

OFFICE OF CHIEF OPERATIONS OFFICER
Summary of State Board of Education Agenda Items
Consent Agenda
May 21, 2015

D. OFFICE OF EDUCATOR QUALITY

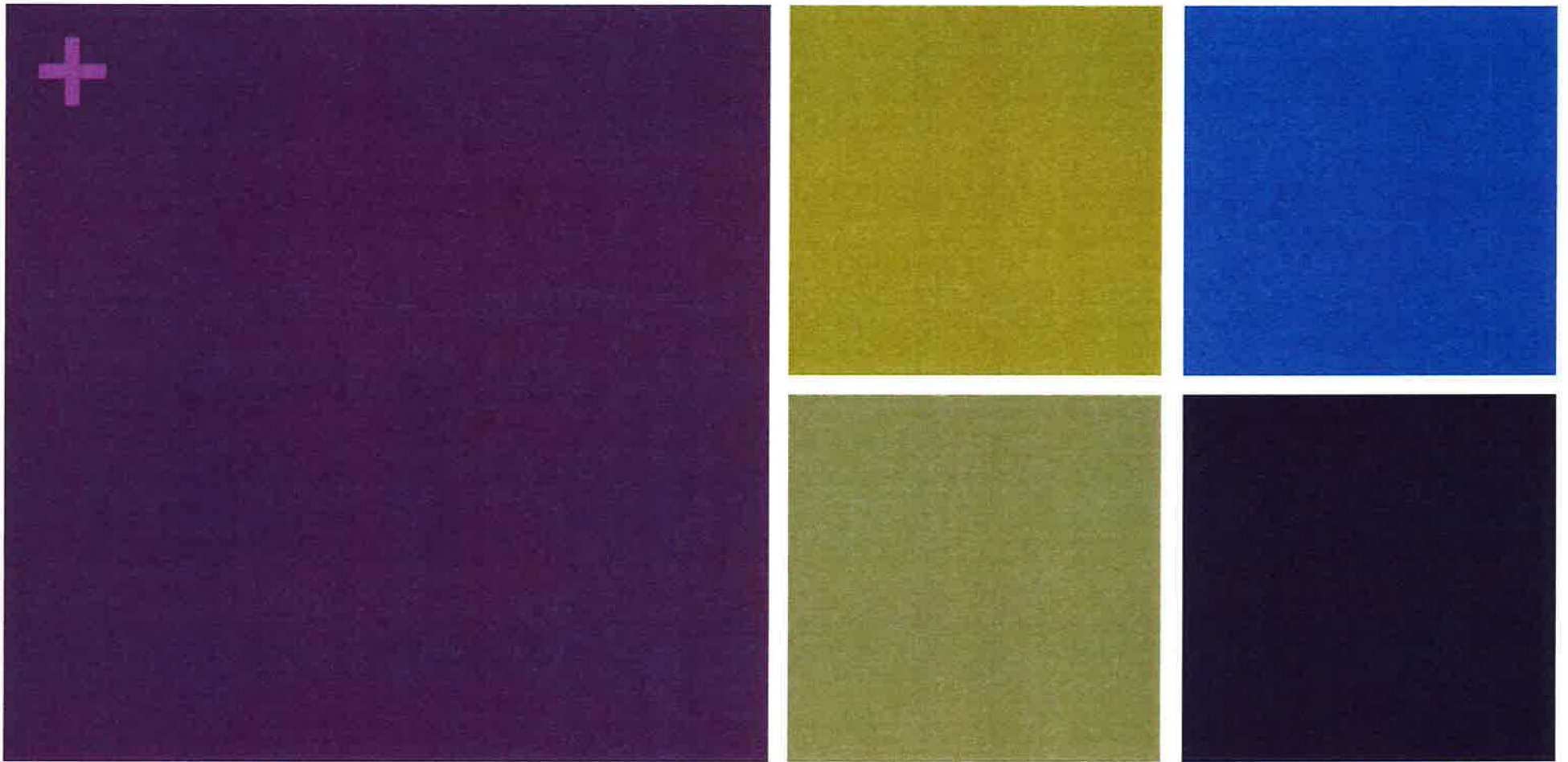
Approval of five new supplemental 900 level endorsement codes for secondary education as recommended by the Commission on Teacher and Administrator Education, Certification and Licensure Development March 6, 2015

(Has cleared the Administrative Procedures Act with no public comments)

- 926 Project Lead The Way (PLTW) – Biomedical Science
- 927 Project Lead The Way (PLTW) – Middle School Science, Technology, Engineering and Mathematics (PLTW Gateway)
- 928 Project Lead The Way (PLTW) – High School Science, Technology, Engineering and Mathematics (STEM)
- 929 Southern Region Education Board (SREB) – Math Ready
- 930 Southern Region Education Board (SREB) – Literacy Ready

Recommendation: Approval

Back-up material attached



SREB Readiness Course: Literacy Ready

Cynthia Shanahan, University of Illinois, Chicago
Jodi Holschuh, Texas State University
Leslie Rush, University of Wyoming

+ Overview



■ Who is this course for?

