Preparing Students for Postsecondary and Work Place Success (Implementing Common Core Standards)

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Postsecondary Success
Why its important
The Good
Job Opportunities

2.5X

Unemployment rate for high school graduates is 2.5x greater than that of college graduates

Source: Business Insider (2/7/11)
Earnings Potential

$26,000

Average annual salary difference between college and high school graduates

Source: 2008 Census Bureau
Earnings Potential

$1,000,000

Average lifetime salary difference between college and high school graduates

Source: 2008 Census Bureau
The Bad
Remediation

Percentage of students taking at least one remedial course at community colleges and 4-year institutions

45%

27%

Source: National Center for Education Statistics
Remediation

Annual estimated cost of college remediation in the United States

$5.6B

Source: Alliance for Excellent Education
Filling the Skills Gap

<table>
<thead>
<tr>
<th>Major Occupational Group</th>
<th>Supply 2010</th>
<th>Average Annual Demand 2013-2018</th>
<th>Projected % Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting &amp; Recordkeeping</td>
<td>668</td>
<td>1,234</td>
<td>46%</td>
</tr>
<tr>
<td>Manufacturing, Production</td>
<td>784</td>
<td>1,243</td>
<td>37%</td>
</tr>
<tr>
<td>Science Technology</td>
<td>64</td>
<td>309</td>
<td>79%</td>
</tr>
<tr>
<td>Selected Health Occupations</td>
<td>*</td>
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</tbody>
</table>

Students who are college/career ready when they leave high school have a significantly higher likelihood of:

– Enrolling in a postsecondary program,
– Enrolling in credit bearing courses without the need for remediation,
– Succeeding in entry level postsecondary course work,
– Persisting in their postsecondary education,
– Completing a postsecondary degree or training program, and
– Entering the job market with significantly higher lifetime earning potential.
The Ugly
The State of College and Career Readiness

- Only 24% of high school graduates met all four of ACT’s College Readiness Benchmarks in English, Mathematics, Reading, and Science.
- 39% met three of ACT’s College Readiness Benchmarks.
- Sadly, 28% of students who have aspirations of going to college meet none of the Benchmarks.
Hope for the Future
Hope for the Future

• The Common Core State Standards (CCSS) align U.S. K-12 education with a uniformly higher standard - college and career readiness
• 45 states and DC have adopted the CCSS for English language arts and mathematics.
• ACT research on college and career readiness lies at the heart of the CCSS
• Achieve and the College Board (SAT) were members of the CCSS Development Team
Hope for the Future

• 2009 PISA Reading and Math
  – United States 15\textsuperscript{th} in Reading (behind Poland and Iceland)
  – United States 28\textsuperscript{th} in Mathematics (behind Hungary, Slovenia, and Estonia)

• ACT linking study between PISA and ACT PLAN highlighted in \textit{Affirming the Goal}

• Significant Improvement in overall U.S. achievement rates if students are college and career ready (e.g., meet the Common Core)
College and Career Readiness in Mathematics

College and Career Readiness Standards

Increased readiness of students meeting College and Career Benchmark

Current U.S. Performance

Average PISA 2009 Mathematics Score

United States

US College & Career Readiness Benchmark

Significantly above the College & Career Readiness Benchmark

Not significantly different from the OECD average

Significantly below the College & Career Readiness Benchmark

Not significantly different from the OECD average

Significantly above or below the OECD average

OECD average

Average PISA 2009 Mathematics Score

0 100 200 300 400 500 600 700 800 900 1000
Internationally Competitive

Estimated U.S. rank on PISA if students all students were college and career ready

7th

Source: ACT, Affirming the Goal
Economic Impact

Estimated annual increase to U.S. GDP if U.S. academic achievement rose as expected by meeting a college and career threshold

$507B

Source: OECD
Common Core State Standards
Building on the strength of current state standards, the Common Core State Standards are designed to be:

- Focused, coherent, clear and rigorous
- Internationally benchmarked
- Linked to college and career readiness*
- Evidence and research based

* Ready for first-year credit-bearing, postsecondary coursework without the need for remediation.
Common Core State Standards for Mathematics
Overview of CCSS Mathematics Standards

The mathematics standards:

- Call on students to practice applying mathematical ways of thinking to real world issues and challenges
- Require students to develop a depth of understanding and ability to apply mathematics to novel situations, as college students and employees regularly are called on to do
- Emphasize mathematical modeling, using mathematics and statistics to analyze problems, understand them better, and improve decisions
- Identify the mathematics that all students should study in order to be college and career ready.
Common Core State Standards for English Language Arts and Literacy in History/ Social Studies, Science, and Technical Subjects
Overview of Reading Strand

• **Text Complexity**
  - Range of Reading – not just text books and literary works
  - Exemplar Texts (Shakespeare, Hemmingway – U.S. Constitution, MLK Letter from Birmingham Jail)

• **Reading Comprehension**
  - Standards for Reading Foundational Skills (K-5)
  - Reading Standards for Literature (K-12)
  - Reading Standards for Literacy in History/Social Studies (6-12)
  - Reading Standards for Literacy in Science and Technical Subjects (6-12)
  - Reading Standards for Informational Text (K-12)
Vehicle Information:
2008 ACURA MDX TECH
VIN: 2HNYD28478H501569
4 DR. WAGON/SPORT UTILITY
3.7L V6 PFI SOHC 24V
4 WHEEL DRIVE

Search for other 2008 ACURA MDX vehicles

Standard Equipment | Safety Options

- No accident / damage reported to CARFAX
- CARFAX 1-Owner vehicle
- 6 Service records available
- Personal vehicle
- 39,500 Last reported odometer reading
- $70 Above retail book value

