What every future teacher needs to know about PARCC / CCSS

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What is Common Core?
What are standards?
What are the major shifts of Common Core?

What is curriculum?
How does Common Core Impact You as a Future Teacher?

What is PARCC?
What is assessment?
Why is assessment important?
How does PARCC Impact You as a Future Teacher?

Why the controversy?

COMMON CORE
http://www.corestandards.org/about-the-standards/

NJ DOE
http://www.state.nj.us/education/sca/

PARCC
http://www.parcconline.org/about-parcc

NEWS
WASHINGTON POST
http://www.washingtonpost.com/blogs/answer-sheet/wp/2015/03/19/revolt-against-high-stakes-standardized-testing-growing-and-so-does-its-impact/

What is the Common Core?

State education chiefs and governors in 48 states came together to develop the Common Core, a set of clear college- and career-ready standards for kindergarten through 12th grade in English language arts/literacy and mathematics. Today, 43 states have voluntarily adopted and are working to implement the standards, ***which are designed to ensure that students graduating from high school are prepared to take credit bearing introductory courses in two- or four-year college programs or enter the workforce.***

Video from NJ DOE on Common Core

http://www.state.nj.us/education/sca/video/

FACT ---------- OPINION

1 2 3 4 5 6 7 8 9 10

Youtube Video against CCSS has 2.5 million hits

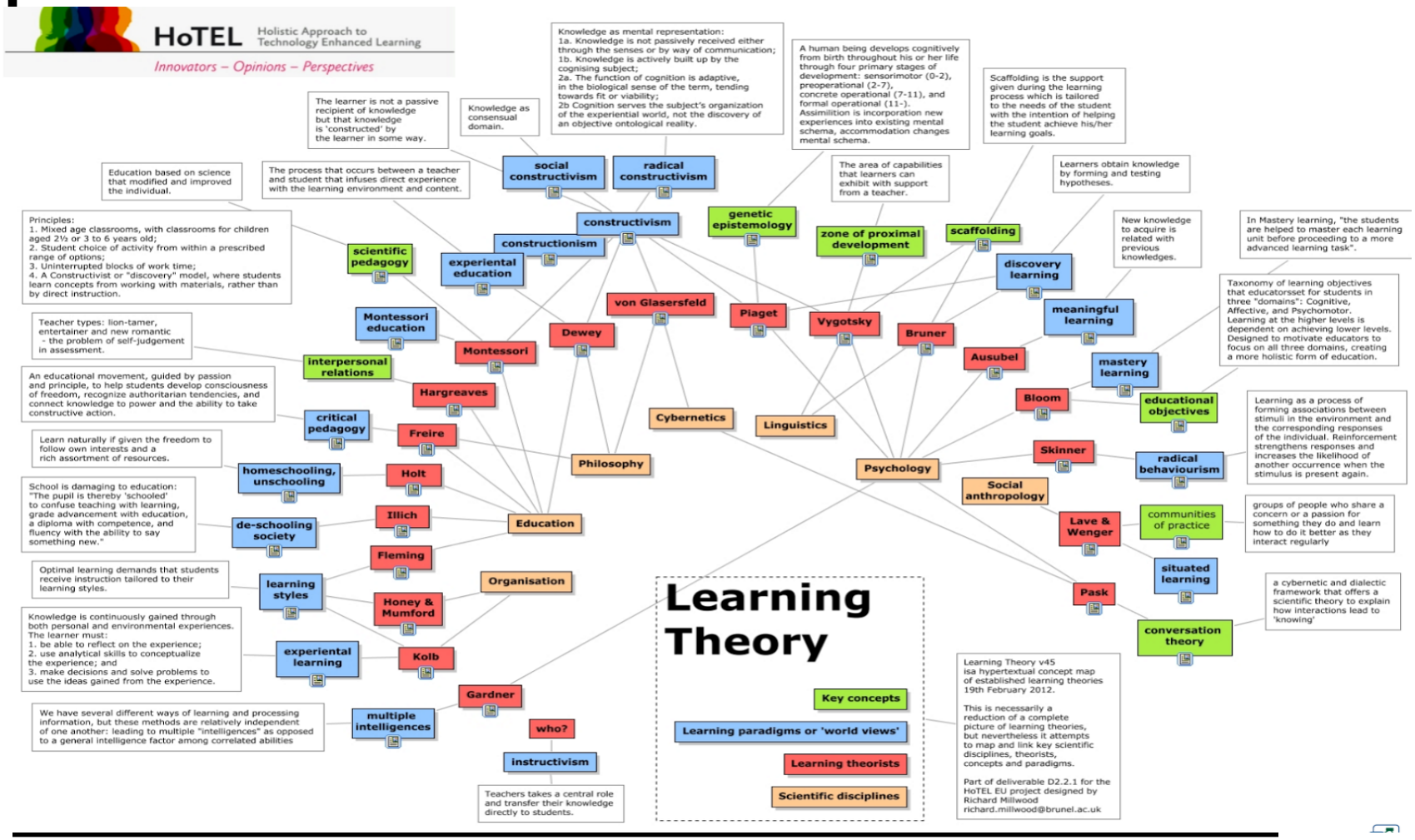
https://www.youtube.com/watch?v=wZEGijN_8R0

Standardized

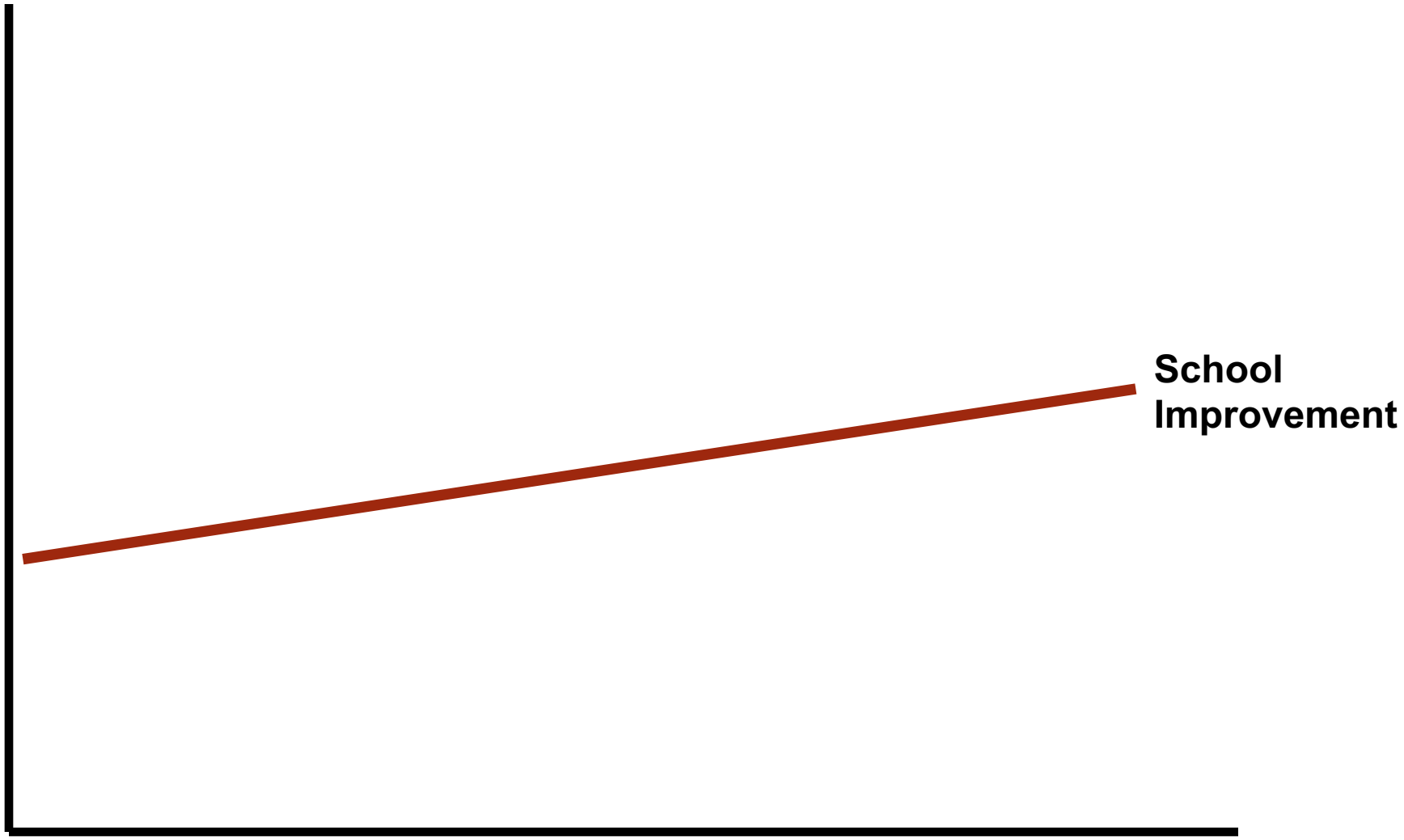
https://www.youtube.com/watch?v=iS3W3uDN0dM

Why the Concern?

