Myth or Reality
Serious Questions About Rigor & Relevance

David Longanecker
President
WICHE
Myth or Reality #1: Courses Don’t Matter; Learning Does

• Of Course
  • Seat time ≠ Learning
  • Texas Experience: Course Title ≠ Course Content
• But
  • Adelman’s *Tool Box Revisited*
Odds of Earning a Bachelor’s Degree, Based on Level of High School Math

<table>
<thead>
<tr>
<th>Math Level</th>
<th>1992 12th Graders</th>
<th>1982 12th Graders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculus</td>
<td>7.52</td>
<td>8.18</td>
</tr>
<tr>
<td>Pre-calculus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trigonometry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algebra 2</td>
<td>0.89</td>
<td>1.82</td>
</tr>
<tr>
<td>Geometry</td>
<td>0.24</td>
<td>0.63</td>
</tr>
<tr>
<td>Algebra 1</td>
<td>0.07</td>
<td>0.19</td>
</tr>
<tr>
<td>Pre-algebra</td>
<td>0.05</td>
<td>0.06</td>
</tr>
</tbody>
</table>

Myth or Reality #1: Courses Don’t Matter; Learning Does

• Of Course
  • Seat time ≠ Learning
  • Texas Experience: Course Title ≠ Course Content

• But
  • Adelman’s Tool Box Revisited
  • ACT’s Ready for College and Ready for Work: Same or Different?
Myth or Reality #2: Everyone doesn’t need a rigorous high-school curriculum, so why make everyone take it

- True not all adult lives require rigor and relevance
  - 40% of manufacturing require a post-secondary degree or certificate
  - 60% of all jobs will require a post-secondary degree or certificate
  - 90% of the fastest growing job areas will require a post-secondary education
Myth or Reality #2: Everyone doesn’t need a rigorous high-school curriculum, so why make everyone take it

- On The Other Hand
  - Absent this level of education,
    - College success precluded
    - Living-wage jobs without college precluded
  - Which leaves three options
    - Chronic unemployment
    - Low skill/Low wage employment
    - The NBA
Myth or Reality #2: Everyone doesn’t need a rigorous high-school curriculum, so why make everyone take it

- And by the way
  - Why wouldn’t we design our curriculum for what we need?
  - Rather than what we don’t need?
- If we want to be competitive in the New World, we have some work to do.
Differences in College Attainment (Associate and Higher) Between Younger and Older Adults—U.S. and OECD Countries, 2005

Source: Organisation for Economic Co-operation and Development (OECD), *Education at a Glance 2007*
Percent of Adults with an Associate Degree or Higher by Age Group—U.S. and Leading OECD Countries

Source: OECD, *Education at a Glance 2007*
How Can the U.S. Reach International Competitiveness?

Current Degree Production Combined with Population Growth and Migration and Improved Performance on the Student Pipeline Measures

- Degrees Produced 2005-25 with Current Rate of Production: 40,605,747
- Additional Degrees from Population Growth: 1,255,167
- Additional Degrees from Net Migration of College-Educated Residents: 7,045,932
- Reaching Best Performance in High School Graduation Rates by 2025: 1,265,118
- Reaching Best Performance in College-Going Rates by 2025: 3,270,900
- Reaching Best Performance in Rates of Degree Production per FTE Student: 7,347,209
- Total Degrees Produced 2005-25 If All of the Above: 60,790,073
- Degrees Needed to Meet Best Performance (55%): 63,127,642

Source: 2005 ACS, PUMS
Myth or Reality #3: Everyone can’t learn at a “rigorous” level, and we want to affirm everyone

• They think they will learn enough to go to college
Chart 15

How Expectations Differ: Plans For Students After High School

Response From

- Work full-time
- 2- or 4-yr college

Myth or Reality #3: Everyone can’t learn at a “rigorous” level, and we want to affirm everyone

• They think they will learn enough to go to college
• Though, we often don’t tell them what that means
• Afterwards, they wish we had
• And if we do, they listen to us
Myth or Reality #4: We know what we need to know & the last thing we need is more testing

• No we don’t!
  • We need to know what courses they are taking
  • What they are learning
Myth or Reality #4: We know what we need to know & the last thing we need is more testing

• Knowing what courses they take
  • SSI Data: At the start partner schools there was little data on “what courses students took”.
  • Due to architecture and structure of data bases (Administrative, not academic planning)

• Knowing what students learn
  • The nexus between courses and competence
  • No Need to be more test; just more relevant tests
Myth or Reality #5: Our students may need rigor, but they won’t take rigor; they’re adolescents, after all

Our own SSI data demonstrates that most students rise to expectations
Percent of SSI Students Who Fail a Course
All Grades (9th – 12th) by SSI Course Type and Term
(Based on available AY 2006-07 data as of 2/20/2008)

- Fall 2006
- Spring 2007

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Fall 2006</th>
<th>Spring 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>9.1%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Other Mathematics</td>
<td>14.2%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Algebra I</td>
<td>15.4%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Algebra II</td>
<td>9.8%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Geometry</td>
<td>12.0%</td>
<td>10.3%</td>
</tr>
<tr>
<td>Higher Mathematics</td>
<td>4.0%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Other Science</td>
<td>9.6%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Biology</td>
<td>11.5%</td>
<td>10.2%</td>
</tr>
<tr>
<td>Chemistry</td>
<td>7.4%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Physics</td>
<td>7.3%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Language other than English</td>
<td>7.0%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Social Studies</td>
<td>8.7%</td>
<td>7.2%</td>
</tr>
</tbody>
</table>
Myth or Reality #5: Our students may need rigor, but they won’t take rigor; they’re adolescents, after all

Our own SSI data demonstrates that most students rise to expectations

They will take challenging courses

And, taking a rigorous core makes a difference
Myth or Reality #5: Our students may need rigor, but they won’t take rigor; they’re adolescents, after all

So if most students rise to expectations,
And a rigorous core makes a big difference,
Why would we support a standard curriculum built on less rigorous expectations?
Our task for the next day

- Gain some knowledge
  - to move forward on the basis of evidence

- Progress an action agenda
  - Extending what we are doing
  - Moving beyond the current arena

- Let us begin
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