CAN ANNETTE MASSIE EMAIL?

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PARCC & Common Core Standards

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Assessment Consortia PARCC

- Consortia of 24 states + D.C.
- Attributes:
  - Computer-Based
  - Components – 1) Diagnostic and 2) Mid-year (optional); 3) Performance Based and 4) End-of-year (required – contributes to summative score); 5) Listening/Speaking (required)
  - Rapid reporting system to inform instruction and accountability

http://www.parcconline.org/

46 States + DC Have Adopted the Common Core State Standards

*Minnesota adopted the CCSS in ELA/literacy only

Key Advances of the Common Core

MATHEMATICS	ENGLISH LANGUAGE ARTS & LITERACY
Focus, coherence and clarity: emphasis on key topics at each grade level and coherent progression across grades	Balance of literature and informational texts; focus on text complexity
Procedural fluency and understanding of concepts and skills	Emphasis on argument, informative/ explanatory writing, and research
Promote rigor through mathematical proficiencies that foster reasoning and understanding across discipline	Speaking and listening skills
High school standards organized by conceptual categories	Literacy standards for history, science and technical subjects

ALIGNED TO COLLEGE AND CAREER READINESS

What's Next? Common Assessments

- **Common Core State Standards** are critical, but it is just the first step
- **Common assessments** aligned to the Common Core will help ensure the new standards truly reach every classroom

Partnership for Assessment of Readiness for College and Careers (PARCC)

K-12 and Postsecondary Roles in PARCC

K-12 Educators & Education Leaders

- Educators will be involved throughout the development of the PARCC assessments and related instructional and reporting tools to help ensure the system provides the information and resources educators most need

Postsecondary Faculty & Leaders

- Nearly 200 institutions and systems covering hundreds of campuses across PARCC states have committed to help develop the high school assessments and set the college-ready cut score that will indicate a student is ready for credit-bearing courses

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The PARCC Goals

1. Create high-quality assessments
2. Build a pathway to college and career readiness for *all* students
3. Support educators in the classroom
4. Develop 21st century, technology-based assessments
5. Advance accountability at all levels

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Goal #1: Create High Quality Assessments

Priority Purposes of PARCC Assessments:

1. Determine whether students are college- and career-ready or on track
2. Assess the full range of the Common Core Standards, including standards that are difficult to measure
3. Measure the full range of student performance, including the performance high and low performing students
4. Provide data during the academic year to inform instruction, interventions and professional development
5. Provide data for accountability, including measures of growth
6. Incorporate innovative approaches throughout the system

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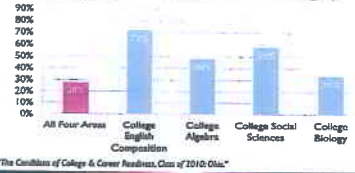
What is College and Career Readiness?

Being qualified for:

- A degree-granting postsecondary education, without remediation
- A chosen career, ready for advanced training.

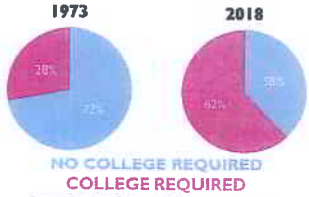
Are Ohio Students Ready for College?

Percent of Ohio Students Ready for College-Level Coursework (according to ACT benchmarks)



ACT, "The Condition of College & Career Readiness, Class of 2010: Ohio."

Jobs Will Require More Education & Training



Sources: Georgetown Center on Education and the Workforce, 2010.