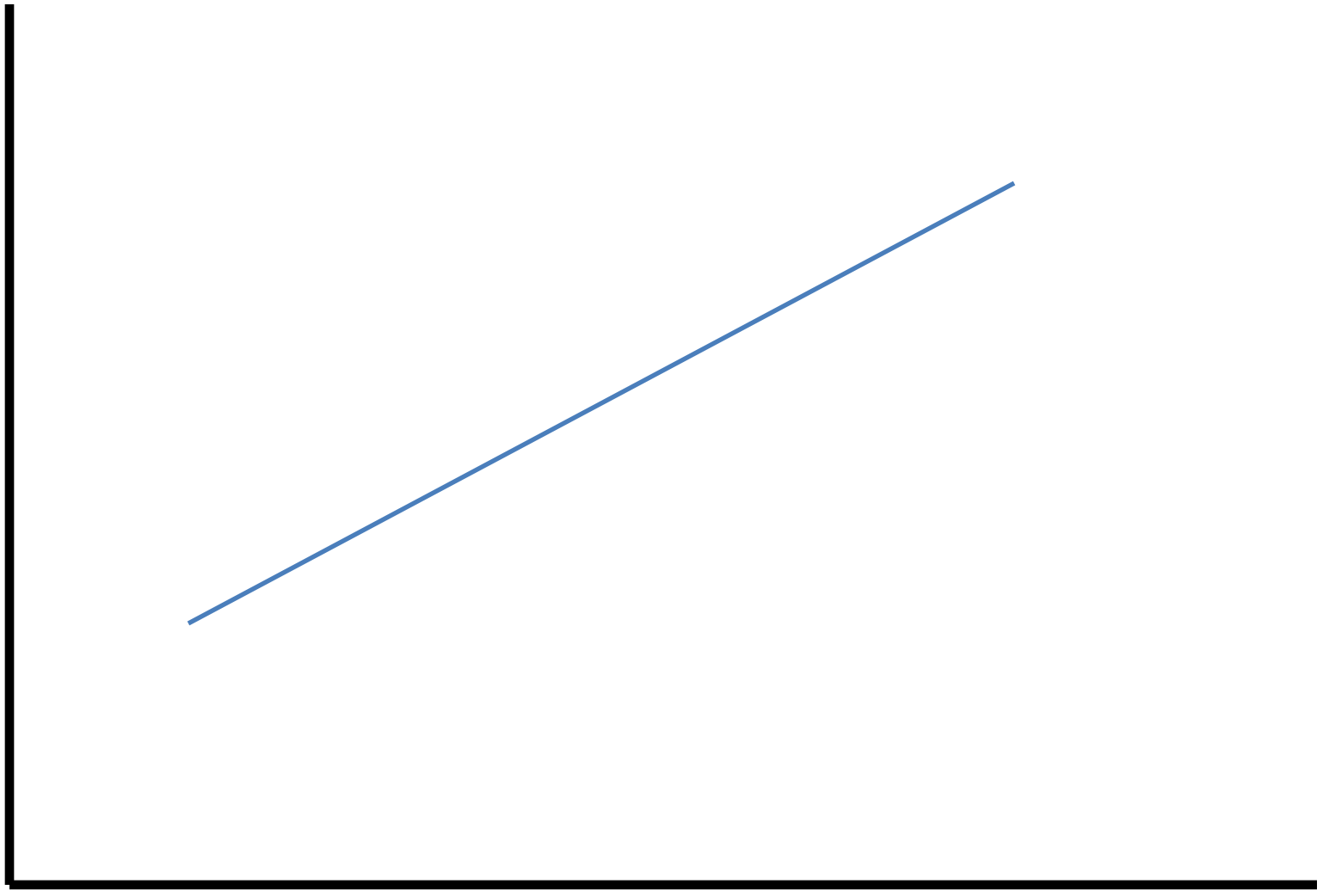
School Improvement



School Improvement

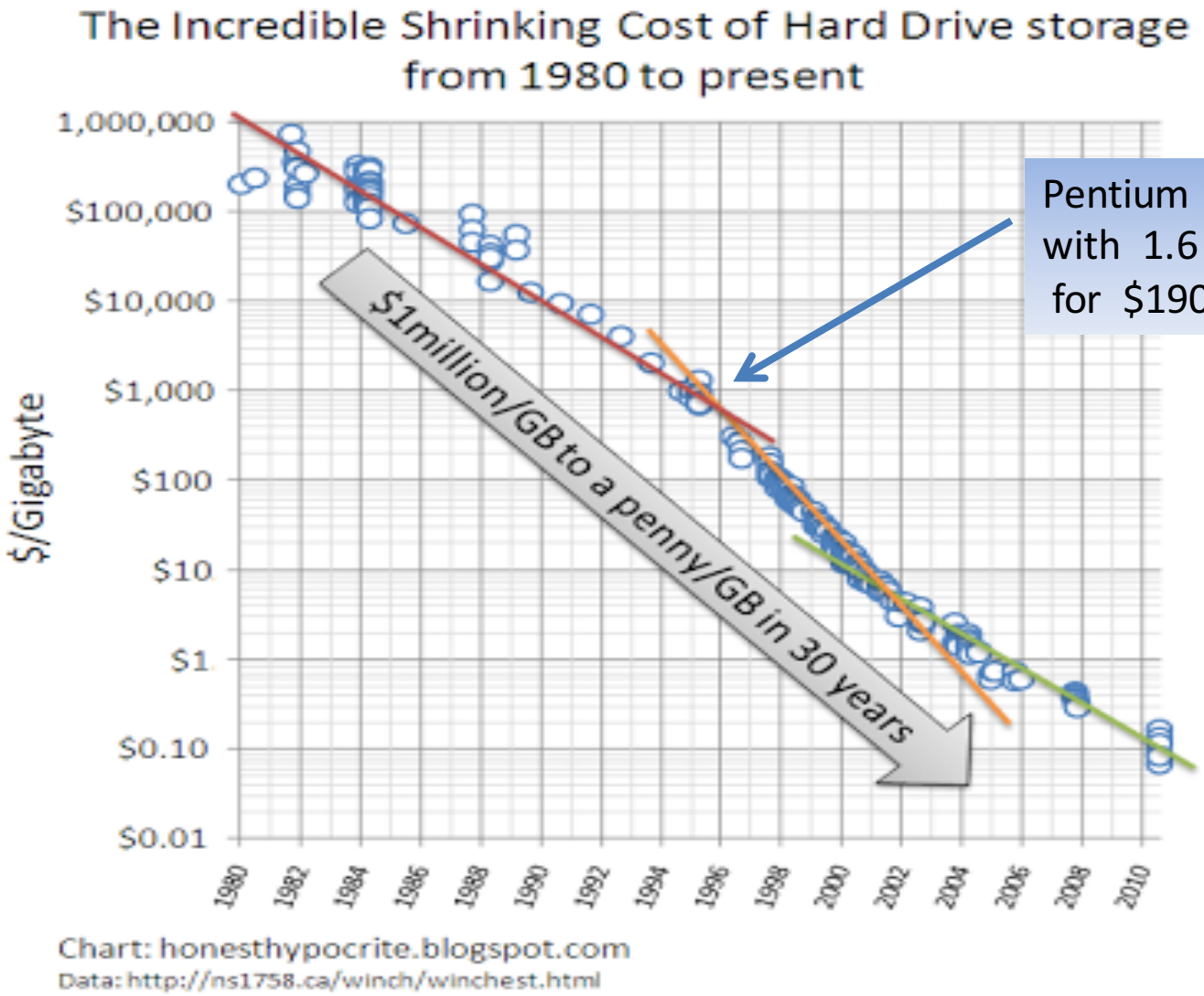


Changing World



1996: Achieve is founded at the National Education Summit by leading governors and business leaders

Pentium 166 mhz 1.6 Gig Hard Drive for $1900



Pentium 166 mhz Computer with 1.6 Gig Hard Drive for $1900

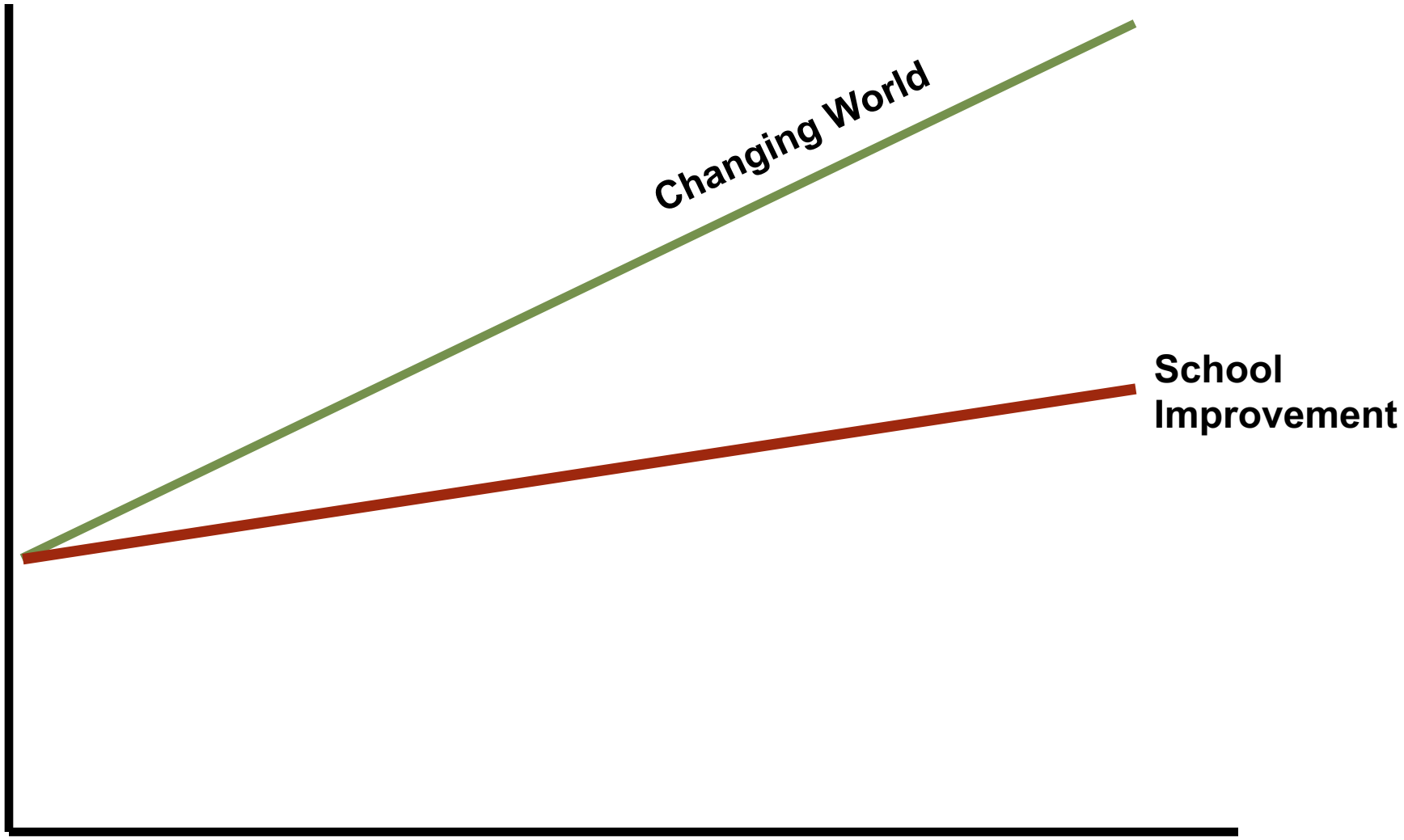
1 Gig is 1 cents

What is different here?

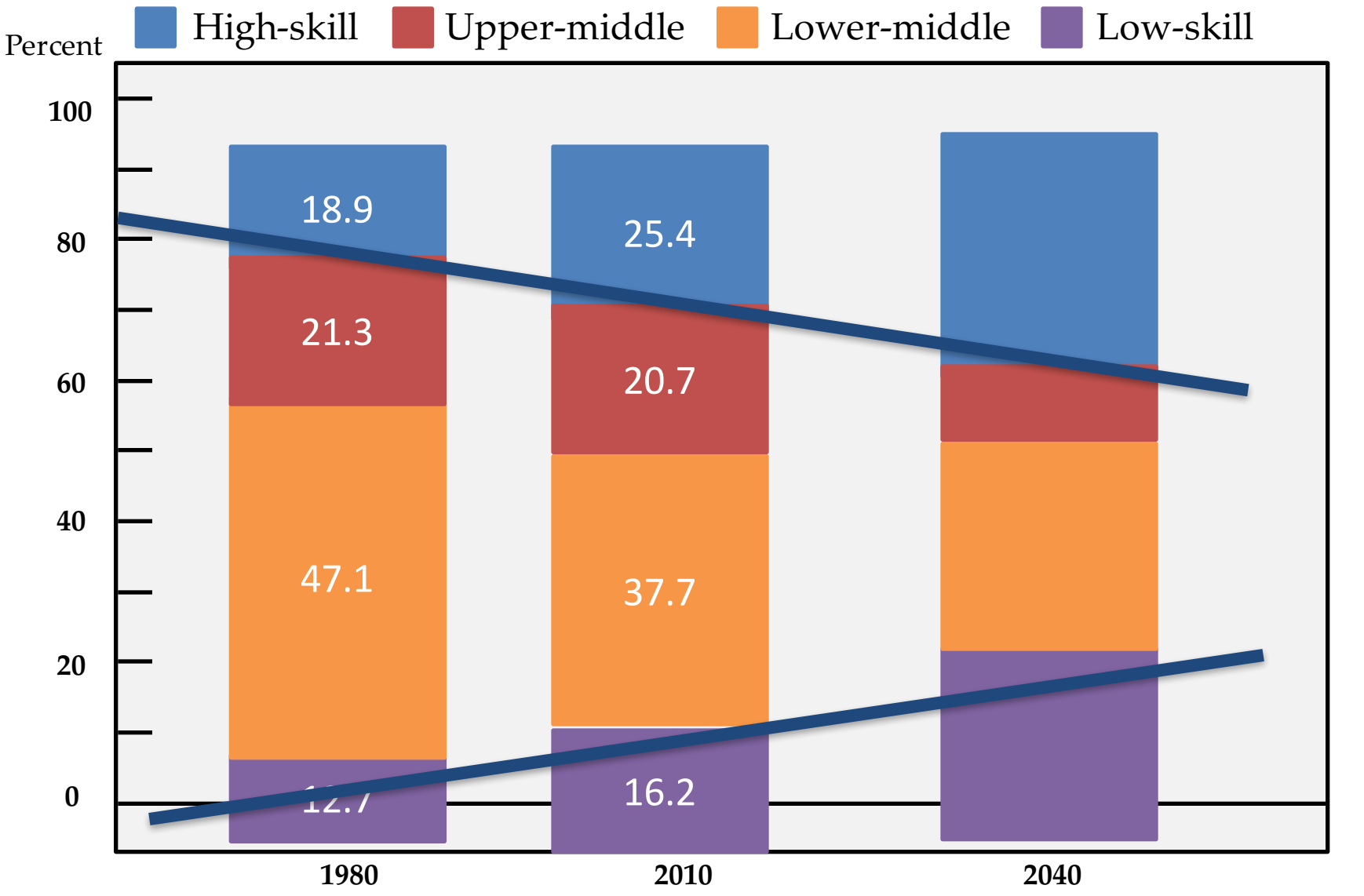
Pope Benedict XVI

Pope Francis

Growing Gap



Job Shares by Skill Group, 1980-2010



Sources: NY Fed Calculations, U.S. Census Bureau

Lost Jobs

- Telemarketers -
- Secretarial/Adm. Assistant -
- Accountant/Auditors –
- Retail Salespersons –
- Technical Writers –

source: The Future of Employment
C. Frey and M. Osborne

Are our Students College and Career Ready?

College Freshman Well or Very Well Prepared

- High School Teachers - 89%

Source: ACT survey

College Freshman Well or Very Well Prepared

- High School Teachers - 89%
- College Instructors – 26%

Source: ACT survey

Freshmen Needing Remediation

1. Two Year College – 51.7%
2. Four Year College – 19.9%

Source: ACT

College Retention Rate 2013 First to Second Year

Two-Year Colleges – 55.5%

Four-Year Colleges – 65.2%

Source: ACT

College Dropout Rate 2013 First to Second Year

Two-Year Colleges – 44.5%

Four-Year Colleges – 34.8%

Source: ACT

Average Graduation Rate 1984-2013

Two-Year Colleges in 3 years – 29.1%

Four-Year Colleges in 5 years – 36.6%

Source: ACT

13 Million Americans are Unemployed

BUT

3.8 million jobs in the

U.S.

remain unfilled

53.6% of Bachelor's degree holders under 25 are jobless or underemployed

Source: USDOL – March, 2013

What would you do?

http://www.corestandards.org/about-the-standards/

HISTORY OF COMMON CORE

1996: Achieve is founded at the National Education Summit by leading governors and business leaders

1996: Achieve is founded at the National Education Summit by leading governors and business leaders.