- Non-remedial high school students, who, nevertheless, would be relegated to remedial coursework in college, or if not, would be likely to struggle with the text demands in their beginning college coursework.
- Non-AP

■ Why do we need a readiness (transitional) course?

- The Common Core Standards raise the bar for high school students, who will need to meet higher demands for literacy in English, Science, and History/Social Studies
- Too many students currently need remedial coursework in College (Some estimates as high as 50%) even before Common Core
- This readiness course would better prepare students so they would not need a remedial course

+ Why this course?

- Teaches students to interact with not only literature texts, but also with informational texts in English, history, and science, in line with the Common Core Standards
- This is a literacy course, but the focus in each unit is the interaction of three kinds of learning
 - Learning the literacy
 - Learning the discipline
 - Learning the content
- Each unit teaches students to interact with *challenging texts*, also in line with the Common Core Standards



How was the course developed?



- **Three teams: History, Science, English**
 - **Team Leaders were literacy experts**
 - **History: Cynthia Shanahan**
 - **English: Leslie Rush**
 - **Science: Jodi Holschuh**
 - **Tim Shanahan provided feedback on text choice, readability**
 - **Literacy Design Collaborative (LDC) provided guidance on lesson design**
- **Teams composed of high school and college instructors in the discipline**
- **State Department participation**
- **Two face-to-face meetings**
- **Numerous virtual meetings**
- **Teams composed first drafts; leaders compiled and composed pilot version**
- **Teams provided continuous feedback**



What features does this course have?



- Overall:
 - Six units, two in each discipline
 - Each unit covers six weeks of instruction (Total: 36 weeks)
 - Each discipline has a less difficult and a more difficult unit
 - 2nd unit has more challenging texts (longer, more difficult)
 - 2nd unit has an increase in sophistication and difficulty of writing tasks
 - All units provide instruction in reading multiple texts and genres
 - All units include vocabulary instruction
 - All units provide numerous opportunities for assessment and evaluation of both literacy skill and content knowledge
 - All units have final projects (presentations, essays, tests)
 - Alignment to Common Core Reading and Writing Standards (ELA, Social Studies/History, Science and Technical Subjects)



Units designed for flexible use

- Some options for delivery:
 - All six units – recommended for students needing the most support in transition
 - Three most difficult units – for students needing less support in transition
 - Units in a selected discipline only – for students who struggle with literacy in one content area but excel in literacy in other content areas (example: good in reading English novels but cannot make sense of science texts)
 - Teachers—ideally content teachers (English, history, science), not just English. (I.e., for full implementation, teachers could each teach content three times and students could rotate)



+ Example of a Possible Structure for the Literacy Ready Course

	1st Six Weeks	2nd Six Weeks	3rd 6 weeks
T1 (English)	X	Z	Y
T 2 (Science)	Y	X	Z
T3 (History)	Z	Y	X

+ The units: History Units 1 and 2

	Unit 1	Unit 2
Topic	Civil Rights, with a focus on the Freedom Rides	U.S. foreign relations: <ul style="list-style-type: none">• Cuban Missile Crisis• Vietnam• Six-Day War
Theme/Essential Questions	Changes in conceptions of liberty/freedom during the 1960's in relation to Civil Rights	Conceptions of liberty/freedom during the 1960's with U.S. foreign relations.
Final Project	Power-Point presentation of claim and text evidence for Essential Question	Essay addressing essential question Final exam



The units: History Units 1 and 2

	Unit 1	Unit 2
Reading genres	<ul style="list-style-type: none">• Textbook chapter• Photographs• Memoir (with photographs)• Political Cartoons• Telegrams• Proclamations• Newspaper reports• Timeline• Anchor text• Lecture• Speeches• Essay• Bios• Lyrics	<ul style="list-style-type: none">• Textbook chapters• Photographs• Political Cartoons• Timelines• Lectures• History text• Declarations• Manifestos• Laws• Speeches• Bios