House Bill 1: Content Standards

The standards shall specify... the core academic content and skills... that will allow each student to be prepared for postsecondary instruction and the workplace for success in the twenty-first century. (Adopted June 2010)

ORC § 3301.079(A)(1)(a)

AP Course Expectations Aligned to CCSS English Language Arts Grades 9 - 12

- Reading Anchor Standards
- Reading Standards for Informational Text

Source: Research Report 2011 Common Core State Standards Alignment- College Board

AP Course Expectations Aligned to CCSS English Language Arts Grades 9-12

- Writing Anchor Standards
- Writing Standards
- Language Standards

Source: Research Report 2011 Common Core State Standards Alignment- College Board

AP Statistics Course Expectations Aligned to CCSS Mathematics (Grades 6-12)

- Standards for Mathematical Practice
- Conceptual Categories
  - Statistics and Probability
  - Number
  - Quantity
  - Algebra
  - Functions

Source: Research Report 2011 Common Core State Standards Alignment- College Board

AP Calculus AB and BC Course Expectations Aligned to CCSS Mathematics (Grades 6-12)

- Standards for Mathematical Practice
- Conceptual Categories
  - Number and Quantity
  - Algebra
  - Functions
  - Geometry

Source: Research Report 2011 Common Core State Standards Alignment- College Board

Ohio's Revised Standards

Ohio's Revised Standards Reflect

NEW FEATURES:	NEW FOCUS:
▫ Fewer, clearer, and higher	▫ College and career readiness
▫ Internationally benchmarked	▫ Content *and* skills
▫ An aligned model curriculum	▫ Coherence, focus, rigor

Senate Bill 210

First Component

Student success in meeting benchmarks contained in physical education standards adopted under division (A)(3) of Section 3301.079 of Ohio Revised Code

SB 210 and The Physical Education Evaluation

- Signed in June 2010
- Includes four components to be included on the state report card starting with 2012-2013 school year
- Not a factor in performance ratings

Early Childhood

- ELA, Mathematics, Social Studies and Science standards currently available.
- Standards will be expanded to include social and emotional, approaches to learning and physical well-being.
- Draft of the expanded standards will be available for public review in the Spring 2012.

Ohio's Revised Academic Standards

COMMON CORE	OHIO'S REVISED STANDARDS
▫ English language arts	▫ Science
▫ Mathematics	▫ Social Studies

Revised and New Standards in Other Content Areas

- **World Languages (Revised)**
- **Fine Arts (Revised)**
- **Financial Literacy and Entrepreneurship (New)**
- **Business Education (New)**

Standards for Mathematical Practice
Mathematical 'Habits of Mind'

Grade Level Introduction

Mathematics | Grade 6

Cross-cutting themes

In Grade 6, instructional time should focus on four critical areas: (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking.

Critical Area of Focus

(1) Students use reasoning about multiplication and division to solve ratio and rate problems about quantities. By viewing equivalent ratios and rates as deriving from, and extending, pairs of rows (or columns) in the multiplication table, and by analyzing simple drawings that indicate the relative size of quantities, students connect their understanding of multiplication and division with ratios and rates. Thus students expand the scope of problems for which they can use multiplication and division to solve problems, and they connect ratios and fractions. Students solve a wide variety of problems involving ratios and rates.

Grade Level Overview

Grade 8 Overview

The Number System
- Know that there are numbers that are not rational, and approximate them by rational numbers.

Expressions and Equations
- Work with radicals and integer exponents.
- Understand the connections between proportional relationships, lines, and linear equations.
- Analyze and solve linear equations and pairs of simultaneous linear equations.

Functions
- Define, evaluate, and compare functions.
- Use functions to model relationships between quantities.

Geometry
- Understand congruence and similarity using physical models, transparencies, or geometry software.
- Understand and apply Pythagorean Theorem.
- Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.

Statistics and Probability
- Investigate patterns of association in bivariate data.

Mathematical Practices
1. Make sense of problems and persevere in solving them
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others
4. Model with mathematics
5. **Use appropriate tools strategically**
6. Attend to precision
7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning

Format of K-8 Standards

Grade Level

Domain

Standard

Cluster

Operations and Algebraic Thinking 1.OA

Represent and solve problems involving addition and subtraction.

1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.

Understand and apply properties of operations and the relationship between addition and subtraction.