1998: Achieve begins its Academic Standards and Assessments Benchmarking Pilot Project.

1999: Achieve sponsors a National Education Summit.

2001: Achieve sponsors a National Education Summit; Achieve joins the Education Trust, Thomas B. Fordham Institute and National Alliance of Business to launch the American Diploma Project (ADP) to identify the "must-have" knowledge and skills most demanded by higher education and employers.

2004: The American Diploma Project releases "Ready or Not: Creating a High School Diploma That Counts." This groundbreaking report – the result of over two years of research – identifies a common core of English and mathematics academic knowledge and skills, or "benchmarks," that American high school graduates need for success in college and the workforce. *Education Week* later named "Ready or Not" one of the most 12 influential research studies.

2005: Achieve co-sponsors a National Education Summit on High Schools, with the National Governors Association; the American Diploma Project Network is launched with 13 inaugural states.

2006: Achieve releases its first annual report on the ADP college- and career-ready policy agenda: "Closing the Expectations Gap: An Annual 50-State Progress Report on the Alignment of High School Policies with the Demands of College and Work."

2007: The ADP Assessment Consortium launches to develop common Algebra II end-of-course assessment, which was, at that time, the largest multi-state effort to develop assessments to date.

2008: Achieve releases "Out of Many, One: Toward Rigorous Common Core Standards from the Ground Up," a report that found that individual state efforts to set college- and career-ready standards for high school graduates actually led to a remarkable degree of consistency in English and mathematics requirements.

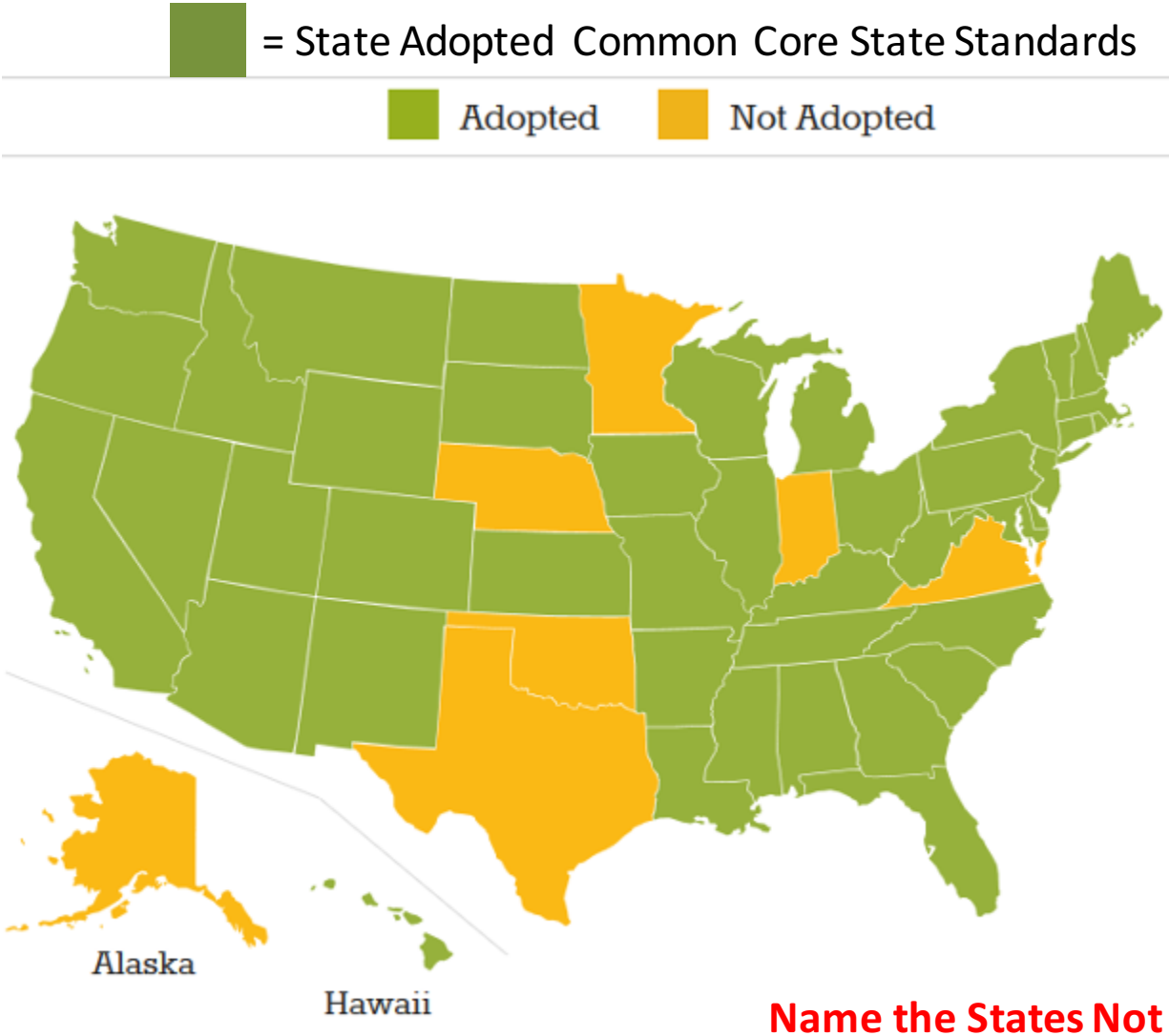
2009: Work begins on the development of the Common Core State Standards; Achieve partners with the National Governors Association and Council of Chief State School Officers on the Initiative and a number of Achieve staff and consultants serve on the writing and review teams.

2010: The final Common Core State Standards are released; Achieve begins serving as Project Management Partner for the Partnership for Assessment of Readiness for College and Careers (PARCC).

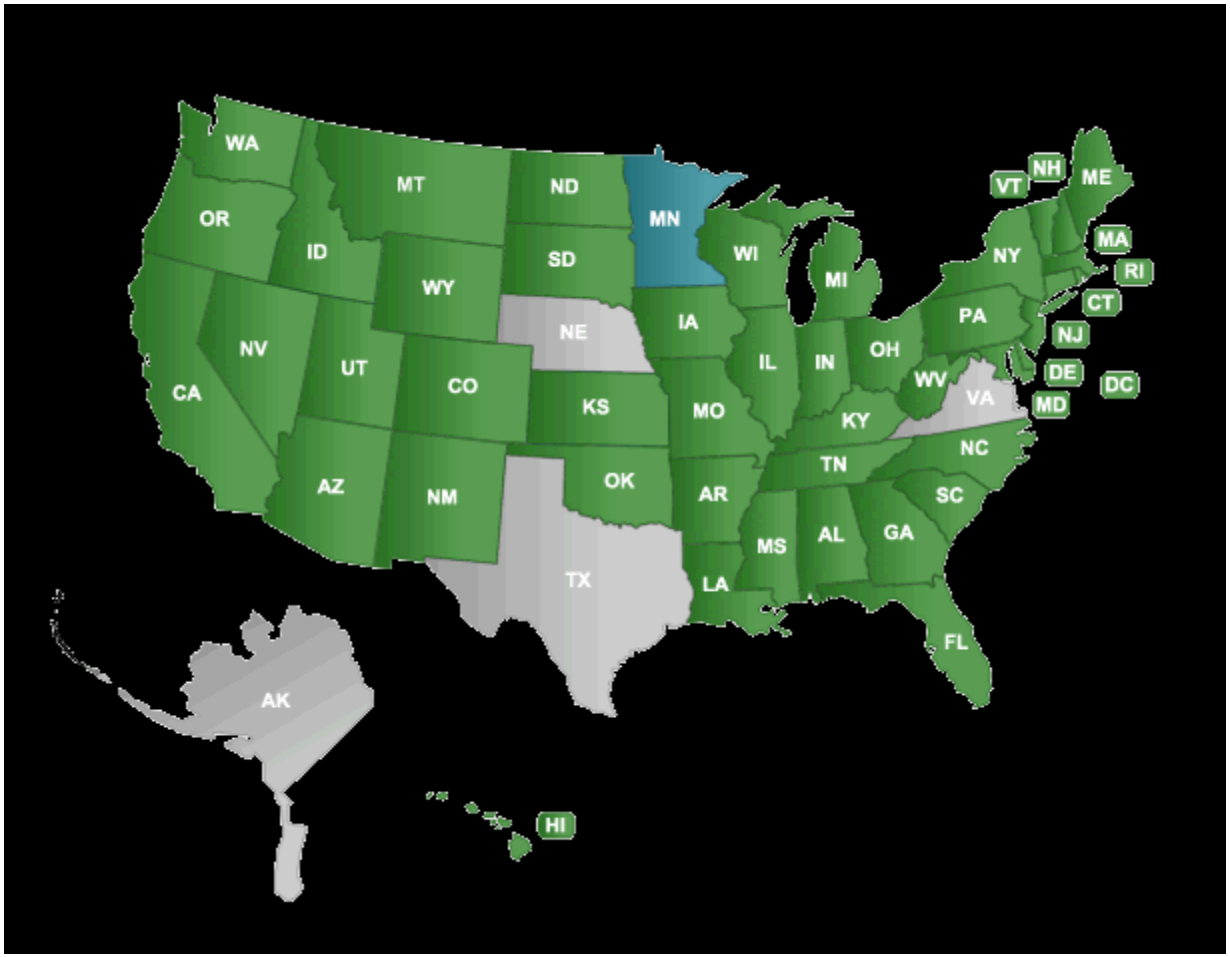
2011: Achieve begins managing the state-led development of the K-12 Next Generation Science Standards.

2013: The final Next Generation Science Standards are released.

= State Adopted Common Core State Standards



Name the States Not Adopting



Alaska
Minnesota
Nebraska
Texas
Virginia

What is an Academic Standard?

Academic standards describe the knowledge and skills a student needs to acquire by the end of each school year and upon completion of a K-12 public school education.

.

Did New Jersey have state standards prior to the Common Core State Standards?

Yes. Since the 1990s New Jersey has had state standards for teaching and student learning in nine subject areas, known as the Core Curriculum Content Standards (English language arts (ELA); mathematics; **science; social studies; technology**; **21st century life and careers**; **comprehensive health and physical education; visual and performing arts;** and **world languages).** The New Jersey State Board of Education voluntarily adopted the CCSS to replace the previous ELA and mathematics standards.

What are the Common Core State Standards?

The Common Core State Standards (CCSS) identify the specific skills and knowledge that all students are expected to learn, know, and be able to do in English language arts (ELA) and mathematics. **The New Jersey State Board of Education adopted the CCSS in 2010 and implemented a four-year timeline for educators to learn and begin to adapt their own lesson plans and curriculum.**

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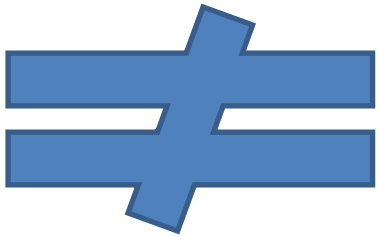
Common Core
State Standards



Curriculum

What is curriculum?

The planned interaction of pupils with instructional content, materials, resources, and processes for evaluating the attainment of educational objectives.

COMPONENTS

Course Content
Learning Objectives
Process Skills
Pupil outcomes (Benchmarks)
Materials
Scope
Sequence
Instructional Strategies
Differentiation
Technology Integration
Literacy Integration
Unit Design
Cross Curricular Opportunities

CONTROVERSY??

Most Common Questions / Concerns

- Belief that Common Core is a Federal takeover of Public Education;

- **Concern that Common Core is a one-size-fits-all education policy that assumes every students learns exactly the same..**

- Narrowing The Curriculum
  - Teaching to the Test / LA and Math;

- Concerns that Mathematics standards are too rigorous;

Most Common Questions / Concerns

- Concern that the Mathematics Standards are not rigorous enough;

- Teachers being evaluated on results

Most Common Questions / Concerns

- Cost of Implementing the Common Core
- Cost of PARCC Test
- Length of PARCC Test

Most Common Questions / Concerns

- Cost of Required Technology (Bandwidth / Hardware)
- Cost of Test Preparation
- Privacy of Data

Academic Shifts

How does this impact the delivered content?

