



Using Webb's Depth of Knowledge as a Review and Alignment Tool

2009 Career Clusters Institute

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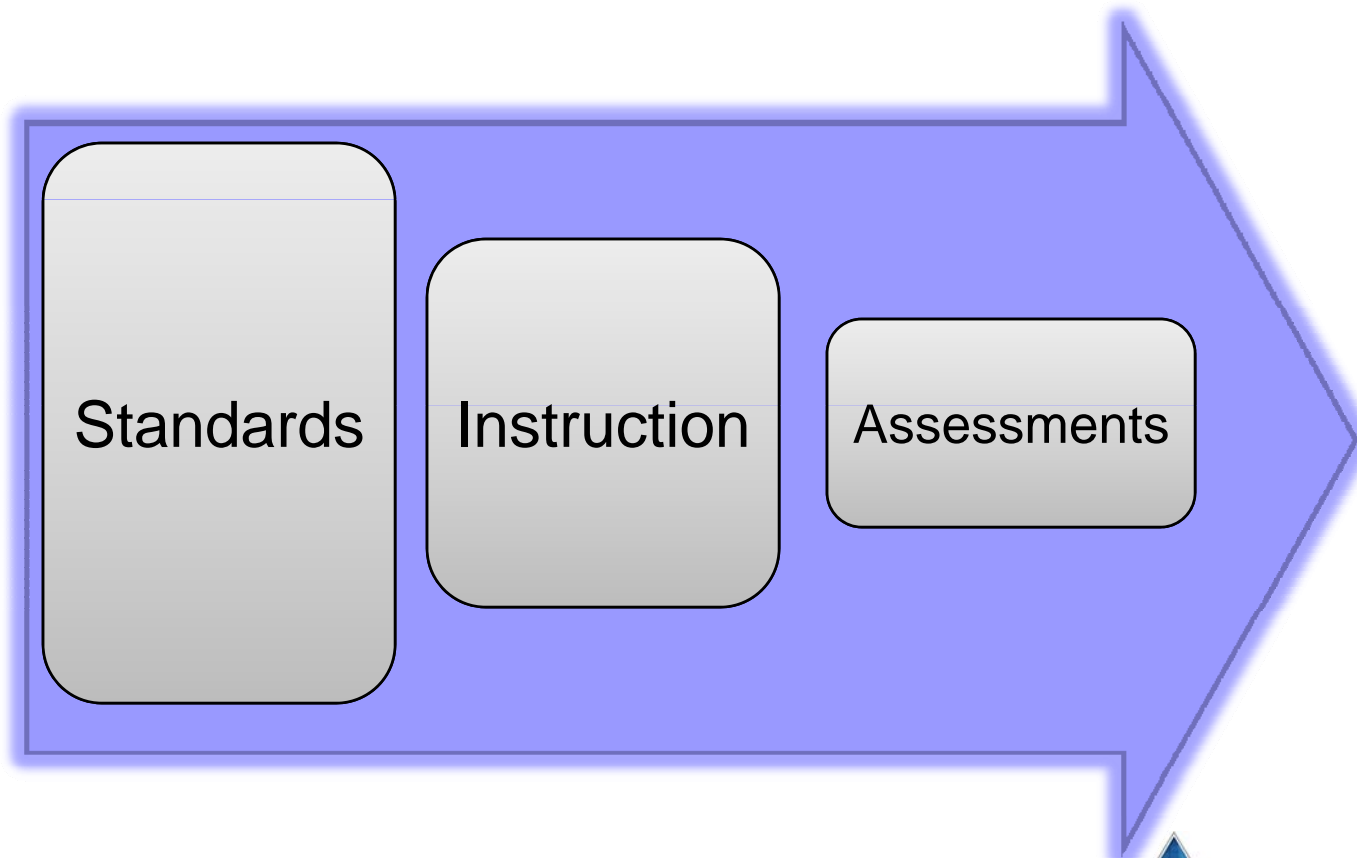


What is alignment?

