Arizona Leadership Academy

Co-Sponsored by Curriculum Improvement Institute and Arizona School Administrators
Tuesday, November 16, 2010 and Wednesday, May 4, 2011
Crowne Plaza Phoenix – Phoenix, AZ

Michael J. Rush, Executive Director
Dr. Pat Johnson, Senior Faculty

Curriculum Improvement Institute

Deconstructing the Common Core State Standards or Current Arizona State Standards

Understanding What the Standards Require Students to Know and Be Able to Do

Arizona Leadership Academy

Curriculum Improvement Institute

Hope is not a strategy

And Random “piecing together” is not a tactic

Understanding standards requires a systematic approach

Standards describe the destination that schools and students are supposed to reach, but by themselves have little power to affect change. Much else needs to happen to successfully journey toward that destination.

Chester E. Finn Jr. & Michael J. Petrilli (2010)
Now What? Imperatives & Options for "Common Core" Implementation & Governance

Curriculum Improvement Institute

Implications for Curriculum & Instruction

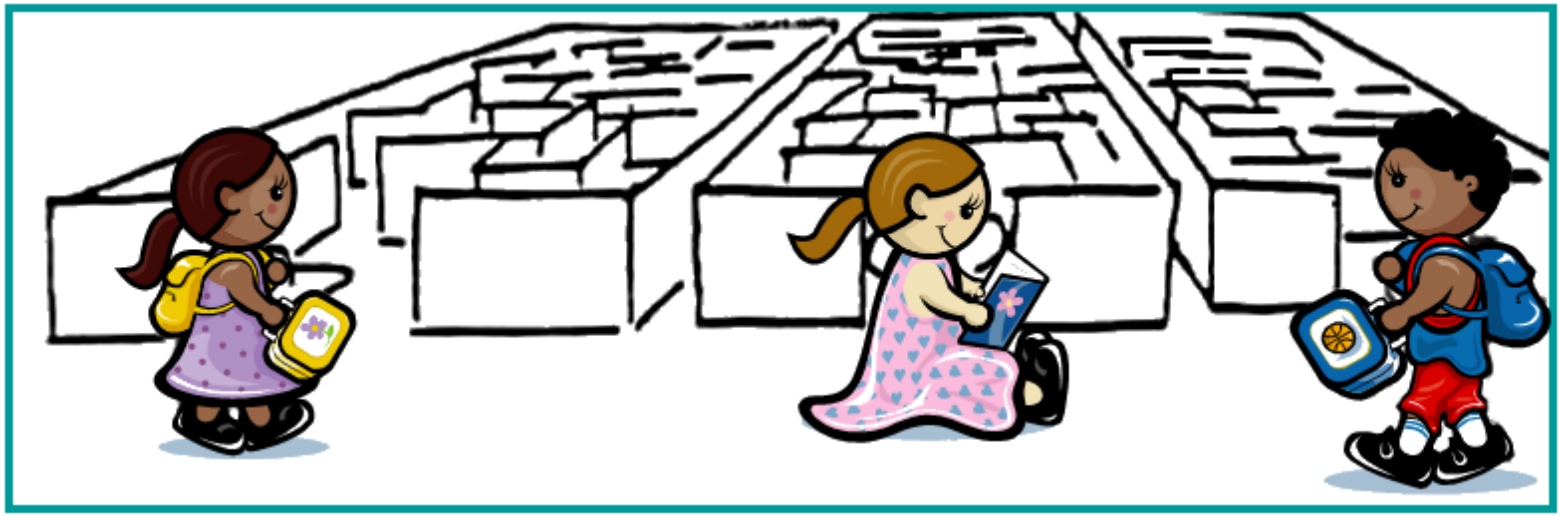
- Arizona has releases a cross walk that shows the alignment between the CCSS and current state standards
- Standards should be well understood and we need to begin to plan for implementation
  - Content, level of rigor
  - Resources, instructional strategies, classroom assessments
  - Timeline for implementation (instruction, assessment)