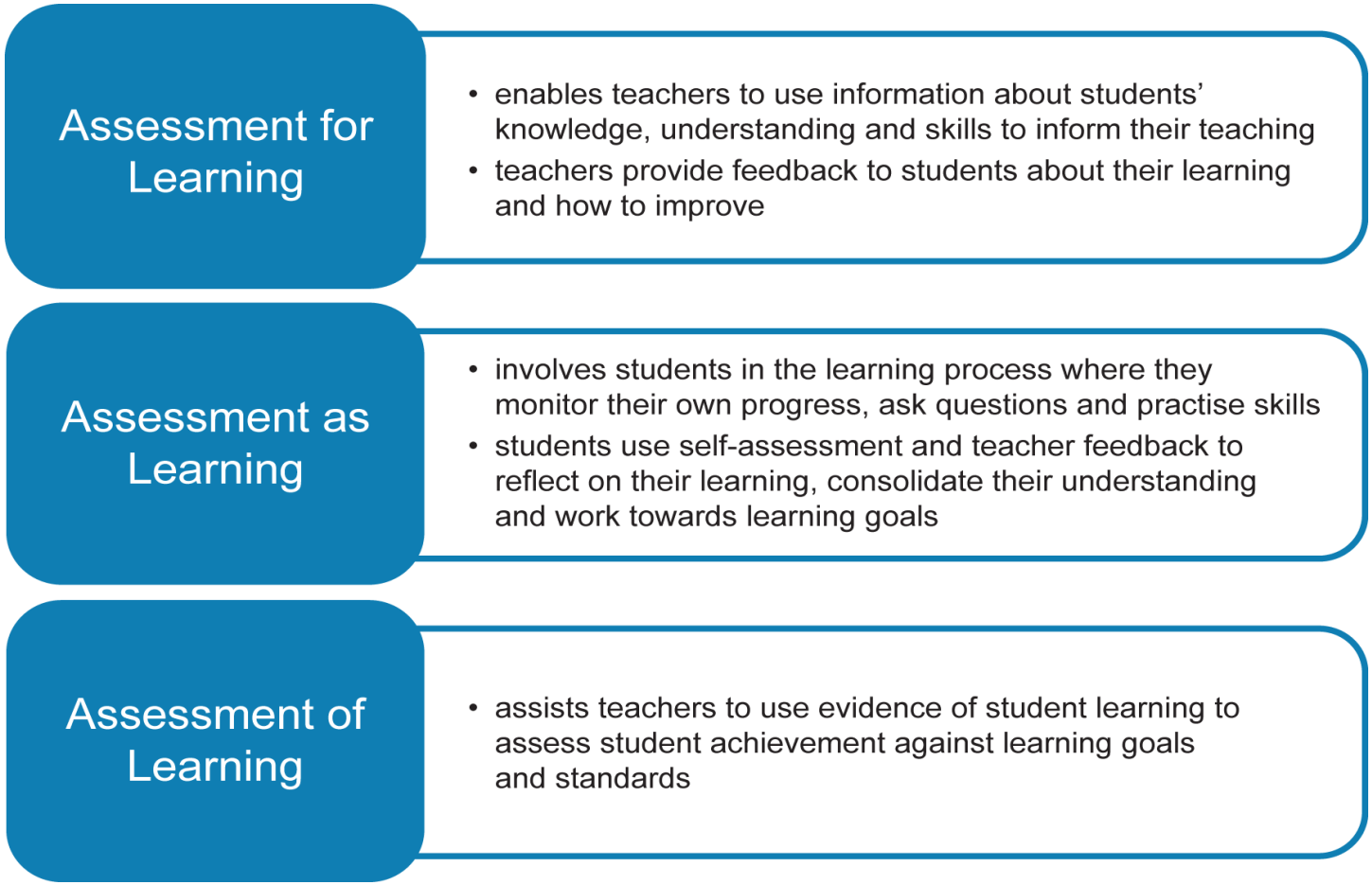
Major Differences between Common Core and Prior Standards

→ But First --- Assessment

PARCC

Partnership for Assessment of
Readiness for College and Careers

Assessment (FOR / AS / OF)



Assessment

- *Assessment and feedback are crucial for helping people learn*. Assessment should mirror good instruction; happen continuously as part of instruction; and provide information about the levels of understanding that students are reaching. In order for learners to gain insight into their learning and their understanding, frequent feedback is critical: *students need to monitor their learning and actively evaluate their strategies and their current levels of understanding*.
(How People Learn by Bransford, Brown, and Cocking 1999)

- Individuals acquire a skill much more rapidly *if they receive feedback about the correctness of what they have done*. O*ne of the most important roles for assessment is the provision of timely and informative feedback to students during instruction and learning* so that their practice of a skill and its subsequent acquisition will be effective and efficient.
(Knowing What Students Know: The science and design of educational assessment by Pellegrino, Chudowsky, and Glaser 2001)

What is assessment?

Assessment is essential not only to guide the development of individual students but also to monitor and continuously improve the quality of programs, inform prospective students and their parents, and provide evidence of accountability to those who pay our way."

-- Redesigning Higher Education: Producing Dramatic Gains in Student Learning by Lion F. Gardiner; ASHE-ERIC Higher Education Report Volume 23, No. 7, p. 109

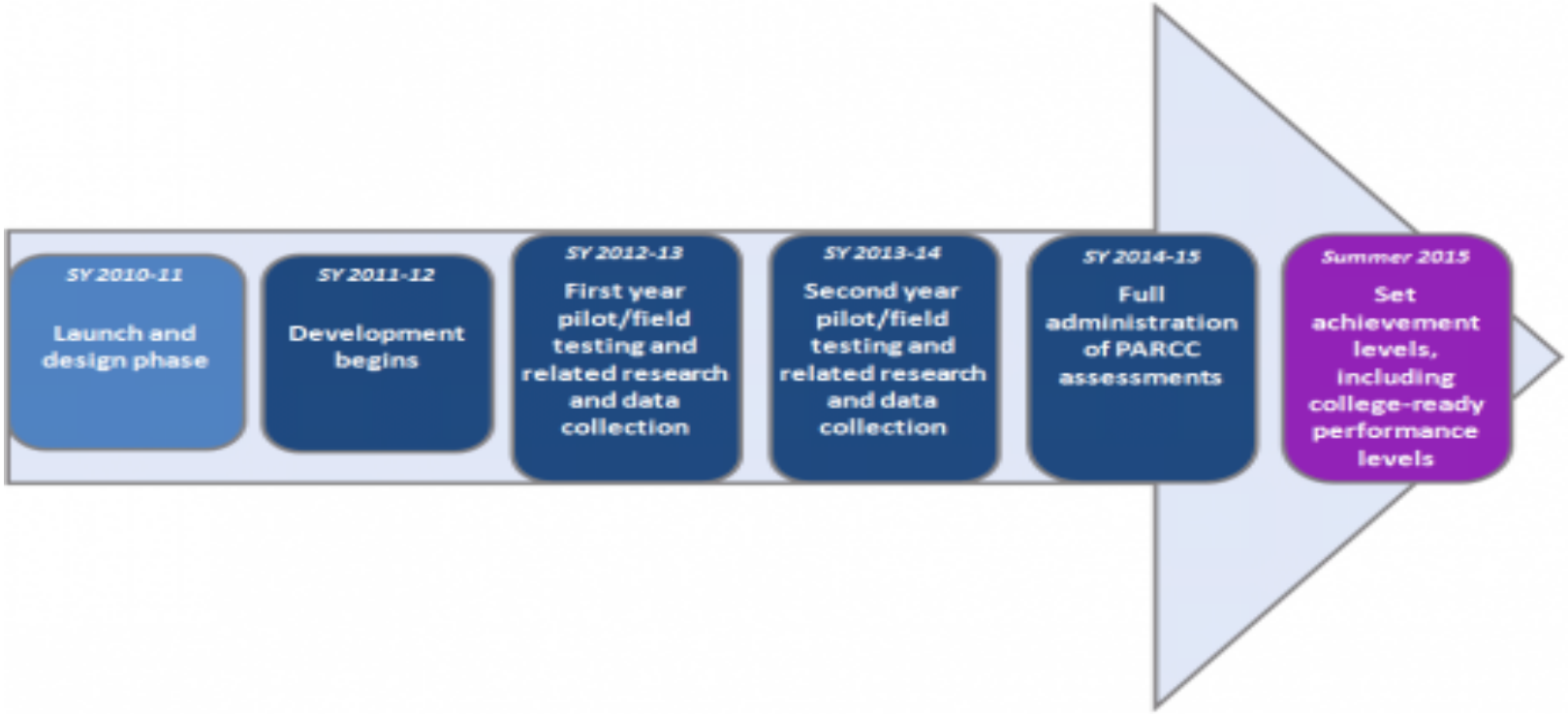
‘Partnership for Assessment of Readiness for College and Careers (PARCC) is a **consortium of states,** including the District of Columbia that is developing a common set of K-12 assessments.

The assessments are designed to build a pathway to college and career readiness by the end of high school, mark students’ progress toward this goal from 3rd grade on, and provide teachers with **timely information that informs instruction.**

PARCC assessments will measure the full range of the content and skills called for in the English Language Arts/Literacy and mathematics Common Core State Standards (CCSS).

PARCC received a $186 million grant through the U.S. Department of Education's Race to the Top assessment competition to support the development and design of the next-generation assessment system’

TIMELINE


SY 2010-11
Launch and design phase
SY 2011-12
Development begins
SY 2012-13
First year pilot/field testing and related research and data collection
SY 2013-14
Second year pilot/field testing and related research and data collection
SY 2014-15
Full administration of PARCC assessments
Summer 2015
Set achievement levels, including college-ready performance levels

TIMELINE

2010-11 School Year: Launch and design phase

PARCC received a $186 million grant through the U.S. Department of Education's Race to the Top assessment competition to support the development and design of the next-generation assessment system

Spring 2010 (23 PARCC States)

Alabama,
Arizona,
Arkansas,
Colorado,
Delaware,
Florida,
Georgia,
Illinois,
Indiana,
Kentucky,
Louisiana,
Maryland,
Massachusetts,
Mississippi,
New Jersey,
New Mexico,
New York,
North Dakota,
Ohio,
Pennsylvania,
Rhode Island,
Tennessee,
Washington DC

TIMELINE

- ✓ **2010-11 School Year:** Launch and design phase
- ✓ **2011-12 School Year**: Development begins
- ✓ **2012-13 School Year:** Item research and tryouts, and related research and data collection
- ✓ **2013-14 School Year: Field testing and related research and data collection**
- **2014-15 School Year**: Full operational administration of PARCC assessments
- **Summer 2015:** Set achievement levels, including college and career ready performance levels

FALL 2014 (10 PARCC States)

Alabama,
Arizona,
Arkansas,
Colorado,
Delaware,
Florida,
Georgia,
Illinois,
Indiana,
Kentucky,
Louisiana,
Maryland,

?

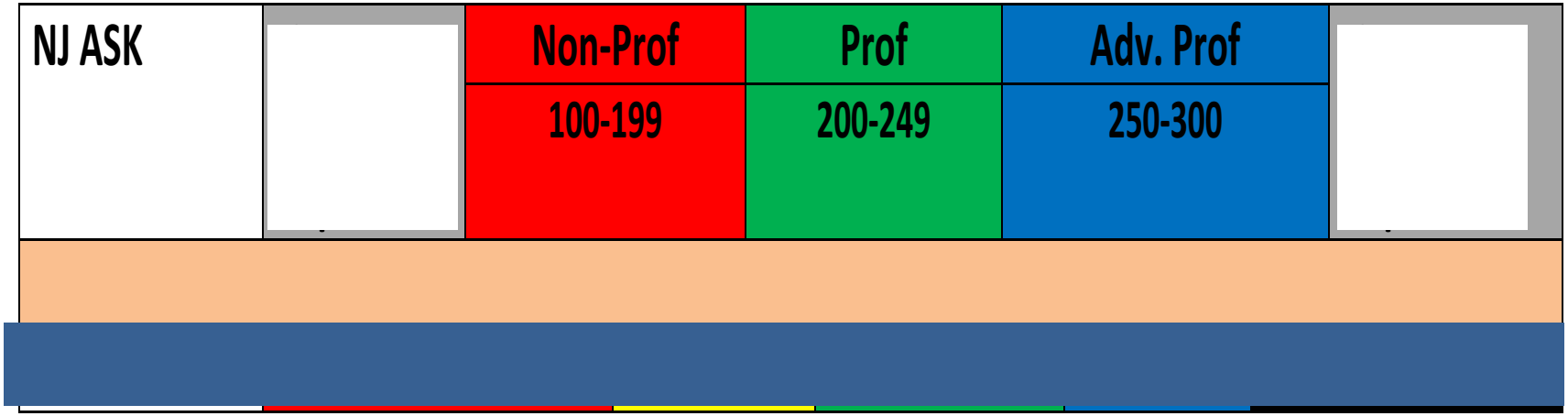
Massachusetts,
Mississippi,
New Jersey,
New Mexico,
New York,
North Dakota,
Ohio,
Pennsylvania,
Rhode Island,
Tennessee,
Washington DC

Currently only 17% of students across US will be tested using PARCC*

PARCC (10)		SBAC (17)		Other Tests (18)		Undecided (6)	
Arkansas	483,114	California	6,287,834	Alabama	744,621	Arizona	1,080,319
Colorado	854,265	Connecticut	554,437	Alaska	131,167	Louisiana	703,390
District of Columbia	73,911	Delaware	128,946	Florida	2,668,156	Massachusetts	953,369
Illinois	2,083,097	Hawaii	182,706	Georgia	1,685,016	Michigan	1,573,537
Maryland	854,086	Idaho	279,873	Indiana	1,040,765	New York	2,704,718
Mississippi	490,619	Maine	188,969	Iowa	495,870	South Carolina	727,186
New Jersey	1,356,431	Missouri	916,584	Kansas	486,108		
New Mexico	337,225	Montana	142,349	Kentucky	681,987		
Ohio	1,740,030	Nevada	439,634	Minnesota	839,738		
Rhode Island	142,854	New Hampshire	191,900	Nebraska	301,296		
		North Dakota	97,646	North Carolina	1,507,864		
		Oregon	568,208	Oklahoma	666,120		
		South Dakota	128,016	Pennsylvania	1,771,395		
		Vermont	89,908	Tennessee	999,693		
		Washington	1,045,453	Texas	5,000,470		
		West Virginia	282,870	Utah	598,832		
		Wisconsin	871,105	Virginia	1,257,883		
				Wyoming	90,099		
TOTAL:	8,415,632	**TOTAL:**	12,396,438	**TOTAL:**	20,967,080	**TOTAL:**	7,742,519
Percent of Total:	17%		25%		42%		16%
TOTAL U.S. preK-12 enrollment, 50 states + DC, fall 2011: 49,521,669 (Digest of Education Statistics)							