This CARFAX Vehicle History Report is based only on information supplied to CARFAX and available as of 2/10/11 at 3:09:38 PM (EST). Other information about this vehicle, including problems, may not have been reported to CARFAX. Use this report as one important tool, along with a vehicle inspection and test drive, to make a better decision about your next used car.

http://www.carfax.com/phoenix/vehicle_history/SampleReport.cfx?reportName=oneOwnerCleanLateModel#
Overview of **Writing** Strand

- Expect students to compose arguments and opinions, informative/explanatory pieces, and narrative texts
- Focus on the use of reason and evidence to substantiate an argument or claim
- Emphasize ability to conduct research – short projects and sustained inquiry
- Require students to incorporate technology as they create, refine, and collaborate on writing
Overview of Speaking and Listening and Language Strands

Speaking and Listening
• Focus on speaking and listening in a range of settings, both formal and informal – academic, small-group, whole-class discussions
• Emphasize effective communication practices
• Require interpretation and analysis of message as presented through oral, visual, or multimodal formats

Language
• Include conventions for writing and speaking
• Highlight the importance of vocabulary acquisition through a mix of conversation, direct instruction, and reading
• To be addressed in context of reading, writing, speaking and listening

Media and Technology are integrated throughout the standards.
Overview of Standards for **History/Social Studies, Science, and Technical Subjects**

**Reading Standards for History/Social Studies, Science, and Technical Subjects**

- Knowledge of domain-specific vocabulary
- Analyze, evaluate, and differentiate primary and secondary sources
- Synthesize quantitative and technical information, including facts presented in maps, timelines, flowcharts, or diagrams

**Writing Standards for History/Social Studies, Science, and Technical Subjects**

- Write arguments on discipline-specific content and informative/explanatory text
- Use of data, evidence, and reason to support arguments and claims
- Use of domain-specific vocabulary
A First Look at the Common Core
A First Look at the Common Core

- Linking Study – ACT College Readiness Indicators linked to CCSS
- Large Sample of students taking the ACT:
  - 250,000+
  - Not self-selected
  - Multiple states
  - Full range of abilities and college aspirations
  - Rural, suburban, and urban schools
  - Standard and accommodated test takers
  - 67% Caucasian, 17% African-American, 11% Hispanic, 6% Other

  - Typical 11th grade students like you’d find in high schools across the country
First Look Results for Mathematics
Common Core Mathematics

Number & Quantity
Real Number System; Quantities; The Complex Number System; Vector & Matrix Quantities

Algebra
Seeing Structure in Expressions
Creating Equations
Arithmetic with Polynomials & Rational Functions; Reasoning with Equations & Inequalities

Functions
Interpreting Functions; Building Functions; Linear, Quadratic, & Exponential Models; Trigonometric Functions

Geometry
Congruence
Similarity, Right Triangles & Trigonometry; Circles
Expressing Geometric Properties with Equations; Geometric Measurement & Dimension; Modeling with Geometry

Statistics & Probability

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
**A First Look at Common Core Math**

- **Increased focus is needed on the foundations of mathematics**
  - Low performance on N&Q is particularly concerning – foundational for success in other more complex CCSS categories such as Algebra, Geometry, and Functions
  - Focus on N&Q from the earliest grades and build on those foundations
    - Early grade hands on experiences with numbers and measurement
    - Middle and high school connections between Number and Quantity and other CCSS mathematical concepts – particularly Algebra
First Look Results for ELA and Literacy
Common Core English Language Arts (ELA) & Literacy

**Reading**
- Key Ideas & Details
- Craft & Structure
- Integration of Knowledge & Ideas
- Range of Reading & Level of Text Complexity

**Writing**
- Text Types & Purposes
- Production & Distribution of Writing
- Range of Writing

**Language**
- Conventions of Standard English
- Knowledge of Language & Vocabulary Acquisition and Use

**Common Core Literacy Scores**
- Literature
- Informational Text
- Literacy in Social Studies
- Literacy in Science
A First Look at Common Core ELA

• Too few students (31%) are able to work with complex text
  – Students need exposure to a wide variety of text
  – Students need to focus on reading progressively more complex texts as they advance through the early and middle grades
• **Increased focus is needed on language and vocabulary acquisition**
  
  – Focus on Language Standard 3 (which begins formally in grade 2) and focuses on recognizing the differences between formal and informal English
  
  – Students would benefit from direct vocabulary instruction with emphasis on acquiring vocabulary through reading beginning in grades 4-5
Focus on Implementation

• **A Sense of Urgency**
  – Use the next three years to create, deploy, and align instructional strategies, interventions, and diagnostic tools to best support teaching and learning of the Common Core

• **New Standards – New Opportunities**
  – Begin thinking about new forms of accountability to include student growth toward college and career ready standards
  – Leverage ESEA Reauthorization
    • Ensure federal programs support College and Career Readiness
    • Empower local districts to better focus resources and strengthen professional development of teachers to support learning of the Common Core

• **Transition to College and Career Ready Standards**
  – Initial results are due to shifting expectations not a drop in student achievement
  – Moving to higher standards will be challenging for our education systems – but it is achievable
Shift in Expectations
Not a Drop in Student Achievement

STATE ‘A’ - Percent of ACT-tested Students Meeting College Readiness Benchmarks, by Subject and Year

2002 – first year implementation of statewide ACT assessment of all students

STATE ‘B’ - Percent of ACT-tested Students Meeting College Readiness Benchmarks, by Subject and Year
Challenging – But Achievable

District ‘A’ - Percent of ACT-tested Students Meeting College Readiness Benchmarks, by Subject and Year

District ‘B’ - Percent of ACT-tested Students Meeting College Readiness Benchmarks, by Subject and Year
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