Policy Discussion
Linking Student Assessments: The ACT Portfolio

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2005 WICHE Commission Meeting

November 8, 2005
Boulder, Colorado
This Morning’s Framework

• What issues drove us
• What we observed
• What we concluded
• What we did
• What we have learned so far
• Where we are going from here
What Are the Driving Educational Issues We Need To Address?

- Student Achievement
- Standards
- College and Workplace Readiness
- Remediation rates
- Performance gaps
- Expectations Gaps
- Student Motivation
- Teacher Training and Support
- Student Counseling
- Parental Involvement
- School Improvement and Reform
- Retention and Completion Rates
- Understanding and Use of Data Results
What is problem – Disconnection

- Between assessments
- Between standards
- Between curriculum
- Between courses
- Between grades
- Between information
- Between expectations
Better **Alignment** is needed

- Expectations
- Standards
- Requirements
- Curriculum
- **Assessments**
- Publications
Why Common Assessment?

- Efficiency
- Consistency
- Multiple Uses
- Meaningful
- Valued
- Cost Effective
What Are the Necessary Characteristics of the Assessment?

- Meaningful Content
- Score Scales
- Multiple Measures
- Technically Sound
- Common Interpretation
- Acceptance
- Understanding
Pivotal Milestones in ACT History

- (1959) Curriculum-based college admission test
- (1989) Enhanced ACT
Pivotal Milestones in ACT History

- (1997) Standards describing students’ skills
- (2005) “On Course for Success” defines rigor
Educational Planning and Assessment System (EPAS)

- EXPLORE (Grades 8/9)
- PLAN (Grade 10)
- The ACT (Grades 11/12)
EPAS is truly a “system”…

- Curriculum-based, achievement tests
  - English, math, reading, science (ACT Writing)
- Common score scale
- Common non-cognitive components
What Are the Benefits of a Common Assessment System?

• Early Indicators for Planning and Intervention
• Monitoring and Evaluating
• Admission
• Placement
• Instruction
• Counseling
## EPAS Assessment Linkage

<table>
<thead>
<tr>
<th></th>
<th>COMPASS</th>
<th>CAAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Writing (objective)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Math</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Science</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

**WorkKeys – Applied Math, Reading**
What Have Been the Outcomes?

- Incredible usage growth (acceptance and meeting needs)
- Ongoing system enhancements
- EPAS works results
- State adoptions including the ACT
Statewide use of the ACT

Illinois

Colorado

Michigan
What are the **Results** of Using The ACT?

Results show **increases** in:
- student participation
- preparation for college
- numbers of students taking the right number of courses
- college enrollments, particularly minorities
- college retention
- opportunities for college and career planning
- economic benefits accruing to states
What Have We Learned Thus Far?

- Impact (it works, positive)
- Communication
- Training
- Commitment
- Champion/partners
- Adoption models varied (who, where begin)
- Funding/ROI
Why States are Considering The ACT

- Aligned with state standards
- Addresses the quality of statewide assessments
- Cost-effective
- Measures growth on national scale
- Comparable and transportable
- Value to all stakeholders
- Articulates higher education expectations with K-12 education
Does The ACT Measure State Standards?

- Empirical content foundation based on the ACT National Curriculum Study®
- College Readiness Standards
- Alignment of College Readiness Standards with state standards
- State customized assessments
Standards-Based Assessment

Custom-Developed, Standards-Based Items

Aligned with State Content Standards and Objectives

Broad-based, rigorous, college-readiness standards
Standards-Based Assessment

Custom-Developed, Fully Aligned, Standards-Based Items

State CRT Standards-Based Interpretations

Scores for college admissions and course placement, and predictive of success
Implications: State and ACT College Readiness Standards

- ACT is based on college readiness
- State standards are aligned to ACT College Readiness Standards
- How can this strong alignment be translated into language both high schools and postsecondary education can understand?
What is the **Alignment** with College Expectations?

- ACT College Readiness Standards
- Alignment of ACT College Readiness Standards with state standards
Are Students College-Ready?

What does “readiness” mean?

- Many definitions: ACT’s are empirically based
- College Readiness Benchmark Scores
- Workforce Training Program Readiness
ACT College Readiness Benchmark Scores

- Empirically based—national representative sample of postsecondary institutions
- Success in entry level courses (50% chance of B, 75% chance of C)
- National Benchmarks
  - English (composition) 18
  - Math (college algebra) 22
  - Reading (social science) 21
  - Science (college biology) 24
- Translate directly into ACT College Readiness Standards
ACT College Readiness Benchmark Scores: 2005 Results

% Ready

English: 68%
Math: 41%
Reading: 51%
Science: 26%

= National
What do the ACT College Readiness Benchmark Scores Mean?