+ The units: History Units 1 and 2

	Unit 1	Unit 2
Writing genres:	<ul style="list-style-type: none">• Free-write• Short answer• Annotation/notetaking• Summarizing• Historical Account• Outline/PowerPoint for research paper• Comparison/contrast essay plan	<ul style="list-style-type: none">Free-writeShort answerAnnotation/notetakingPrécis(summarization)Explanatory essaysCause/effect essay

+ The units: History Units 1 and 2

	Unit 1	Unit 2
Strategies	<ul style="list-style-type: none"> • Sourcing, Contextualization, Corroboration • G-SPRITE • Nat'l Archives photo analysis technique • Political Cartoon Analysis Guide • Modified Cornell Notetaking • Note organizers • Talk-Through • Reciprocal Questioning • Sentence Analysis 	<ul style="list-style-type: none"> • Sourcing, Contextualization, Corroboration • G-SPRITE • History Pattern Organizer • Nat'l Archives photo analysis technique • Political Cartoon Analysis Guide • Modified Cornell Notetaking • Power-Point Notetaking • Note organizers • Talk-through • Reciprocal Questioning • Socratic Seminar • Paragraph Analysis

+ The units: Science Units 1 and 2

	Unit 1	Unit 2
Topic	Nutrition	DNA and Biotechnology
Theme/Essential Questions	Making science public and evaluating science claims	Understanding DNA structure and the future of biotechnology
Final Project	Informational pamphlet on a topic related to nutrition and diet	Scientific poster and research symposium presentation Final exam

+ The units: Science Units 1 and 2

	Unit 1	Unit 2
Reading genres	<ul style="list-style-type: none">• Textbook chapter• Science claims in advertisements• Research articles• Science animations• Case studies• Science videos• Labs• Charts• Diagrams• Lecture	<ul style="list-style-type: none">• Textbook chapter• Government research reports• Research articles• Science animations• Science models• Science videos• Labs• Codons• Charts• Diagrams• Lectures



The units: Science Units 1 and 2



	Unit 1	Unit 2
Writing genres:	<ul style="list-style-type: none">• Free-write• Reflection• Annotation/note taking• Summarizing• Explanatory/informational• Transforming information from text to visual and vice versa• Essay	<ul style="list-style-type: none">• Free-write• Reflection• Annotation/note taking• Lab report• Synthesis• Argumentation• Transforming information from text to visual and vice versa• Research poster



The units: Science Units 1 and 2

	Unit 1	Unit 2
Strategies	<ul style="list-style-type: none">• Close reading• Checklist for evaluating science in the news• Debate• Text annotation• Concept Charting• Cornell Note taking• Diagramming science processes• Talk-Through• Reciprocal Questioning• Jigsaw• Generative quiz review• Individual and group quiz• Project planning timeline• Peer feedback	<ul style="list-style-type: none">• Close reading• Discussion web• Cornell Note taking• Research article note taking template• Modeling• Diagramming science processes• Comparison/contrast charting• Concept maps• Diagramming arguments• Text annotation• Jot lists• Reciprocal Questioning• Generative test review• Project planning timeline• Peer feedback



The units: English Units 1 and 2



	Unit 1	Unit 2
Topic	<i>The Shallows: What the Internet is Doing to Our Brains</i> , by Nicholas Carr	<i>Ubik</i> , by Philip K. Dick
Theme/Essential Questions	How is the exponential increase of information that we process in all forms of media affecting the way we live?	How is the exponential increase of information that we process in all forms of media affecting the way we live?
Final Project	Synthesis essay	Literary argument essay



The units: English Units 1 and 2

	Unit 1	Unit 2
Reading genres	<ul style="list-style-type: none">• Book-length argument• Articles• Interview transcript• Video• Poetry• Cartoon• Blog post	<ul style="list-style-type: none">• Novel• Websites• Book covers• Excerpts from novels• Chapter from a textbook• Literary argument, in the form of a chapter from an edited volume• Interview transcript• Biography excerpt



The units: English Units 1 and 2



	Unit 1	Unit 2
Writing genres:	<ul style="list-style-type: none">• Reading log• Survey response• Individual and class definitions• Rhetorical précis• Summaries• MLA Citations• Prompt responses• Outline• Reflection• Counter-arguments• Alignment, analysis and evaluation paragraphs• Concept map• Individual and group evaluations• Synthesis presentation and essay	<ul style="list-style-type: none">• Reading log• Notes• Predictions and evidence• Summaries• Interpretations and evidence• Level 2 questions• Journal entries• Avatar• Prompt responses• Thesis statements and evidence• Character inference notes• Summary with evidence• Claim chain• Individual and group evaluations• Literary argument essay



The units: English Units 1 and 2

	Unit 1	Unit 2
Strategies	<ul style="list-style-type: none">• Annotation• Rhetorical précis• Graphic organizers• Text/text connections• Charting• Note-taking• Vocabulary strategies• Socratic Seminar• Writing process strategies	<ul style="list-style-type: none">• Close reading and interpretation• Summarizing• Developing questions• Highlighting• Making predictions• Journaling• Thesis statement development• “Sandwich effect” for embedding quotes in text• Claim Chain• Vocabulary strategies• Socratic Seminar• Writing process strategies



Where are we in the process?