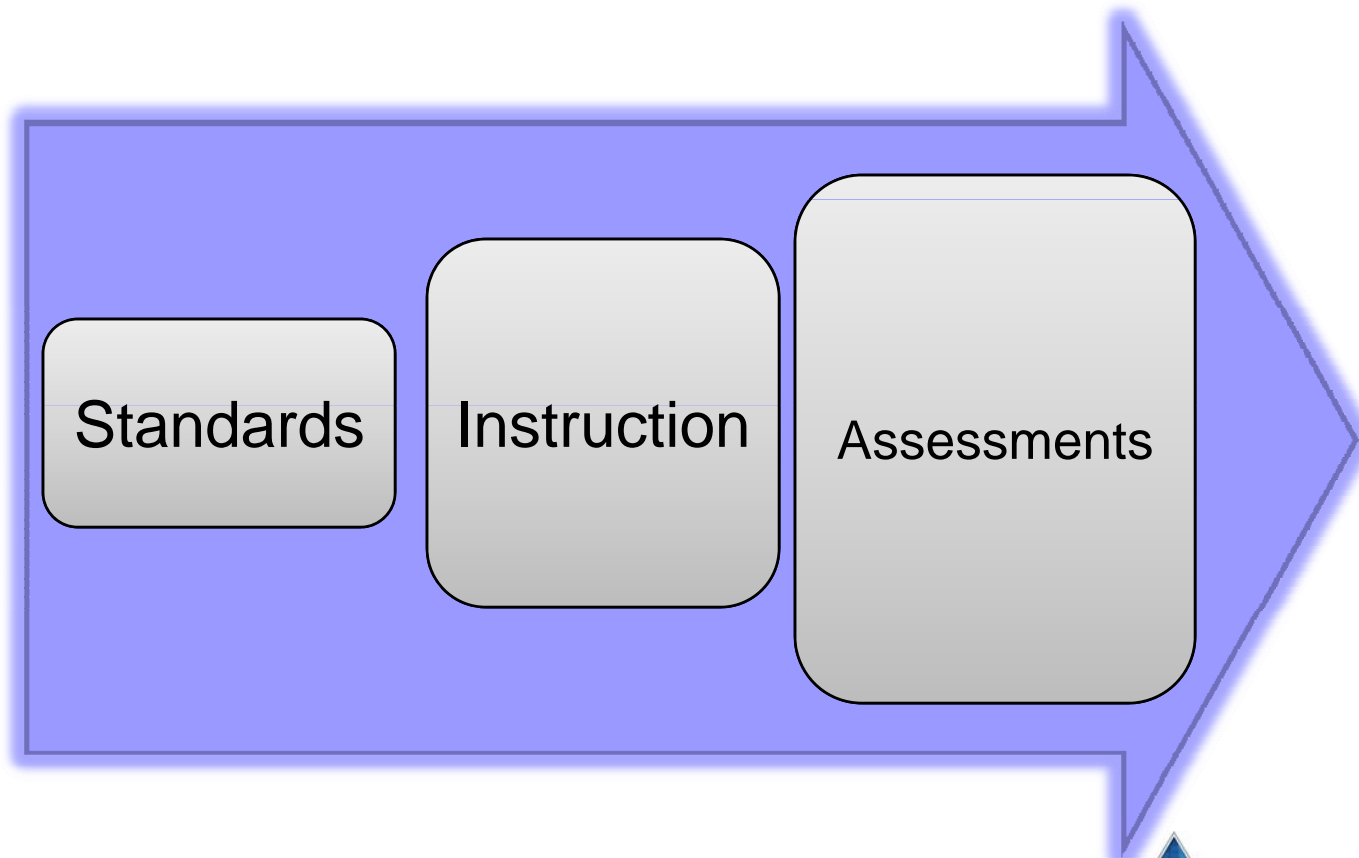
■ Alignment

- *To what degree are expectations, assessments and instruction in agreement and guide toward students learning what is expected?*