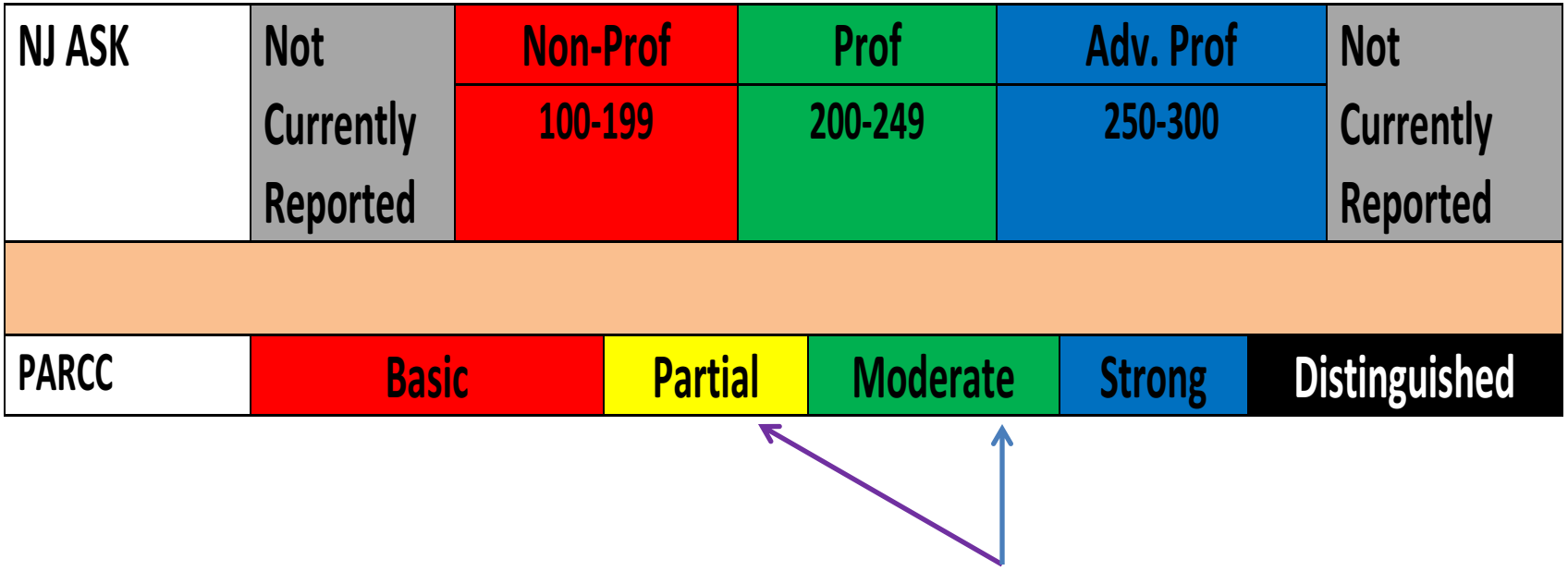
*** As of October 2014**

The NJASK and HSPA measured ***student proficiency*** in 3 relatively wide bands;



- New Jersey has historically measured ***student proficiency*** in 3 relatively wide bands; the PARCC assessments will increase the number of bands to 5.

  While the actual scoring rubric has not yet been released, the table below is an approximation of how the PARCC assessments might be correlated to the current NJ ASK & HSPA assessments.



We expect that many students currently scoring proficient will be scoring in the partial or moderate band.

Academic Shifts

Major Differences between Common Core and Prior Standards

How does this impact the delivered content?

How does this impact assessment?

ELA/Literacy – Before and After

The ELA/Literacy standards include expectations in reading, writing, speaking, and listening that emphasize the students' ability to read complex texts and cite evidence in their writing and speaking, rather than relying on narrative writing based on their opinion and experience. In addition to reading more complex texts, there is also a push for students to be exposed to and understand more academic vocabulary.

Comparing Traditional Assessment to CCSS Assessment – An Overview

Shift 1: Regular practice with complex text and its academic language

From	To
Little emphasis on text complexity	Strong emphasis on text complexity
Vocabulary questions often focused on prior knowledge rather than context; little emphasis on tier 2 words	Vocabulary questions focused on meaning of words in context; strong emphasis on tier 2 words and words important to central ideas
Figurative language questions focused on literary terms	Figurative language questions focused on meaning, not terms

Regular practice with complex text and its academic language

- Subtle and/or frequent transitions
- Multiple and/or subtle themes and purposes
- Density of information
- Unfamiliar settings, topics or events
- Lack of repetition, overlap or similarity in words and sentences
- Complex sentences
- Uncommon vocabulary
- Lack of words, sentences or paragraphs that review or pull things together for the student
- Longer paragraphs
- Any text structure which is less narrative and/or mixes structures

Comparing Traditional Assessment to CCSS Assessment – Text Complexity

Traditional Science Text	Complex Science Text – Grade 5
Have you ever noticed that bubbles have colors? Look closely, and you can see lots of pretty colors on bubbles. The colors happen when light falls on bubbles. Then the light goes from the bubble to your eyes. Next time you see bubbles, look to at what colors there are. Do you see green or blue? Purple or yellow? Sometimes you can see a rainbow!	Bubbles can also teach us about light. The light from the sun is made up of many different colors. Mixed together, they look white. However, it is possible to separate the different colors of light from each other with a prism. Small drops of water or ice crystals can work like a prism. You have seen this for yourself if you have ever seen a rainbow. *From "Bubblology," from an online site "Science for Kids"*

Comparing Traditional Assessment to CCSS Assessment – Vocabulary

Traditional Item	CCSS-Aligned Item
What kind of figurative language is the phrase "tiny human insects" in paragraph 3? A. personification B. metaphor* C. simile D. onomatopoeia	**Why does the author use the phrase "tiny human insects" in paragraph 3?** A. To suggest that the lives of individuals are not considered important in Winesburg B. To suggest the vast contrast in size between the farmland and the farmers* C. To suggest that George's decision to leave Winesburg will not affect his life in a significant way D. To suggest the relative insignificance of farming as an occupation

(Grade 9 items based on a short story from *Winesburg, Ohio* by Sherwood Anderson)

RL.9.4: *Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone).*
RL.9.1: *Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.*

Classifying Vocabulary

Vocabulary Instruction

Choosing Words to Teach

Tier III

Tier III words are low-frequency words and are limited to a specific "domain". They often pertain to a specific content area. These words are best learned within the context of the lesson or subject matter.

Examples: atom, molecule, metamorphic, sedimentary, continent

Tier II

Tier II words are high-frequency words that occur across contexts. These words are used by mature language users and are more common in writing than in everyday speech. Tier II words are important for students to know to enhance comprehension of a selected text. Tier II words the best words for targeted explicit vocabulary instruction.

Examples: hilarious, endure, despise, arrange, compare, contrast

Tier I

Tier I words are the words we use everyday in our speech. These words are typically learned through conversation. These are common words that rarely require direct instruction.

Examples: come, see, happy, table

Source: Bringing Words To Life (Beck, McKeown, & Kucan 2002)

www.blog.maketaketeach.com

http://www.hpcsd.org/district.cfm?subpage=29208

Tier II Grade 5

Abolish, accomplish accurate announce anxious approach approval approximate argument avoid briskly cease claim conclude conflict consistent context convince culture dissatisfied dominate drowsy edible effortless equivalent escalate establish evaluate evidence exhaust expansion expectation explain express extend familiar frequent gigantic gist glare harsh heroic hesitate hilarious historic horizontal hostile huddle identify illegible immigrate influence investigate navigate opposed ordinary passage persuade primary recently reference review revolt scarce significant source summarize superior

Comparing Traditional Assessment to CCSS Assessment – An Overview

Shift 2: Reading, writing and speaking grounded in evidence from text, both literary and informational

From	To
Focus on simple recall or superficial analysis	Focus on careful reading and analysis of texts
Little or no emphasis on using textual evidence	Strong emphasis on using textual evidence
Decontextualized writing prompts	Writing to sources

Comparing Traditional Assessment to CCSS Assessment– Textual Analysis

Traditional Item	CCSS-Aligned Item
What is inside a bubble? A. soap B. air* C. detergent D. membrane	**According to information in the article, which of the following bubbles would last the longest?** A. A small bubble before the air inside passes to a larger bubble B. A small bubble with thin, tightly curved walls C. A large bubble made with soap or detergent and sugar* D. A large bubble with walls that bend in the wind and change colors
(Grade 5 items based on an article titled "Bubblology," from an online site "Science for Kids")	
RI.5.3: *Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.* RI.5.1: *Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.*	

Comparing Traditional Assessment to CCSS Assessment – Writing to Sources

Traditional, De-contextualized Writing Prompt	CCSS-Aligned Writing Prompt
Write a letter to your school principal in which you argue for or against the idea of increasing the budget of the school football team.	**In his inaugural address, Thomas Jefferson directly or indirectly refers to several freedoms that Americans enjoy. Explain which freedoms Jefferson sees as most important for the success of the new nation and explain why they are important. Support your response with evidence from the address.**
(Grade 11 aligned item based on an excerpt from *Jefferson's Inaugural Address, 1801)*	
W.11.1: *Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.* W.11.9: *Draw evidence from literary or informational texts to support analysis, reflection, and research.*	

Content Shift #2

Text-Dependent Questions

Not Text-Dependent	Text-Dependent
In "Casey at the Bat," Casey strikes out. Describe a time when you failed at something.	What makes Casey's experiences at bat humorous?
In "Letter from a Birmingham Jail," Dr. King discusses nonviolent protest. Discuss, in writing, a time when you wanted to fight against something that you felt was unfair.	What can you infer from King's letter about the letter that he received?
In "The Gettysburg Address" Lincoln says the nation is dedicated to the proposition that all men are created equal. Why is equality an important value to promote?	"The Gettysburg Address" mentions the year 1776. According to Lincoln's speech, why is this year significant to the events described in the speech?

Comparing Traditional Assessment to CCSS Assessment – An Overview

Shift 3: Building knowledge through content-rich nonfiction

From	To
Equal representation of informational and literary texts; limited focus on the quality of informational texts	More informational texts as students move through the grades; greater focus on content-rich informational texts at all grades

Building Knowledge Through Content-Rich Nonfiction: Why?

- Students are required to read very little informational text in elementary and middle school.
- Non-fiction makes up the vast majority of required reading in college/workplace.
- Informational text is harder for students to comprehend than narrative text.
- Supports students learning how to read different types of informational text.