- Pilot versions of all six units in the course field tested in seven states.
 - Focus for field testing:
 - Timing
 - Clarity
 - Engagement
 - Modifications needed
 - We met virtually with field-test teachers each weekly or monthly to debrief, trouble-shoot, make needed revisions. Pilot teachers kept logs, copies of student work, and responded to questionnaires.
- Formal state and ACHIEVE reviews completed.
- Based on this feedback, we have revised the units for publication in fall 2013.
- Online versions of the courses are planned for target release on a new SREB iTunes U page in spring 2014.

SREB Readiness Course: Math Ready

From the SREB College and
Career Readiness Transitional
Course Project

Kenna Barger, SREB
Math Consultant
Atlanta, GA



Course
Development

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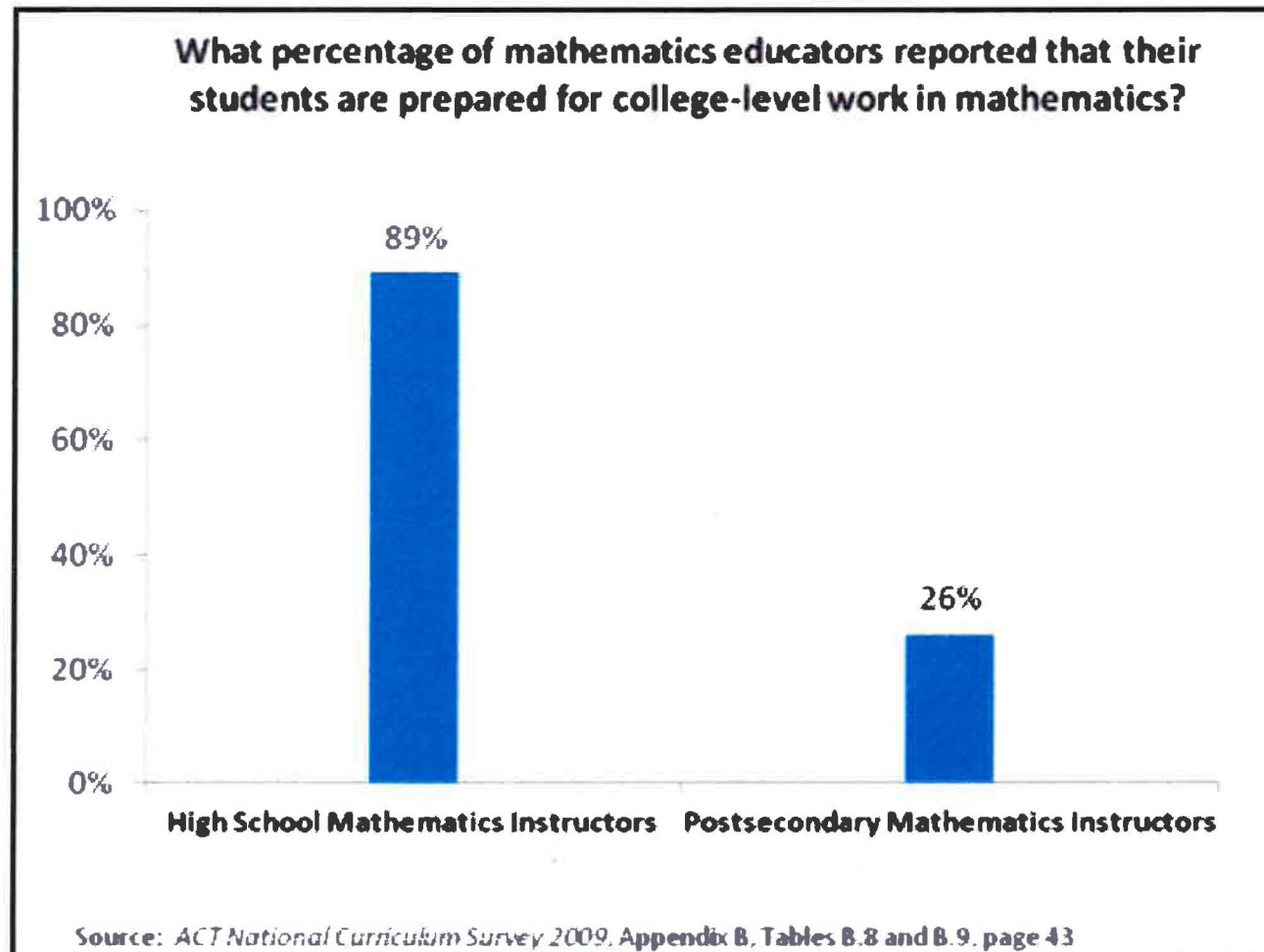
Content of Course?