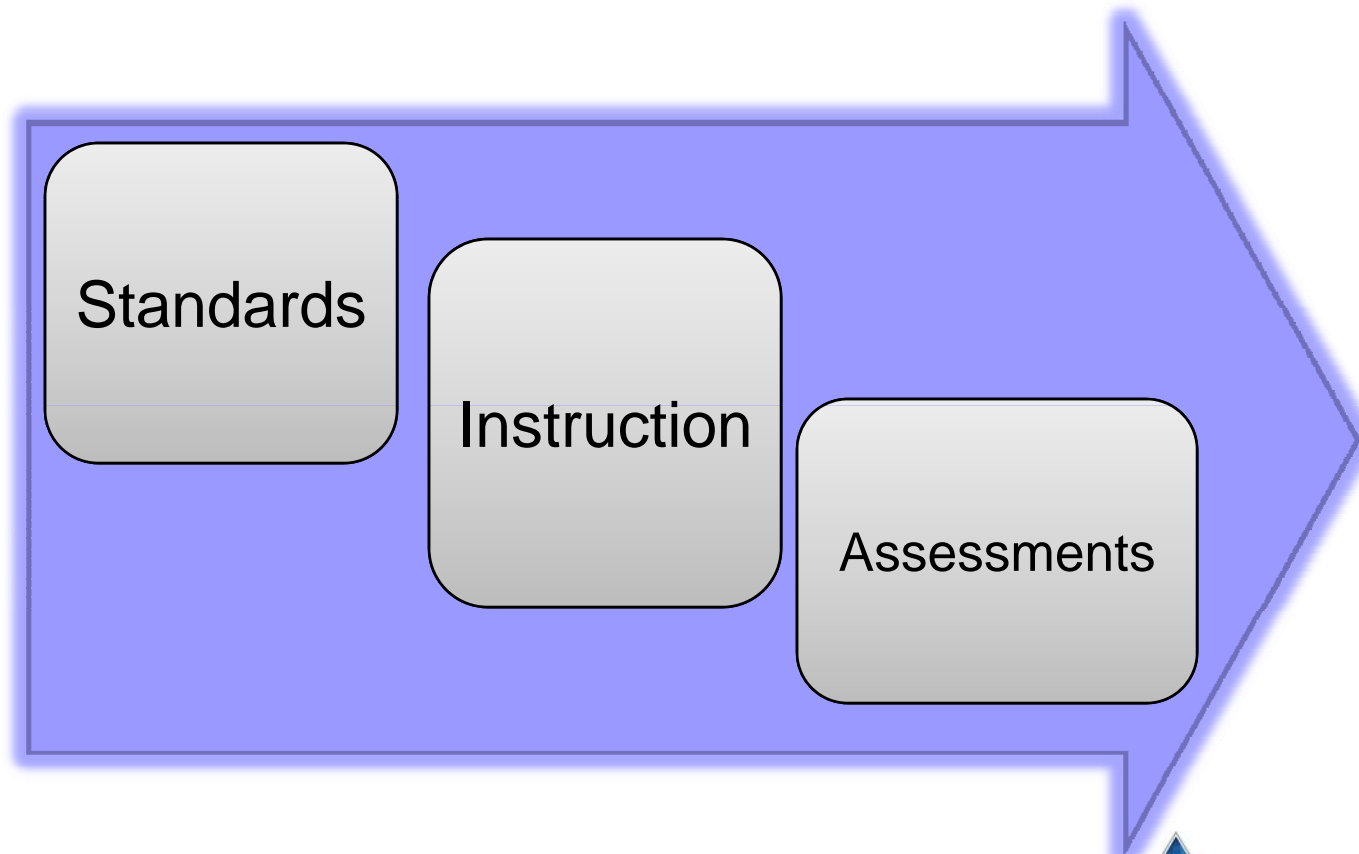
Poorly Aligned System #1



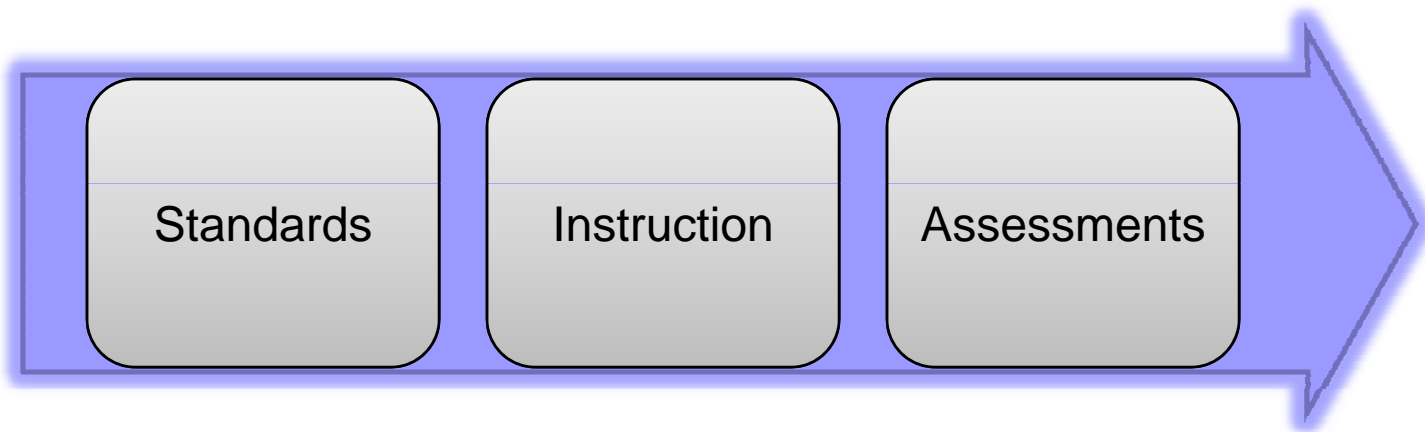
Poorly Aligned System #2



Poorly Aligned System #3



An Aligned System



What you expect, you teach
What you teach, you measure
What students need to know and do – they will



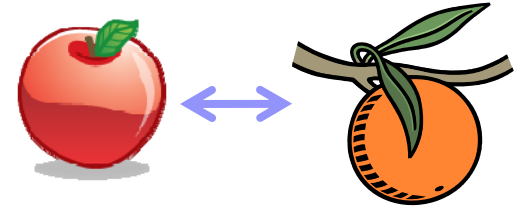
Background on Webb's Alignment Tool

- Norman Webb, Univ. of Wisconsin
- Director, Center for Education Research
- Developed an alignment tool in 1990's as state standards and tests were put into effect
- Providing guidance to Council of Chief State School Officers on large scale assessments
- Offers a clear definition for alignment and measures with which to approach examining alignment

Components of Alignment

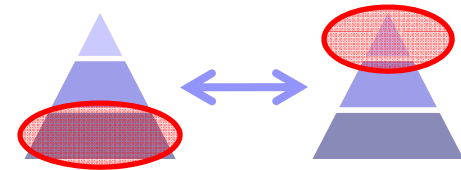
■ Content

- *Does the same content appear?*



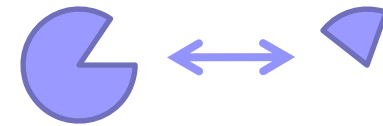
■ Depth of Knowledge

- *Is the level of cognitive demand the same?*



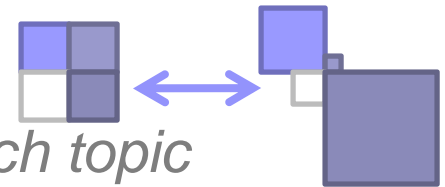
■ Range of Knowledge

- *Is the same span of knowledge consistent throughout?*



■ Representation Balance

- *Is there relatively equal emphasis on each topic throughout the system?*





Approaches to Measuring Alignment

- Workshop with Stakeholders
 - Bring together key stakeholders for calibration and complete measurements
- Third-Party/ Expert Review
 - Contract with a third-party to conduct an expert review of the curriculum
- Reflective Practice
 - Using the measures as a heuristic to reflect upon and improve practice



Why is the Depth of Knowledge (DOK) component important?

