it is presented
- States' rights, cultural differences, North & South economies, and slavery were all key
- Civil War legacy still felt: nat'l/regional politics, regional differences, cultural values

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I want students to learn that the Civil War was complex, that its meaning has changed over time & varies by place, and that it still affects us & our views. I also want them to be aware of the horror of war & to empathize w/effects on families & sense of self (as conveyed so well in Ken Burns' video series).

Students will demonstrate a critical ability to analyze questions about the nature and value of human life as embodied in the traditions of the humanities.

## **PRACTICE**

**(Core Curriculum Humanities Outcome)**

<b>Dimension</b>	<b>5</b>	<b>10</b>	<b>15</b>	<b>20</b>	<b>Tot</b>
<b>THESIS A debatable, problematic assertion</b>	An attempt at an assertion is made, but it is not problematic; discussion is mostly summary	Assertion is obvious and contributes little to the on-going discussion	Assertion is interpretive and moderately contributes to the on-going discussion	Assertion is interpretive, problematic, and clearly contributes to the on-going discussion	
<b>EVIDENCE Substantiate the assertion</b>	The relationship between the examples and the assertion is unclear	Examples are not clearly or consistently linked to the assertion	Examples moderately support and are relevant to the assertion	Examples clearly support and are relevant to the assertion	
<b>ORGANIZATION Coherent Structure</b>	The assertion is not logically maintained throughout the paper, and relationships between ideas are unclear	The assertion is logically maintained to a moderate degree; supporting statements are weak in connecting to the original assertion	The assertion is logically maintained throughout, and supporting statements are moderately consistent in referring to the original assertion	The assertion is logically maintained throughout, and supporting statements are highly consistent in referring to the original assertion	
<b>SIGNIFICANCE Establish a relevancy</b>	Conclusion merely summarizes the assertion attempt	Significance or relevancy is implied but not clearly conveyed	Conclusion moderately conveys the significance or relevancy of the assertion	Conclusion clearly conveys the significance or relevancy of the assertion	
<b>Mechanics</b>	<b>0</b>	<b>5</b>	<b>10</b>		
<b>Grammar, sentence structure, punctuation</b>	Inaccuracies make paper difficult to read	Inaccuracies make paper moderately difficult to read	Few inaccuracies, advanced vocabulary, deliberate word choice	N/A	
<b>Format</b>	For Paper: Does not meet MLA standards: format, heading, spacing, margins, and title; For Exams: Careless layout obscures points made & conclusions drawn	For Paper: Meets some but not all MLA standards: format, heading, spacing, margins, and title; For Exams: Reader has to work to follow train of thought.	For Paper: Meets all MLA standards; For Exams: Reading is easy because assertions and arguments are logically presented & lead to sensible conclusion(s).	N/A	

**What are the benefits to  
the student for taking  
the course?**



**OUTCOMES**



**ASSIGNMENTS**



**SYLLABUS**



**TEXTBOOK**