- Resources: Core Standards Memo, MCF Appendix A, MCF Appendix D
- SREB Getting Ready for College and Careers Guide
- Dr. Bill McCallum & Dr. Jason Zimba Consulted
- Partner States' Input - January Mtg.
- Math Transition Team "Clustering" February Mtg. with Lead Writers

High School: A Major Disconnect

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Emphases in High School

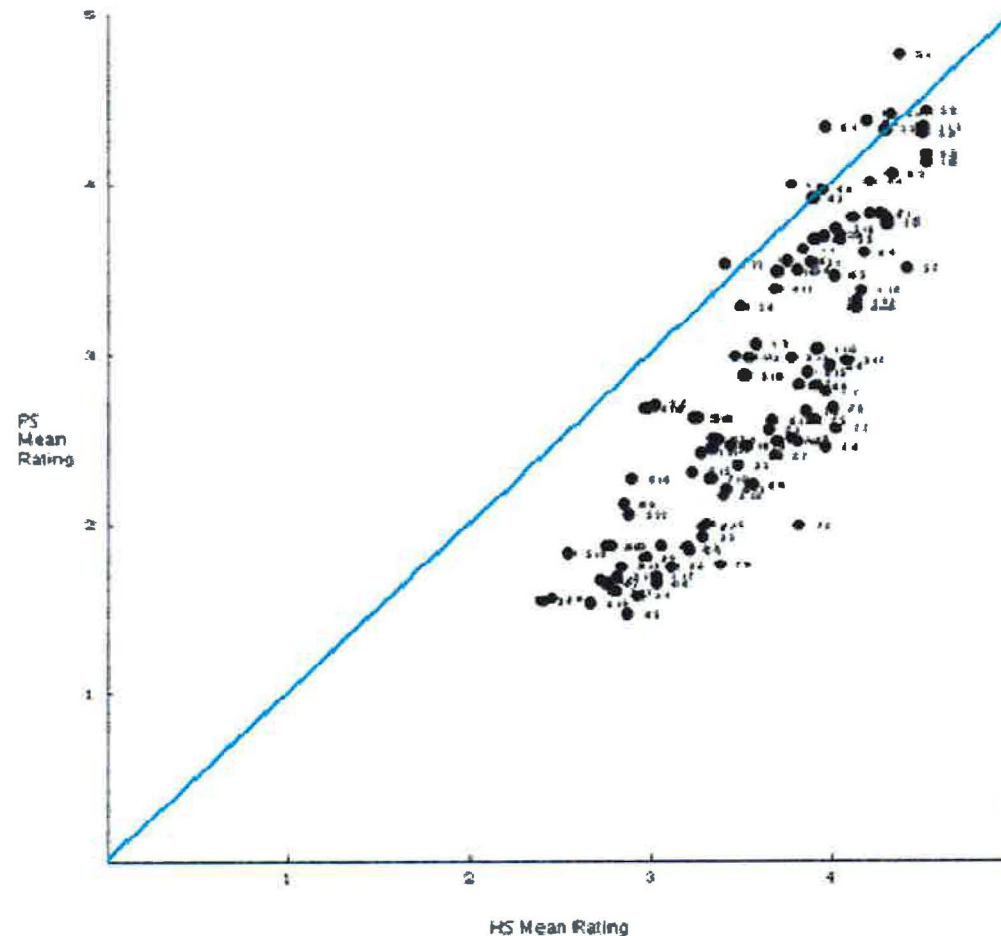
- Many students in two-year and four-year colleges need remediation in math
- Remedial classes lower the odds of finishing the degree or program
- Need to set the agenda in high school math to prepare more students for postsecondary education and training

Postsecondary instructors want deeper mastery of fewer things

— Postsecondary vs. High school skill ratings —

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PS Mean Skill Rating vs. HS Mean Skill Rating