Content Shift #3

Content-Rich Nonfiction

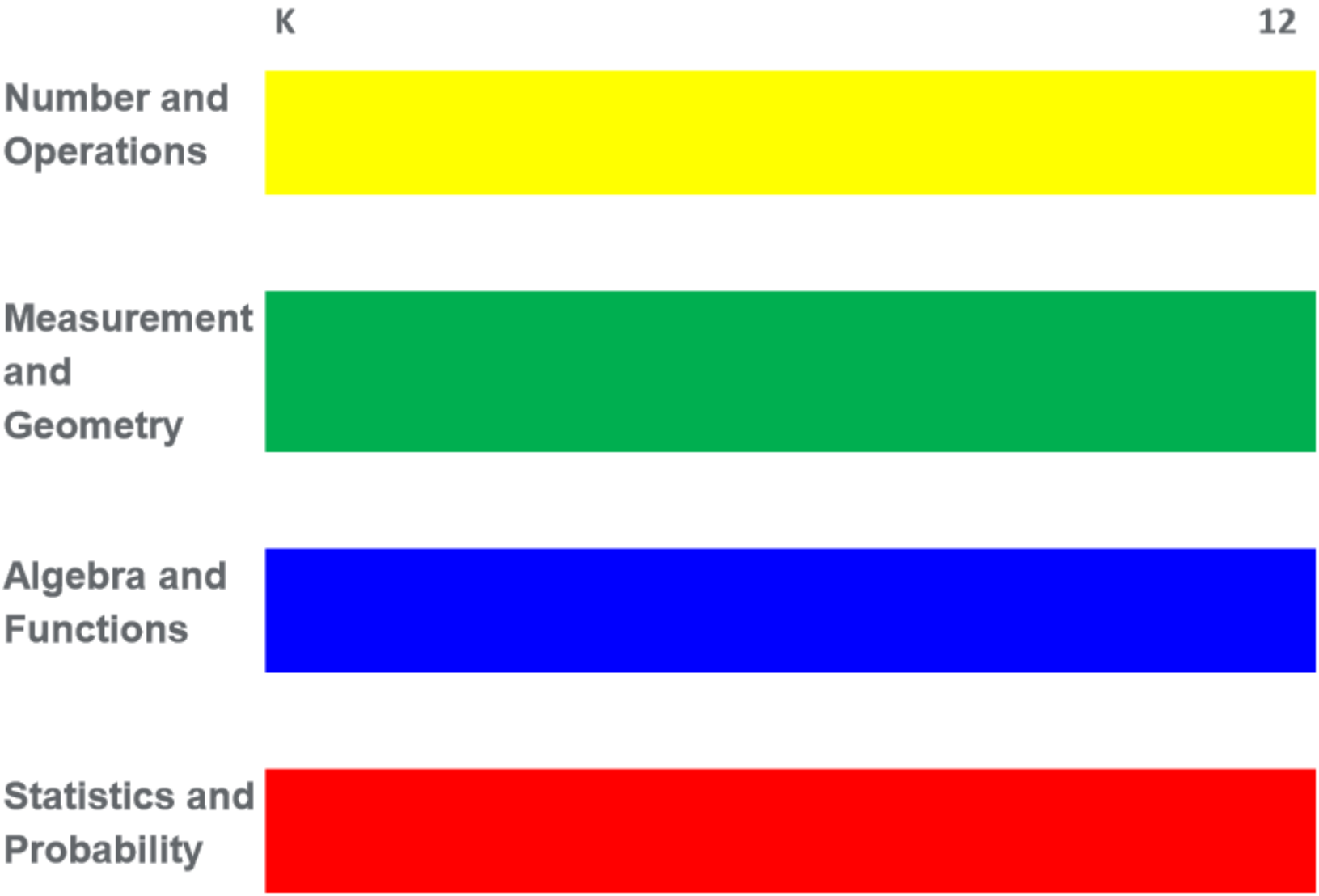
- 50/50 balance K-5
- 70/30 in grades 9-12
- Students learning to read should exercise their ability to comprehend complex text through read-aloud texts.
- In grades 2+, students begin reading more complex texts, consolidating the foundational skills with reading comprehension.
- Reading aloud texts that are well-above grade level should be done throughout K-5 and beyond.

Grade Bands in the Standards	Old Lexile Levels	Common Core Lexile Levels
K-1	NA	NA
2-3	450-725	450-790
4-5	645-845	770-980
6-8	860-1010	995-1115
9-10	960-1115	1080-1305
11-CCRR	1070-1220	1215-1355

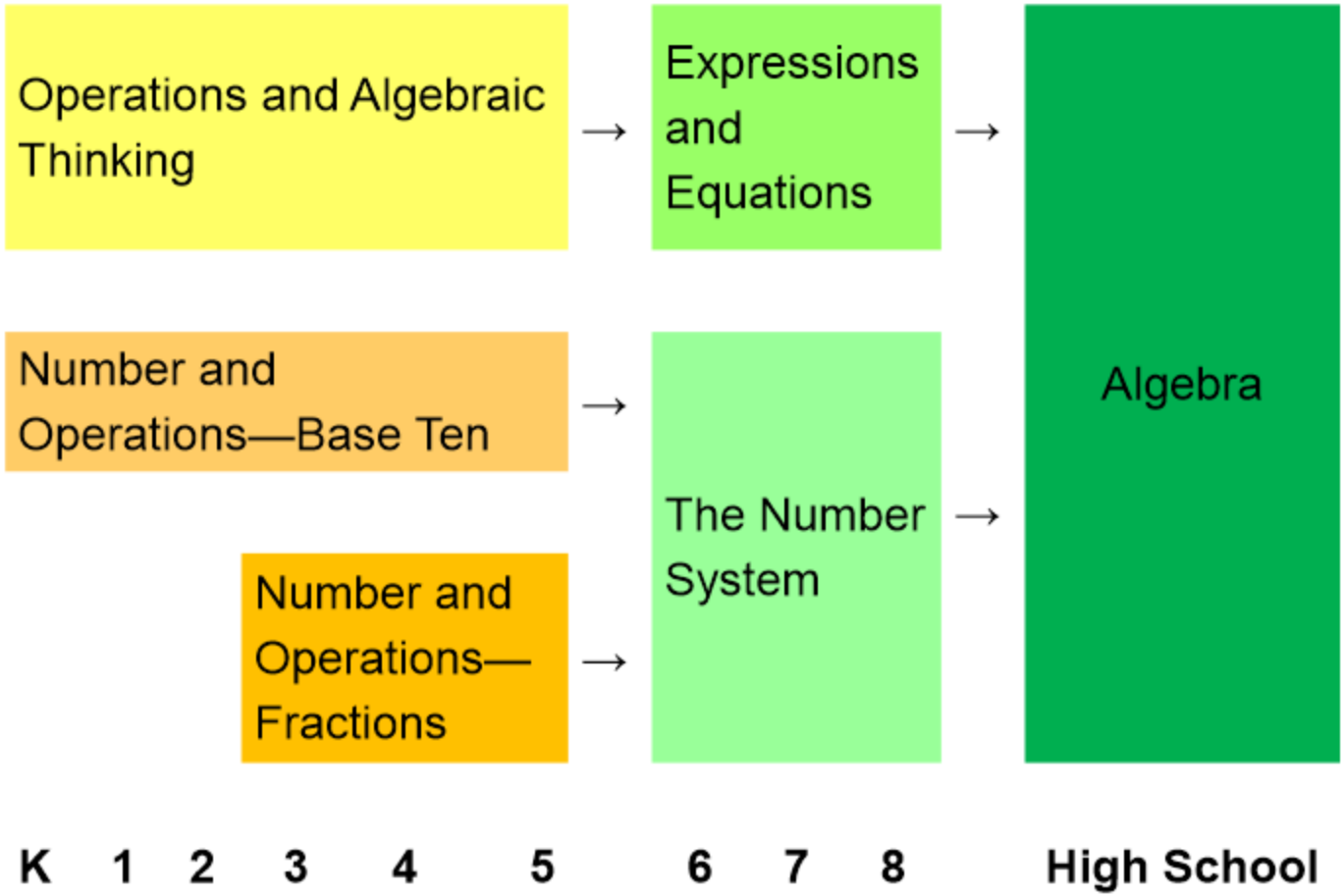
(Credits: Common Core Appendix A)

Math – Before and After

Shift #1: Focus ~ Traditional U.S. Approach



Shift #1: Focus ~ CCSSM Focus Attention Within Number and Operations



Shift #1: Focus ~ CCSSM Key Areas of Focus

Grade	Focus Areas in Support of Rich Instruction and Expectations of Fluency and Conceptual Understanding
K–2	Addition and subtraction - concepts, skills, and problem solving and place value
3–5	Multiplication and division of whole numbers and fractions – concepts, skills, and problem solving
6	Ratios and proportional reasoning; early expressions and equations
7	Ratios and proportional reasoning; arithmetic of rational numbers
8	Linear algebra and linear functions

Smarter Balanced Assessment Consortium

Shift #2: Coherence

Think across grades and **link** to major topics within grades

- Carefully connect the learning within and across grades so that students can build new understanding on foundations built in previous years.

- Begin to count on solid conceptual understanding of core content and build on it. Each standard is not a new event, but an extension of previous learning.

Shift #2: Coherence ~ *Think Across Grades*

Grade 4

4.NF.4. Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.

Grade 5

5.NF.4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.

5.NF.7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.

Grade 6

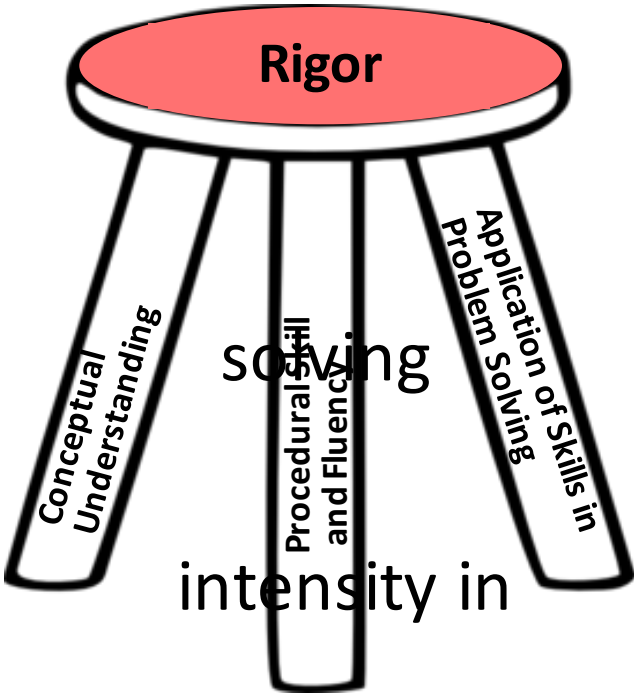
6.NS. Apply and extend previous understandings of multiplication and division to divide fractions by fractions.

6.NS.1. Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent.

Shift #3: Rigor

In Major Topics, Pursue Conceptual Understanding, Procedural Skill and Fluency, and Application

- The CCSSM requires a balance of:
  - ✓ Solid conceptual understanding
  - ✓ Procedural skill and fluency
  - ✓ Application of skills in problem situations
- Pursuit of all three requires equal time, activity, and resources.



solving

intensity in

Rigor

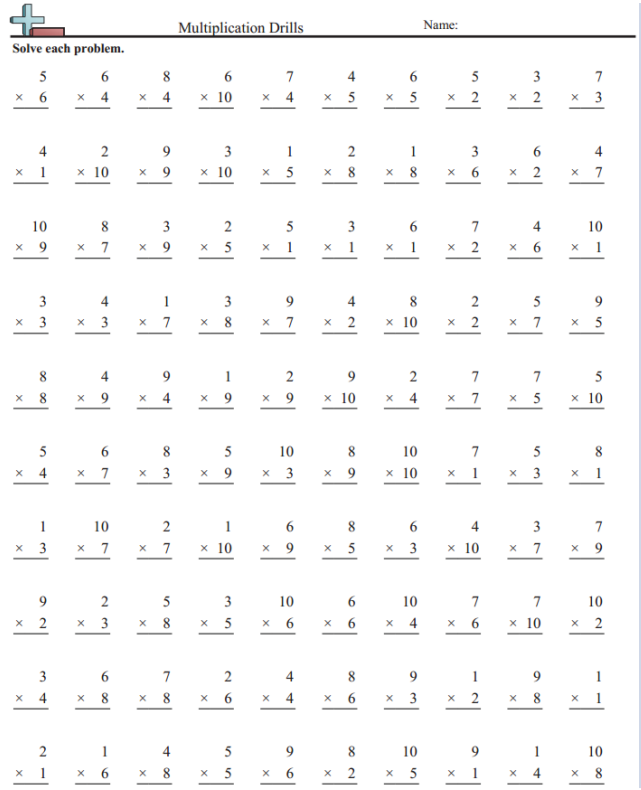
Assessing Conceptual Understanding

Traditional Approach to Conceptual Understanding (Grade 6)	New Approach to Conceptual Understanding (6.EE.A)
Factor: $6y + 24$ Expand: $7(b + 5)$	Circle all the expressions that are equivalent. $7(b + 5) + 3$ $b + 38$ $7b + 7\times8$ $7b + 38$ $7b + (7\times5) + 3$ Show that the expressions you circled above are equivalent. Source: Achieve the Core. http://achievethecore.org/page/910/extending-previous-understandings-of-properties-mini-assessment-detail-pg

Rigor

Assessing Procedural Skill and Fluency

Traditional Approach to Procedural Skill and Fluency (Grade 3)



Multiplication Drills Name:

Solve each problem.