3. Apply properties of operations as strategies to add and subtract. *Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)*

4. Understand subtraction as an unknown-addend problem. *For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.*

CCSS for High School Mathematics

- Organized in "Conceptual Categories"
  - Number and Quantity
  - Algebra
  - Functions
  - Modeling
  - Geometry
  - Statistics and Probability
- Conceptual categories are not courses
- Additional mathematics for advanced courses indicated by (+)
- Standards with connections to modeling indicated by (⋆)

Format of High School Standards

Domain

Cluster

Standard

Advanced

The Complex Number System N-CN

Perform arithmetic operations with complex numbers.

1. Know there is a complex number i such that $i^2 = -1$, and every complex number has the form $a + bi$ with a and b real.
2. Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.
3. (+) Find the conjugate of a complex number; use conjugates to find moduli and quotients of complex numbers.

Represent complex numbers and their operations on the complex plane.

4. (+) Represent complex numbers on the complex plane in rectangular and polar form (including real and imaginary numbers), and explain why the rectangular and polar forms of a given complex number

Reading Literacy Standards
Grades 6-8

Grades 6-8 students:

Key Ideas and Details

1. Cite specific textual evidence to support analysis of science and technical texts.
2. Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.
3. Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

Craft and Structure

4. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 6-8 texts and topics.
5. Analyze the structure an author uses to organize a text, including how the major sections contribute to the whole and to an understanding of the topic.
6. Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text.

Integration of Knowledge and Ideas

7. Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).
8. Distinguish among facts, reasoned judgment based on research findings, and speculation in a text.
9. Compare and contrast the information gained from experiments, simulations, video, or multimedia sources with that gained from reading a text on the same topic.

Range of Reading and Level of Text Complexity

10. By the end of grade 8, read and comprehend science/technical texts in the grades 6-8 text complexity band independently and proficiently.

Writing Literacy Standards
Grades 6-8

Grades 6-8 students:

Text Types and Purposes

1. Write arguments focused on discipline-specific content.
   a. Introduce claim(s), acknowledge and distinguish the claim(s) from alternate or opposing claims, and organize the reasons and evidence logically.
   b. Support claim(s) with logical reasoning and relevant, accurate data and evidence that demonstrate an understanding of the topic or text, using credible sources.
   c. Use words, phrases, and clauses to create cohesion and clarify the relationships among claim(s), reasons, and evidence.
   d. Establish and maintain a formal style.
   e. Provide a concluding statement or section that follows from and supports the argument presented.
2. Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.
   a. Introduce a topic and organize ideas, concepts, and information to make important connections and distinctions; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension.
   b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples.
   c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts.
   d. Use precise language and domain-specific vocabulary to inform about or explain the topic.
   e. Establish and maintain a formal style and objective tone.
   f. Provide a concluding statement or section that follows from and supports the information or explanation presented.
3. (See note; not applicable as a separate requirement)

Production and Distribution of Writing

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
5. With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.
6. Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.

Research to Build and Present Knowledge

7. Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.
8. Gather relevant information from multiple print and digital sources, using search terms effectively; assess the credibility and accuracy of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and following a standard format for citation.
9. Draw evidence from informational texts to support analysis, reflection, and research.

Range of Writing

10. Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

World Language

Current Standards	New Standards
COMMUNICATION	COMMUNICATION
CULTURES	
CONNECTIONS	
COMPARISONS	CULTURES
COMMUNITIES	

Arts Standards
From 5 to 3 Standard Process Goals

Historical, Cultural and Social Contexts	Perceiving
Creative Expression & Communication	Producing/ Performing
Analyzing and Responding	
Valuing the Arts/Aesthetic Reflection	Reflecting
Connections, Relationships and Applications	

Revised framework goals

Attributes of the Social Studies Standards
A Comprehensive Curriculum that:

Promotes
- Historical Thinking
- Civic Participation

Includes
- Economic Decision-making
- Financial Literacy

Graduation Requirements

Social Studies

Three units of social studies

American history – 1/2 unit	American government – 1/2 unit	Integration of economics and financial literacy

Social Studies Requirements

- Observances
  - Veterans Day
  - Constitution Day: September 17 each year
- Documents
  - The Declaration of Independence
  - The United States Constitution
  - The Constitution of the State of Ohio