Fewer, Clearer, Higher

- Fewer
  - What is absolutely necessary to be successful in credit-bearing college courses?
  - How can secondary courses be reorganized to provide sufficient time to learn the core content?
- Clearer
  - Focused, coherent, and contain “big ideas” that thread the content together
- Higher
  - Require students to apply learning, to transfer learning from one context to another, and to measure up to international standards

Research

- A well-articulated curriculum, aligned to standards is critical for student achievement. (Marzano 2003, 2006)
- Survey of Enacted Curriculum
  - Pervasive misalignment of standards and instruction – particularly the level of rigor (CCSSO, 2010)
  - 50% of the variance in student achievement can be explained by the extent to which curriculum, instruction, and assessment are aligned to state standards (CCSSO, 2004)
- The best indicator of a person's likelihood of succeeding in college is the standard of his/her high school curriculum. (U.S. Department of Education)



Do we currently have a **guaranteed and viable curriculum** that **ensures**:

- **All students** experience the same content – in a timeframe that meets their needs?
- **All students** gain the skills necessary to succeed at the next level or course, without gaps or mindless repetitions?
- **All students** are assessed fairly, with tools that accurately measure the skills developed?
- **All students** exit the K-12 curriculum, having mastered the same essential content and skills?

Why Deconstruct the Standards?

- Although the Common Core State Standards have been written to be precise and clear, they are still open to multiple interpretations
- Standards are not meant to be mastered in one learning opportunity
- Educators and students require common, clear learning targets
- The rigor of the curriculum is identified in the skills students are learning-not the standards

Curriculum Improvement Institute

Respond thoughtfully to diverse perspectives; synthesize comments, claims, and evidence made on all sides of an issue; resolve contradictions when possible; and determine what additional information or research is require to deepen the investigation or complete the task.

1. Do we know what is “essential” to know in this standard?
2. Do we know the key concepts and skills students must to know?
3. Do we know where would you begin?

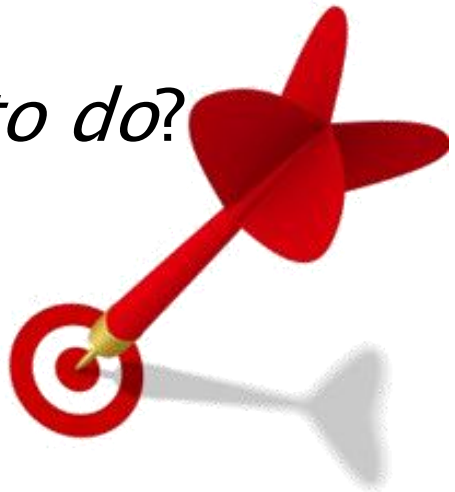
Deconstructing Standards into a Progression of Learning Targets

- A systematic process to identify embedded learning targets in standard indicators so that nothing essential is missed during instruction
- Learning targets: What students should know, understand and be able to do to master the indicators
- Sequence the targets into a developmentally appropriate learning progression

Standard:

Identify the relative position of simple positive fractions, positive mixed numbers, and positive decimals and be able to evaluate the values based on their position on a number line

- What must students *know*?
  - Position of simple positive fractions, positive mixed numbers, positive decimals, values based on position on a number line
- What must students *be able to do*?
  - Identify, evaluate



Curriculum Improvement Institute

Deconstruct the Standard into Skills

Step One

Standard: Identify the relative position of simple positive fractions, positive mixed numbers, and positive decimals and be able to evaluate the values based on their position on a number line.

Step Two

Type:

☒ Knowledge ☒ Reasoning ☐ Performance ☐ Product

Step Three

Learning Targets

What are the knowledge, reasoning, performance, or product targets underpinning this objective?