5 × 6	6 × 4	8 × 4	6 × 10	7 × 4	4 × 5	6 × 5	5 × 2	3 × 2	7 × 3
4 × 1	2 × 10	9 × 9	3 × 10	1 × 5	2 × 8	1 × 8	3 × 6	6 × 2	4 × 7
10 × 9	8 × 7	3 × 9	2 × 5	5 × 1	3 × 1	6 × 1	7 × 2	4 × 6	10 × 1
3 × 3	4 × 3	1 × 7	3 × 8	9 × 7	4 × 2	8 × 10	2 × 2	5 × 7	9 × 5
8 × 8	4 × 9	9 × 4	1 × 9	2 × 9	9 × 10	2 × 4	7 × 7	7 × 5	5 × 10
5 × 4	6 × 7	8 × 3	5 × 9	10 × 3	8 × 9	10 × 10	7 × 1	5 × 3	8 × 1
1 × 3	10 × 7	2 × 7	1 × 10	6 × 9	8 × 5	6 × 3	4 × 10	3 × 7	7 × 9
9 × 2	2 × 3	5 × 8	3 × 5	10 × 6	6 × 6	10 × 4	7 × 6	7 × 10	10 × 2
3 × 4	6 × 8	7 × 8	2 × 6	4 × 4	8 × 6	9 × 3	1 × 2	9 × 8	1 × 1
2 × 1	1 × 6	4 × 8	5 × 5	9 × 6	8 × 2	10 × 5	9 × 1	1 × 4	10 × 8

New Approach to Procedural Skill and Fluency (3.OA.C.7)

9 × 2 = ___	___ × 7 = 56
24 ÷ 6 = ___	5 × 8 = ___
7 × 6 = ___	27 ÷ 3 = ___
35 ÷ 5 = ___	64 ÷ 8 = ___
9 × ___ = 36	___ × 7 = 21

Source Achieve the Core: http://achievethecore.org/page/861/multiplication-and-division-within-100

Focus in K–8

Distribution of Score Points

Traditional Summative Assessment (Grade 6)

Domain	% of Points
Ratios and Proportional Relationships	20
The Number System	20
Expressions and Equations	20
Geometry	20
Statistics and Probability	20
Total	100
% on Major Work	**53**

New Summative Assessment (Grade 6)

Domain (with Clusters)	% of Pts
Ratios and Proportional Relationships (**6.RP.A: 18 pts**)	18
The Number System (**6.NS.A: 12 pts**, 6.NS.B: 7 pts, **6.NS.C: 10 pts**)	27
Expressions and Equations (**6.EE.A: 13 pts**, **6.EE.B: 15 pts**, **6.EE.C: 10 pts**)	38
Geometry (6.G.A: 7 pts)	7
Statistics and Probability (6.SP.A: 4 pts, 6.SP.B: 4 pts)	8
Total *Green denotes Major Clusters	100
% on Major Work	**78**

Source: Student Achievement Partners. For illustrative purposes only.

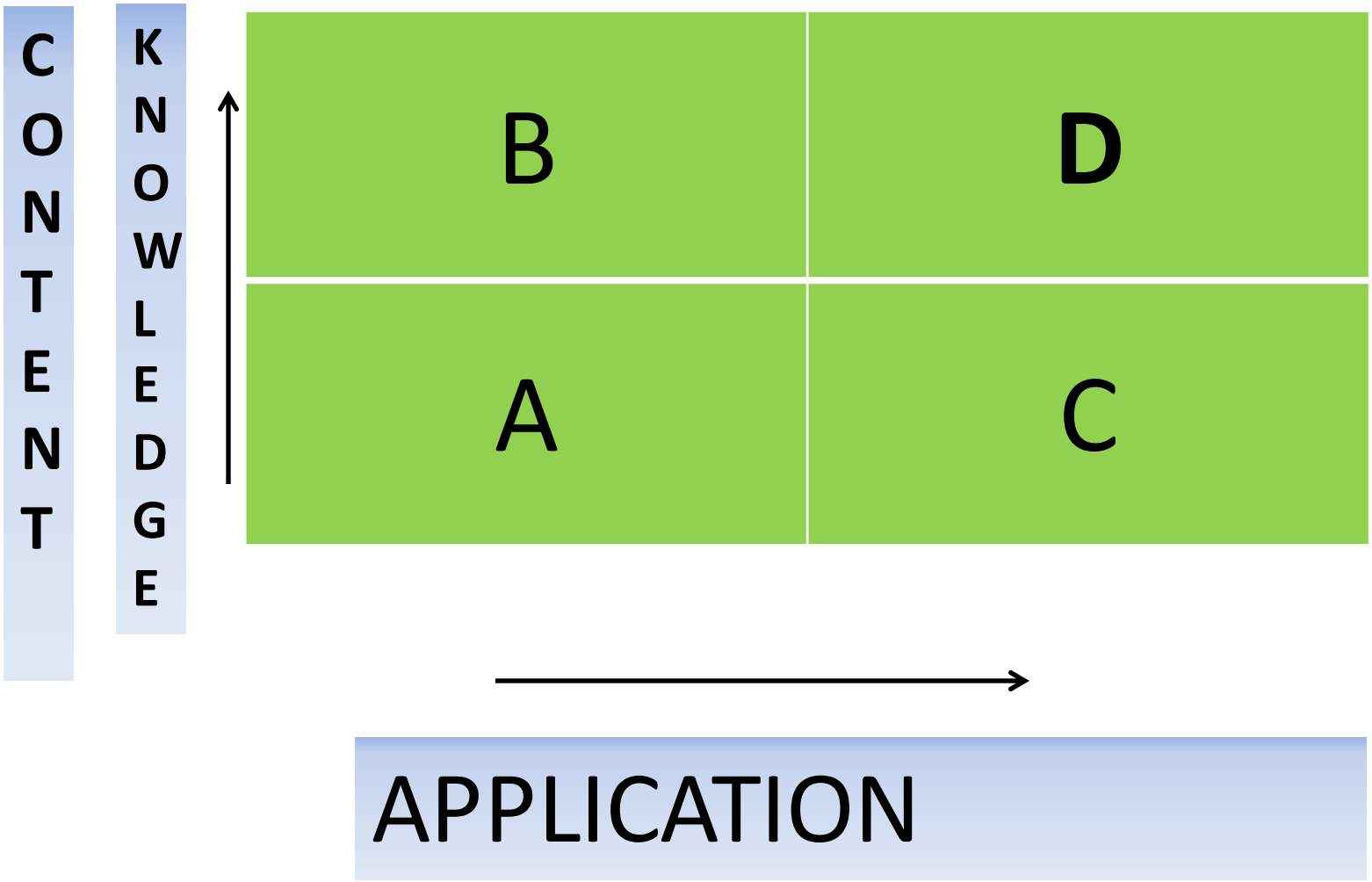
How Are New Assessments Different?

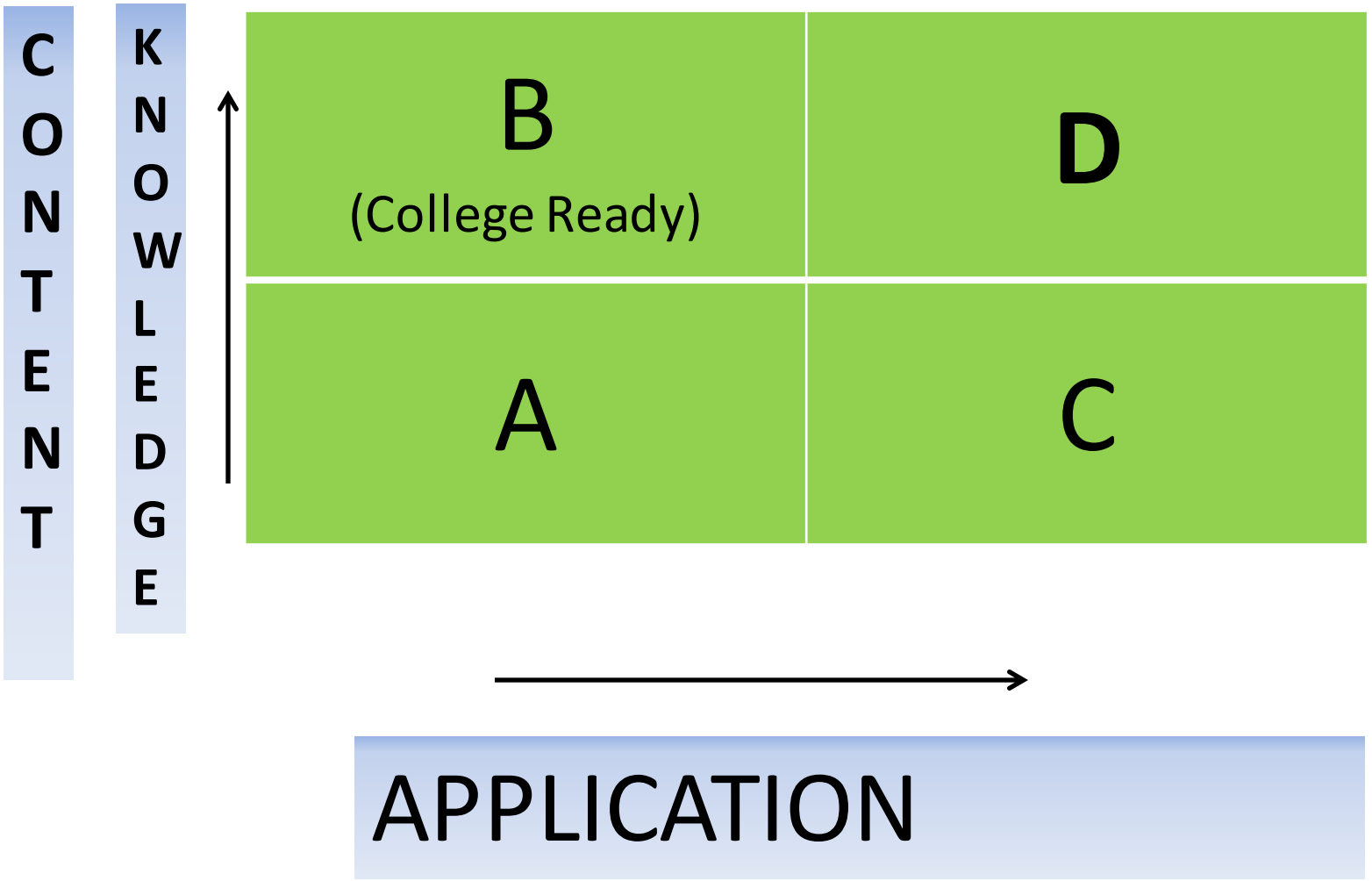
An Overview

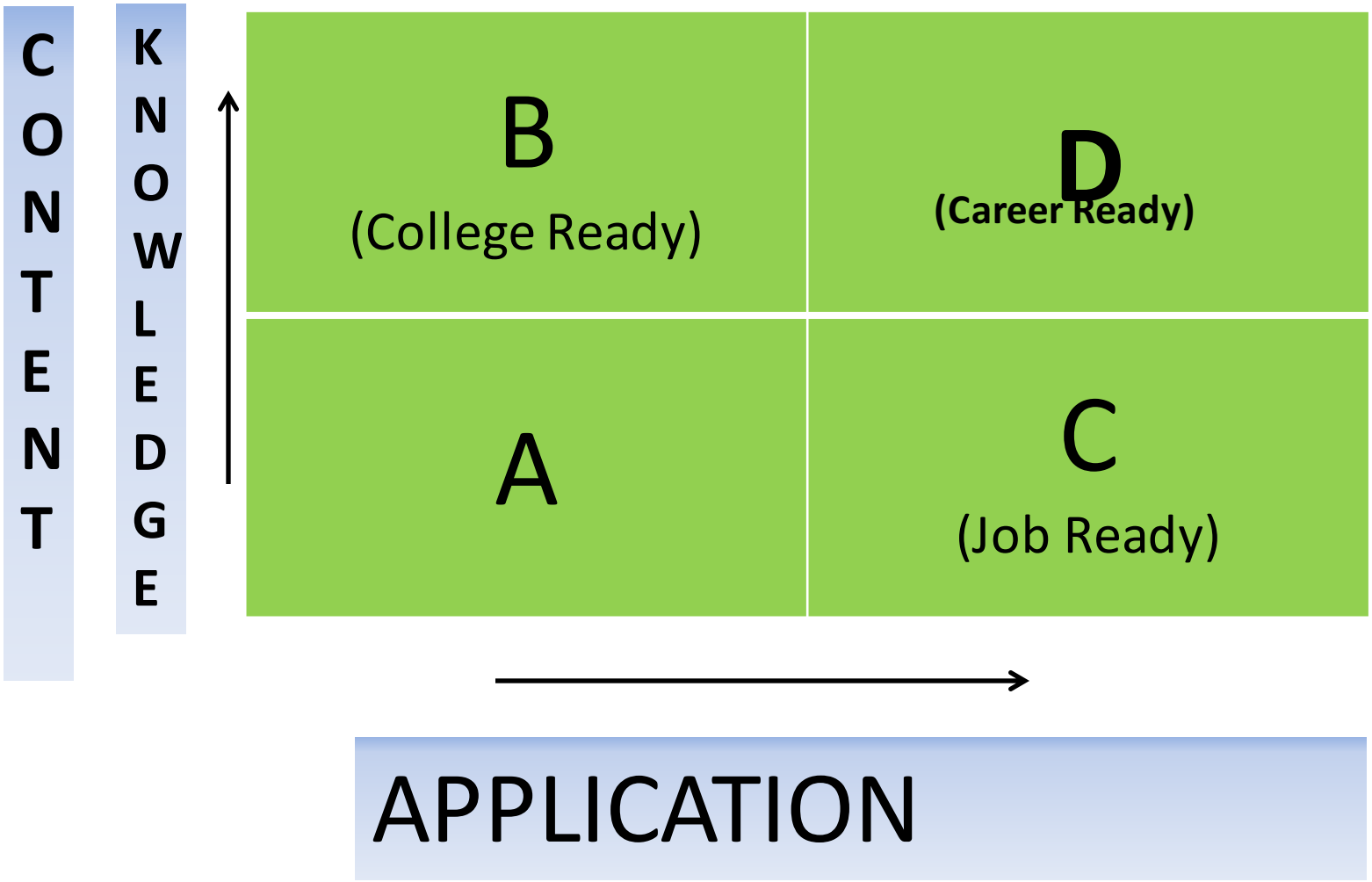
From	To
Unbalanced emphasis on procedure or application	Assessment of all three aspects of rigor in balance
A lack of items that require conceptual understanding	Items that require students to demonstrate **conceptual understanding** of the mathematics, not just the procedures
Fluency items that are only routine and ordinary	**Fluency** items that are presented in new ways, as well as some that are routine and ordinary
Application of mathematics to routine and contrived word problems	**Application** of mathematics to authentic non-routine problems and real-world situations