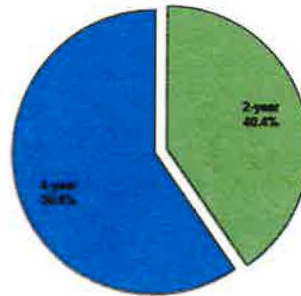


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Conley et al., validity study of CCSS

- Just-released survey of over 1,800 postsecondary instructors
- Instructors rated each of the CCSSM content standards in high school as to applicability and importance for college-level work
- Range of courses and institutions

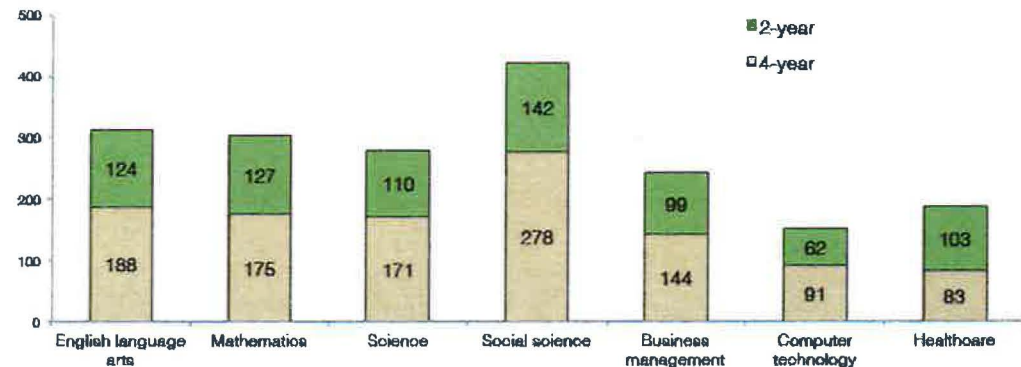
Figure 5. Breakdown of Courses (n = 1897) by Institution Type: 2-year vs. 4-year



Figures 5 and 6 provide information about the distribution by two- and four-year institutions for the courses as a whole and by content area. Approximately 60% of the courses came from four-year institutions, with the other 40% from two-year institutions. This pattern was fairly consistent for each content area as well, with two exceptions. For the social science courses, the percentage at four-year institutions was slightly higher (66% vs. 34% at two-year institutions). For healthcare courses, the percentage at two-year institutions was higher (55% vs. 45% at four-year institutions).

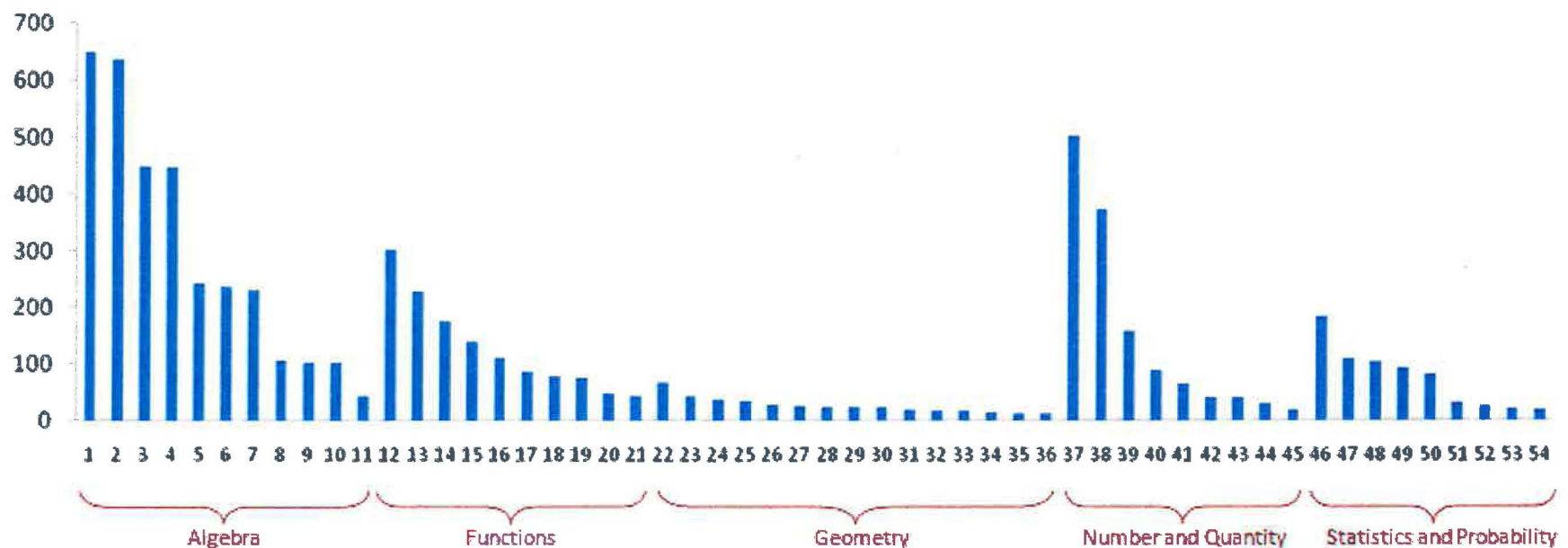
In order to obtain context for the perceptions of instructors in our sample, we asked several questions about the nature of the courses. Figures 7 through 9 and Table 4 show the demographic information about the courses. Figure 7 shows the level of the course. The survey was intended to capture perceptions of instructors of courses that students encounter at the beginning of their college careers; however, 10% of the respondents considered their