Knowledge Targets	Reasoning Targets	Performance Targets	Product Targets
• Identify tenths in decimal form on a number line • Indicate the approximate location of thirds, fourths, and fifths on a number line	• Compare fractions, decimals and mixed numbers by identifying their relative position on a number line	• Draw a basic number line from 0 to 10 • Locate simple whole numbers on a number line • Place halves in fraction form on a number line • Indicate the approximate location of thirds, fourths, and fifths on a number line	

Classifying Targets

Knowledge
Mastery of substantive subject content where mastery includes both *knowing and understanding* it.

Reasoning
The ability to *use knowledge and understanding* to figure things out and *solve problems*.

Performance
The development of proficiency in doing something where it is the *process that is important* such as playing a musical instrument, reading aloud, speaking in a second language or using psychomotor skills.

Products
The ability to *create tangible products*, such as term papers, science fair projects, and art sculptures that meet certain standards of quality and present concrete evidence of academic proficiency.

Examples: Knowledge Targets

- Identify sight words
- Identify similes and metaphors
- Know defining characteristics of various literary genres
- Count and group concrete manipulatives by ones, tens, and hundreds to 1,000

Examples: Reasoning Targets

- Make a prediction based on evidence
- Distinguish between fact and opinion
- Evaluate information from a variety of resources
- Classify and compare triangles by sides and angles

Examples: Performance Targets

- Read aloud with fluency and expression
- Use self-correction strategies
- Use inductive reasoning to find and justify the laws of exponents with numeric bases
- Model, identify and describe square, prime and composite numbers

Examples: Product Targets

- Produce a grammatically correct sentence
- Develop a proper paragraph form in a written composition
- Compose a written composition using the five-step writing process
- Create a design with more than one line of symmetry

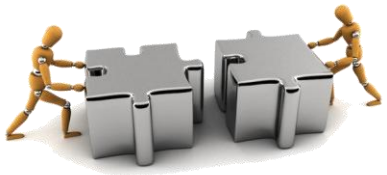
Matrix of Learning Target Verbs

Knowledge	Reasoning	Performance	Product
Explain	Predict	Observe	Design
Describe	Infer	Perform	Produce
Identify	Classify	Compose	Make
Define	Compare	Conduct	Write
Recall	Summarize	Speak	Draw
Recognize	Analyze	Operate	Represent
Select	Evaluate	Investigate	Display
List	Generalize	Collect	Model

Moving to Skills

Skills Criteria Considerations

- Expressed as seeable and measurable verbs
- Are precise and exhibit active demonstrations of learning
- Focused on the what students are learning rather than activities
- Establishes what students needed to know and be able to do
- Not a list of standards, but rather the skills students acquire as they work toward mastery of the standards



Establishing a Learning Progression?

Standard: Identify the relative position of simple positive fractions, positive mixed numbers, and positive decimals and be able to evaluate the values based on their position on a number line.

- Draw a basic number line from 0 to 10
- Locate simple whole numbers on a number line
- Place halves in fraction form on a number line
- Identify tenths in decimal form on a number line
- Indicate the approximate location of thirds, fourths, and fifths on a number line
- Indicate the approximate location of thirds, fourths, and fifths on a number line
- Compare fractions, decimals and mixed numbers by identifying their relative position on a number line