- **Depth of Knowledge = Cognitive Demand = Rigor**
 - *How much and what kinds of “thinking” is called for in the standards documentation, classroom instruction and assessments?*



Depth of Knowledge (DOK) Model

1. Recall

- Recall terms, definitions, and perform highly routine procedures

2. Skills and Concepts

- Make connections among concepts, apply skills to complete a task

3. Strategic Thinking

- Requires reasoning, planning, and use of evidence in complex tasks

4. Extended Thinking

- Make several connections; many alternative results; usually takes time



Why Use Webb's DOK Model?

- Advantages of using Webb's DOK over Bloom's Taxonomy or Bloom's Revised Taxonomy:
 - Designed as an tool for analyzing alignment
 - Fewer levels to distinguish – results with Bloom's would be difficult to digest



Let's Practice - Round #1

- For this round of practice...
 - Skim through the DOK Descriptions
 - Review Objectives 1 through 8
 - Work with a partner to assign each of the objectives to one of the four DOK levels



Quick, Timely Notes

1. Higher is not necessarily better
2. Complexity is not the same as difficulty



What the Experts Might Say...

- Objective 1. Level 2
- Objective 2. Level 4
- Objective 3. Level 1
- Objective 4. Level 3
- Objective 5. Level 2
- Objective 6. Level 3
- Objective 7. Level 1
- Objective 8. Level 4

Observations??

Reflections??



Practice Round #2

- For this round of practice...
 - Work with a small group to review the six instructional tasks – see if you can identify at least one task at each of the four levels
 - With your small group, review the eight assessment items – see if you can identify at least one item at each of the four levels



What the Experts Might Say...

Instructional Tasks

- Task 1. Level 1
- Task 2. Level 2
- Task 3. Level 3
- Task 4. Level 4
- Task 5. Level 3
- Task 6. Level 2

Assessment Items

- Item 1. Level 3
- Item 2. Level 2
- Item 3. Level 1
- Item 4. Level 4
- Item 5. Level 1
- Item 6. Level 3
- Item 7. Level 4
- Item 8. Level 2



What the Experts Might Say...

- Objective 1. Level 2
- Objective 2. Level 4
- Objective 3. Level 1
- Objective 4. Level 3

Observations?

Reflections?



Working Toward Alignment

- Let's focus on thinking about alignment. Work with a team...
 - Choose one of the Cluster K&S Statements (or use a common objective from your own program)
 - Identify the DOK level for the statement
 - Identify an appropriate instructional task
 - Ensure the task is at or above the statement DOK level
 - Think of an assessment item/project for the statement
 - Ensure the item is at or above the statement DOK level



Samples from Clusters K&S

- (BA) Utilize standard processes to move, store, locate and/or transfer ownership of goods and services.
- (HU) Know the rules of confidentiality to apply them and inspire confidence.
- (IT) Create digital communication product specifications.

How would you score each of these on the DOK Levels?



Reflections on the Experience

- What was most challenging about this experience?
- What were some things you had to keep in mind when creating “aligned” instruction and assessment?
- Based upon this experience, why do you think alignment is very important?
- Who needs to learn more about this topic in your district? What will you tell them?



Let's Review

- In an aligned system...
 - What you expect, you teach
 - What you teach, you measure
 - What students need to know and do – they will
- There are four measures of alignment
- Working toward alignment is ongoing!
- Alignment starts with committed professionals doing what they can wherever they may be in the system.



Thanks

- Thanks for your time and participation.
For questions, please email us at

sderner@vivayic.com

dkueker@vivayic.com