Figure 6. Breakdown of Courses (n = 1897) by Content Area and Type of Institution: 2-year vs. 4-year



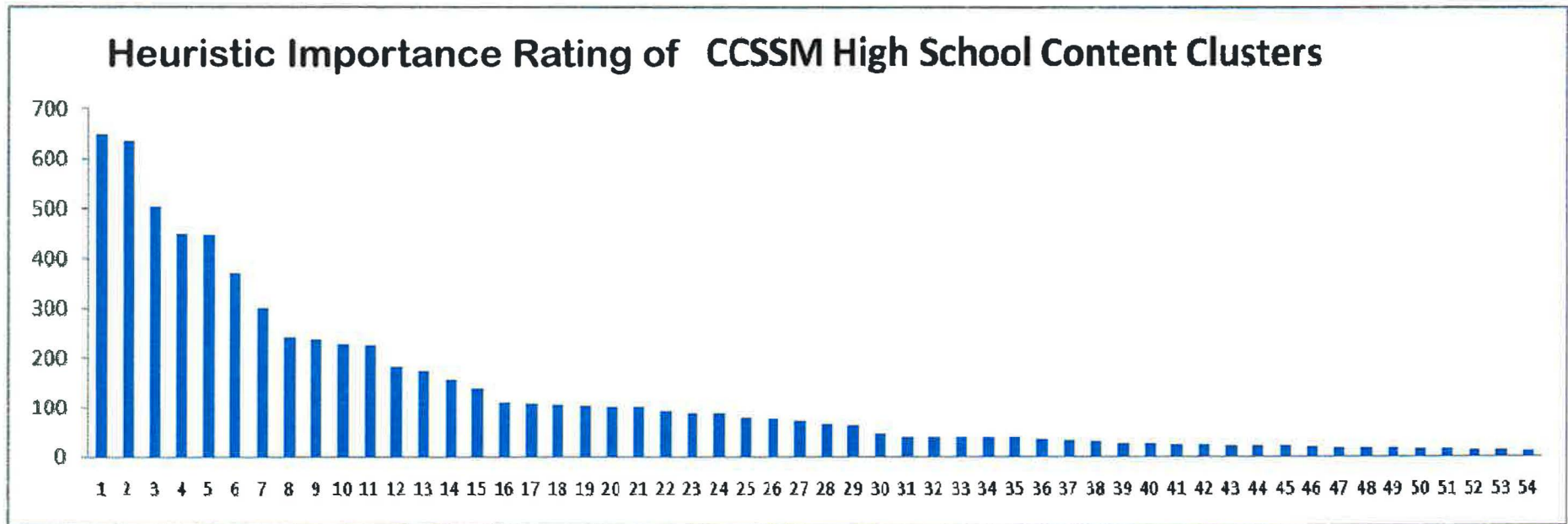
Not all content areas are equally important

Heuristic Importance Rating of CCSSM High School Content Clusters



Source: Derived from Conley (2011) data

Not many clusters are important



Source: Derived from Conley (2011) data

Math Ready Unit Order

1. Expressions (AR)
2. Equations (TN)
3. Measurement (KY)
4. Linear Functions (GA)
5. Systems (KY)
6. Quadratics (NC)
7. Exponentials (AR)
8. Optional- Statistics (TN)