Curriculum Improvement Institute

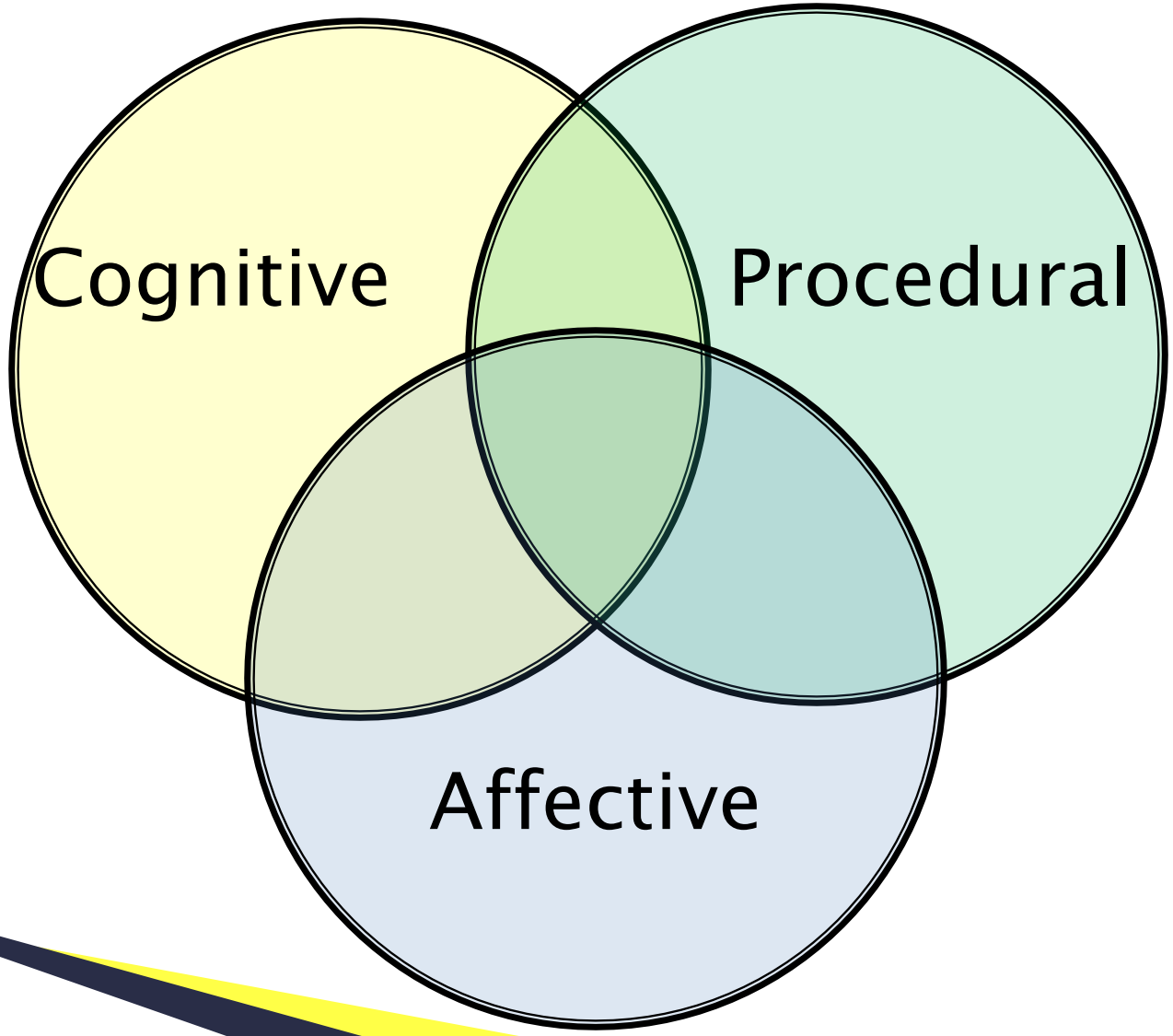
Reflection

- What did we learn?
- What is the effect of this on developing a cohesive, standards-based curriculum?
- How will this play out in your district?
- What resources do you have/need to make this happen?

Leading in a World of Change

- To introduce change, we all need to think about what skills, behaviors and belief systems teachers and administrators will need in order to be part of the change effort.
- An idea worth considering would be to start with yourself. Lead by example.

Key Points for Sustainable Change



Curriculum Improvement Institute

Key Points for Sustainable Change

Cognitive

Identify what teachers and administrators must know and/or be able to do in order to:

a) recognize the need for change
b) know their roles and responsibilities
c) have an understanding of the timelines, goals, strategies, and skills

Curriculum Improvement Institute

Procedural

Put into place the processes and procedures necessary to:

- Set parameters
- Establish expectations
- Inform, inform, inform
- Involve stakeholders

Affective

- Understand the belief systems that exist
- This component requires modifying what I hold close and dear
- Involves a change in thinking

It is harder to change the flow of a river than it is the practice of a teacher