<table>
<thead>
<tr>
<th>Standards for Transition</th>
<th>College Algebra Course</th>
<th>Probability, Statistics, &amp; Data Analysis</th>
<th>Numbers: Concepts &amp; Properties</th>
<th>Algebraic Expressions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score Range: 20–29</td>
<td>Basic Operations &amp; Applications</td>
<td>Solve routine two-step or three-step arithmetic problems involving concepts such as rate, ratio, proportions, tax, added, percentage off, computing an average with negative integers, and distributing to a given average</td>
<td>Translate from one representation of data to another (e.g., a bar graph to a circle graph)</td>
<td>Exhibit knowledge of elementary number concepts including rounding, the ordering of decimals, pattern identification, absolute value, primes, and greatest common factor</td>
</tr>
<tr>
<td>Score Range: 16–19</td>
<td>Solve routine one-step arithmetic problems (using whole numbers, fractions, and decimals) such as single-step percent and calculate a simple average of whole numbers</td>
<td>Solve some routine two-step arithmetic problems</td>
<td>Read tables and graphs</td>
<td>Recognize one-digit factors of a number</td>
</tr>
<tr>
<td>Score Range: 13–15</td>
<td>Perform one-operation computation with whole numbers and decimals</td>
<td>Solve problems in one of two steps using whole numbers</td>
<td>Perform computations on data from tables and graphs</td>
<td>Identify a digit's place value</td>
</tr>
<tr>
<td>Score Range: 10–11</td>
<td>Students who score in the 10–12 range are most likely beginning to develop the knowledge and skills necessary in the other score ranges</td>
<td>Perform a single computation using information from a table or chart</td>
<td>Use the relationship between the probability of an event and the probability of its complement</td>
<td>Exhibit knowledge of basic expressions (e.g., identify an expression for a total of 3x + 3)</td>
</tr>
</tbody>
</table>
**Implications: College Readiness Benchmark Scores**

- Offer common language to define “readiness”
- Relate state standards to postsecondary expectations
- Directly relate college performance to standards (ACT College Readiness Standards)
- State-specific College Readiness Benchmark Scores can be identified
What Do We Know About Core Course Rigor?

• Taking the right number of courses matters in college readiness
• Taking the right kind of courses matters more
  ▪ Advanced math beyond Algebra I, Algebra II, and Geometry
  ▪ Fourth year of English
  ▪ Physics
• Improving the rigor of core courses is essential
What **Impact** Do Core Courses Have on Readiness?

<table>
<thead>
<tr>
<th>Course</th>
<th>ACT Math Score</th>
<th>Percent Students Ready</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alg 1, Alg 2, Geometry, Trig, Calculus</td>
<td>25.3</td>
<td>74%</td>
</tr>
<tr>
<td>Alg 1, Alg 2, Geometry, Other Adv. Math</td>
<td>20.2</td>
<td>55%</td>
</tr>
<tr>
<td>Alg 1, Alg 2, Geometry</td>
<td>17.7</td>
<td>13%</td>
</tr>
<tr>
<td>Less than 3 years</td>
<td>17.4</td>
<td>13%</td>
</tr>
</tbody>
</table>
Summary

• College and work readiness is a real issue
• Results of use of The ACT are positive
• Results of focusing on college readiness early (middle school) are also positive
• Course rigor is an essential part of the college and work readiness solution
Alignment and Success: Future Implications

- Some states have many building blocks of a P-16 aligned system:
  - ACT College Readiness Standards—aligned to State Standards
  - ACT College Readiness Benchmarks help define readiness
  - ACT College Readiness Standards help translate college expectations into K-12 instruction
  - Pre-college Course Requirements—consistent with our research
  - Strong college readiness assessment process (ACT)—already in place
Alignment and Success: Future Considerations

• Require students to take specific courses
• Start measuring college readiness earlier
• Use ACT scores and College Readiness Benchmarks to identify juniors who need interventions
• Vertically align pre-collegiate courses and identify the essential outcomes for these courses
• Measure “success” by examining outcomes in postsecondary education
Recommendations/Considerations

• State/system considerations
• ACT Resources
Web Resources

  Case Studies, Policy Reports (College Readiness, K-12, Postsecondary); *Crisis at the Core, On Course for Success*
  National and state scores
- **State Crisis Reports:**
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