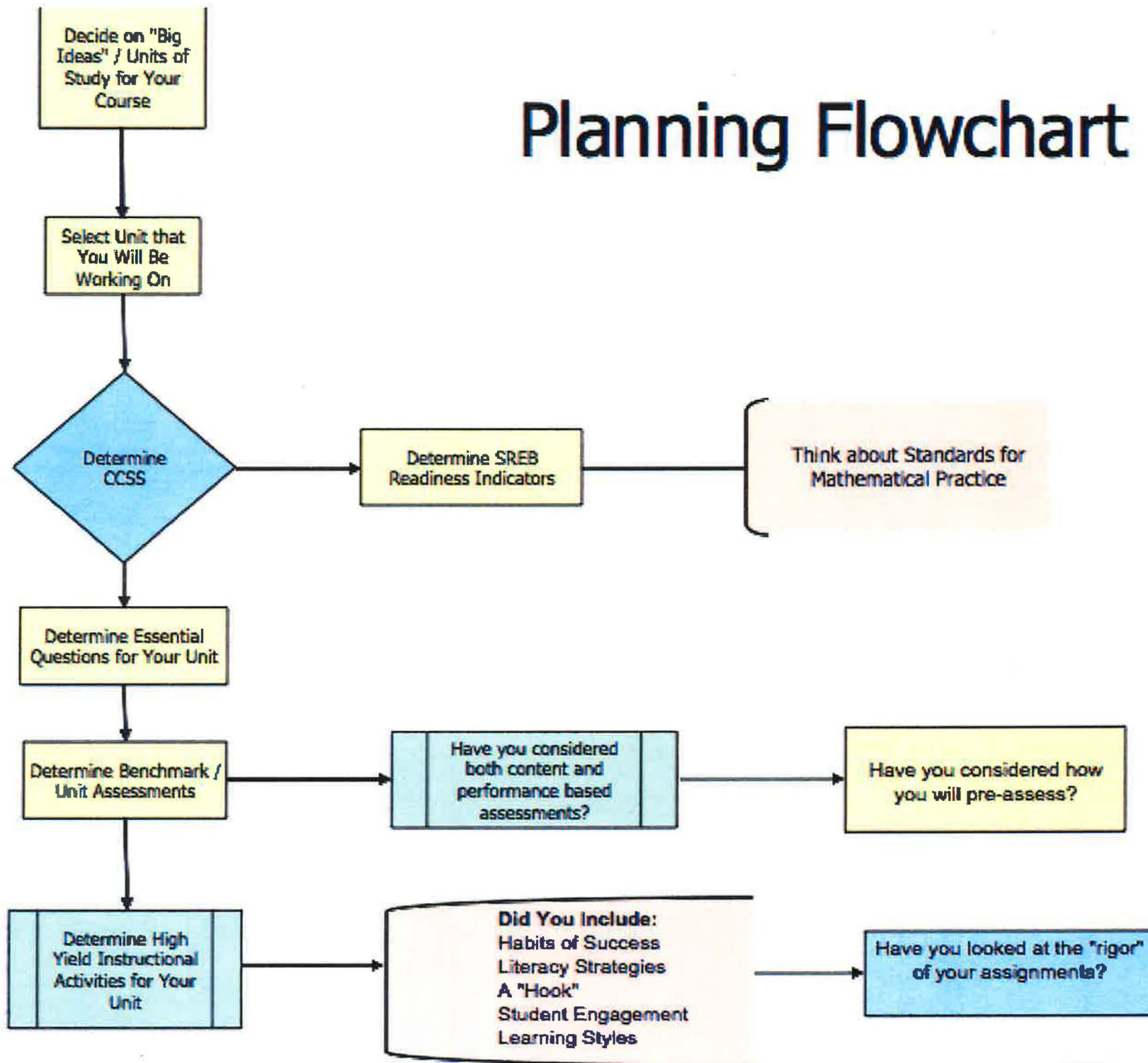
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Planning the Units

- Unit Planning Template
- Unit Planning Rubric
- Skeletal Units
- State Review
- Fully Developed Units
- Face to Face Meeting
- State Review
- Unit Assessments
- State Review

Planning Flowchart



The BIG IDEA of Formative Assessment

Students and teachers

Using evidence of learning

To adapt teaching and learning

To meet immediate learning needs

Minute-to-minute and day-by-day

-Marnie Thompson and Dylan Wiliam (2008)



The 5 Strategies of Assessment for Learning (Formative Assessment)

- 1. Clarifying and sharing learning intentions and criteria for success**
- 2. Engineering effective discussions, questions and learning tasks that elicit evidence of learning**
- 3. Providing feedback that moves learners forward**
- 4. Activating students as the owners of their own learning**
- 5. Activating students as instructional resources for one another**

Where are We?

- Field-tested the units and full courses in schools in seven states
- Went through multiple revisions based on monthly feedback from teachers during testing, eight external review states and ACHIEVE
- Final units revised and ready for publication in fall 2013
- Online versions of the courses are planned for target release on a new SREB iTunes U page in spring 2014

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