Social Studies Requirements

Basic instruction in

- Geography
- United States history
- United States government
- Ohio local government

Social problems
Economics
Foreign affairs
United Nations
World government
Socialism and communism

Social Studies

- Strands
  - History
  - Geography
  - Government
  - Economics
- Inquiry-based teaching and learning
- Skills
  - Historical thinking
  - Spatial thinking
  - Civic participation
  - Economic decision making
  - Financial literacy

Eye of Integration

- What is it? A tool that facilitates integration of concepts and skills across content areas and applications.
- Purpose: To encourage depth, rigor, and relevancy in Ohio classrooms.
- Components:
  - Topic, essential question or big idea
  - Universal Skills or 21st Century Skills
  - Content area specific integration

Graduation Requirements

Science

Three units with inquiry-based laboratory experience

1. Physical sciences
2. Life sciences
3. One advanced science course

Science

- Strands:
  - Earth and space science
  - Physical science
  - Life science
- Skills:
  - Science inquiry
  - Applications

Science Concerns

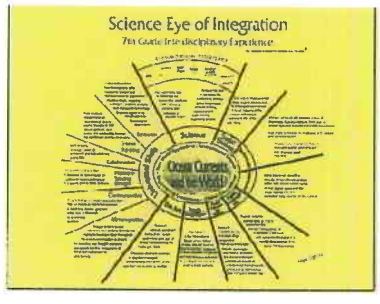
- Emphasis on skills
- Scientific inquiry
- Technological design
- Uncertainty that things not addressed directly in the standards will be addressed through model curricula

Attributes of the Science Standards

Attributes of the Science Standards

- Scientific Inquiry
- Engineering
- Technological Design

Science Eye of Integration



Ohio's New Standards Inform:

- Curriculum Revision
- Assessment Development
- Career-Technical Programs
- Special Education Programs
- English as a Second Language Programs
- Higher Education Alignment

Other Instructional Supports

- Crosswalks/Comparative Analysis Documents
- Formative Instruction Modules
- Eye of Integration
- Instructional Improvement System

Comparative Analysis Document

Formative Instruction Professional Development

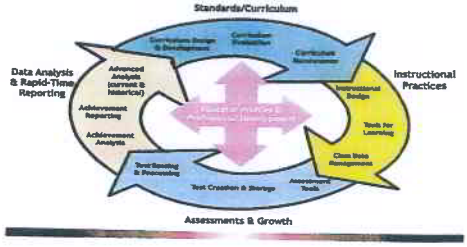
- Online Formative Instruction Professional Development Modules
- Regional Formative Instruction Specialists (RFIS) will provide training and support on the use of FIPD resources
- External provider developing modules and training of RFIS
- Access to modules beginning fall 2011

Instructional Improvement System

Structure and Components:

- Online access to electronic curriculum, resources and tools aligned to the new academic standards
- Curriculum customization for differentiated instruction
- Online portfolio of formative assessments
- Data-analysis capabilities including early-warning indicators for teachers, administrators, parents, and students.

IIS Operational Model

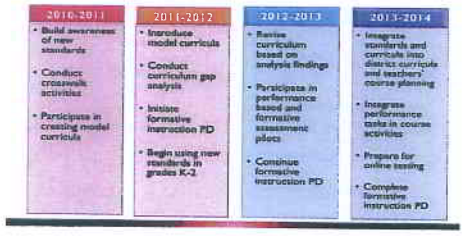


Guidance for Districts

What Should Districts Do Now?

- **Become familiar with:**
  - Common Core State Standards
  - Revised standards
  - Model curricula for each
- **Utilize crosswalks and comparative analyses to identify changes in content and levels of rigor**
- **Assure that all students have access to** high quality instruction and challenging curriculum
- **Develop** support structures **for struggling students**
- **Watch for new** opportunities **and** resources
- **Be skeptical of** easy alignment **and** quick fixes

District Next Steps



State Transition Timeline