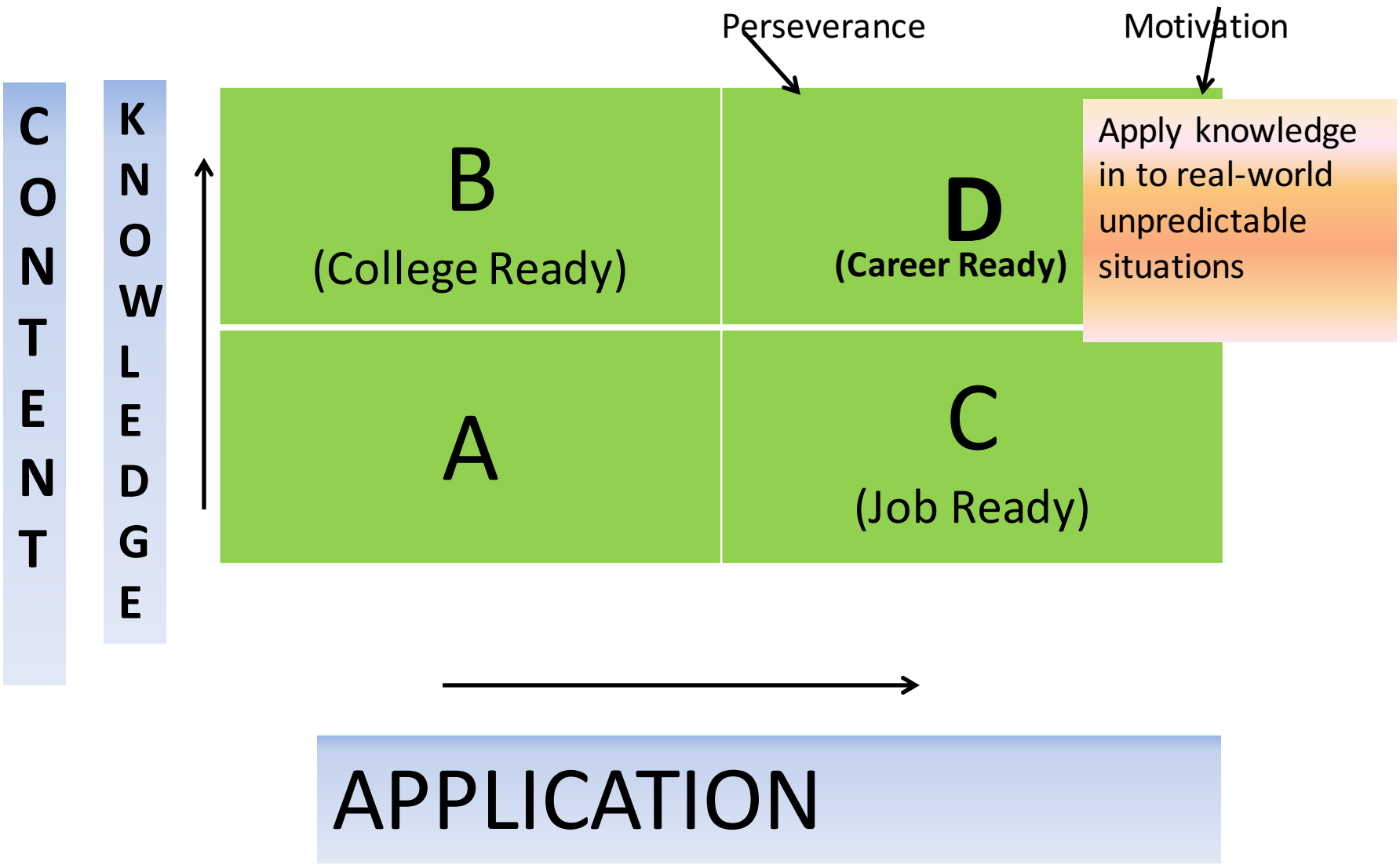
What is College and Career Ready?

WILL PARCC TEST COLLEGE AND CAREER READINESS

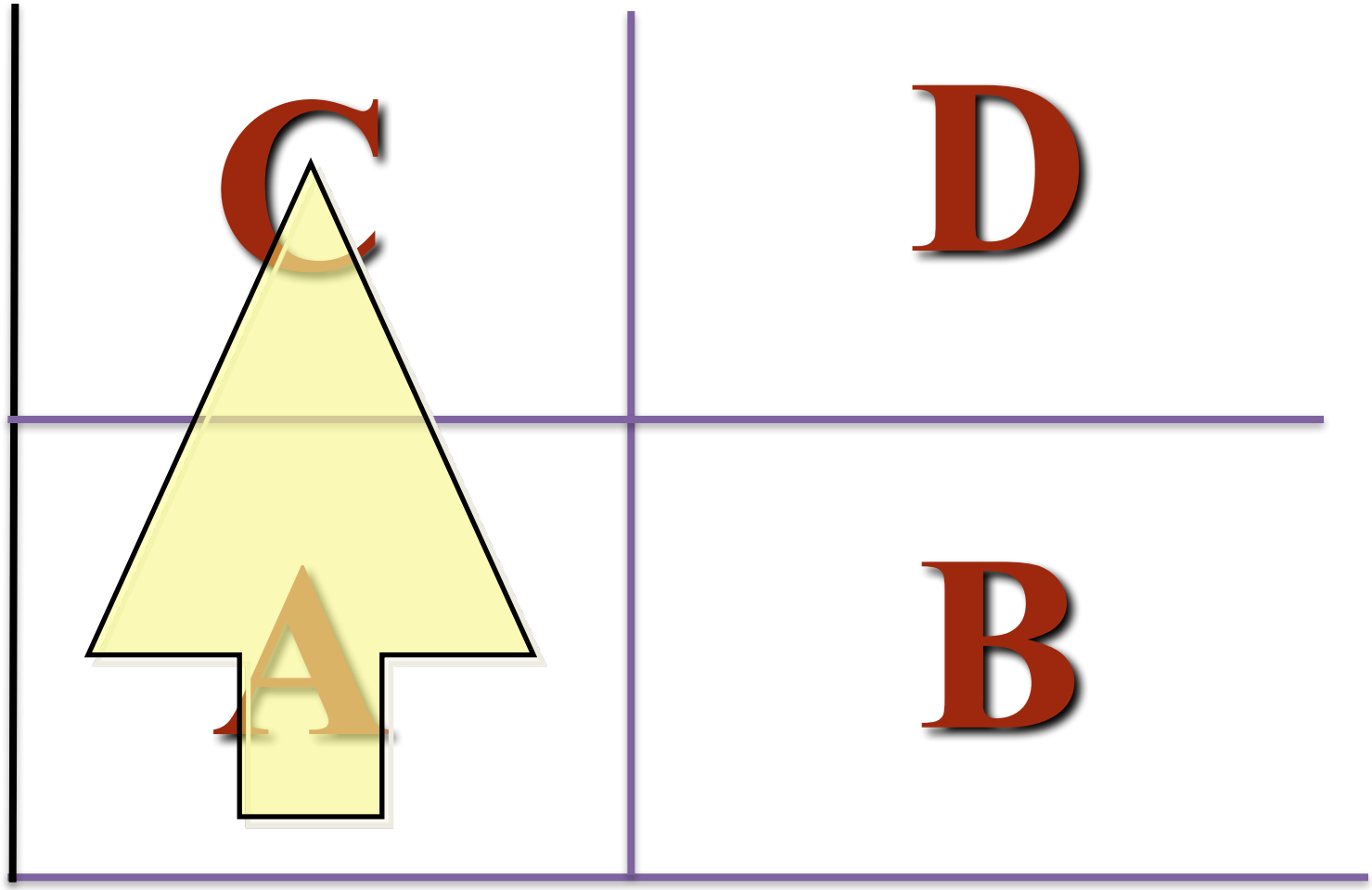



CONTENT
KNOWLEDGE
B
(College Ready)
D
A
C
APPLICATION

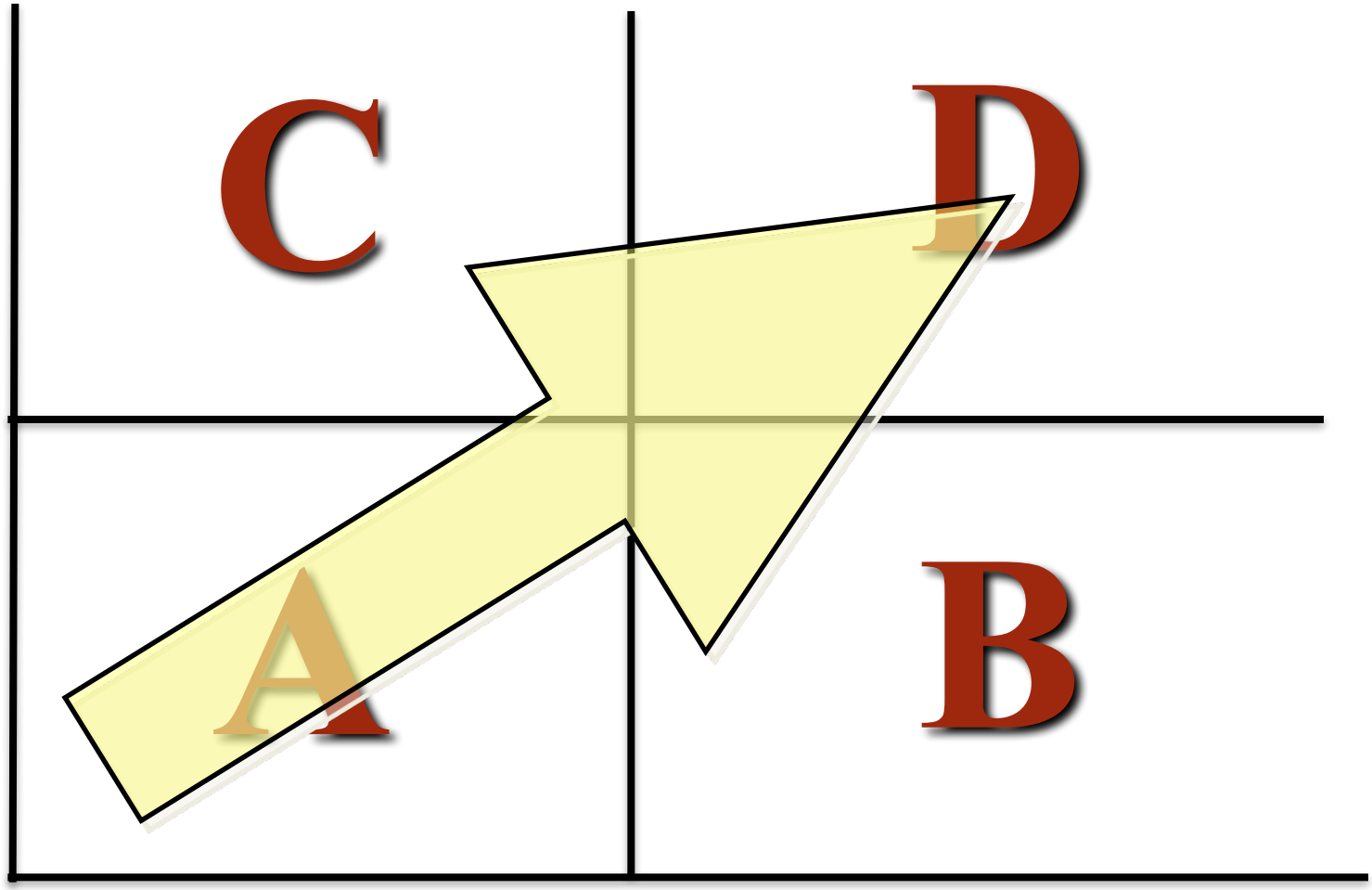

CONTENT
KNOWLEDGE
B
(College Ready)
D
(Career Ready)
A
C
(Job Ready)
APPLICATION


Perseverance
Motivation
CONTENT
KNOWLEDGE
B
(College Ready)
D
(Career Ready)
Apply knowledge in to real-world unpredictable situations
A
C
(Job Ready)
APPLICATION

Standards



Assessments



APPLICATION

1. Knowledge in one discipline

2. Application within discipline

3. Application across disciplines

4. Application to real-world predictable situations

5. Application to real-world unpredictable situations

QUADRENT D

Career Ready = Strong Content Knowledge in Multiple Disciplines + ability to apply to real-world unpredictable situations

Quad D – Skills and Knowledge

Decision Making
Innovation/Creativity
Goal Setting/Results Driven
Multi Tasking
Work with others

END