Progress is Stalled: How You Can Accelerate the Pace

Presentation to SREB 2016 Annual Meeting
Gene Bottoms, Senior Vice President
Gene.Bottoms@SREB.org
Better alignment between state workforce opportunities and college and career readiness is needed now.

Since the 1970s, the U.S. has seen a steady rise in the education needed to obtain a good job.

Based on current trends, by 2020, 65 percent of all jobs will require some postsecondary education and training that leads to advanced credentials — i.e., associate or bachelor’s degrees or higher.
Rise in Education Levels for Jobs
1973 to 2016

Source: Georgetown Center on Education and the Workforce analysis. Note: Numbers may not sum to 100 percent due to rounding.
Jobs Added in the Economic Recovery

Good jobs account for 44%. Low-wage jobs stand at 29% (2010-2014)

Source: Georgetown University Center on Education and the Workforce analysis of Current Population Survey data, 2010-2014
Areas Representing the **Majority of Good Jobs**

*Employment change in high-wage occupations, 2010-2014*

![Bar chart showing employment change in various occupations.](chart)

Source: Georgetown University Center on Education and the Workforce analysis of Current Population Survey data, 2010-2014

- **Managerial & professional office**: 1,781,000
- **STEM**: 881,000
- **Healthcare pro. & tech.**: 445,000
- **Sales & office support**: 124,000
- **Community services & the arts**: 13,000
- **Food & personal services**: 4,000
- **Blue collar**: -71,000
- **Education**: -184,000

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Areas with Majority of **Middle- and Low-Wage Jobs**

*Job growth recovery, 2010-2014*

Source: Georgetown University Center on Education and the Workforce analysis of Current Population Survey data, 2010-2014

- Food, personal services, sales & office support: Middle-wage 86,000, Low-wage 1,053,000
- Blue-collar: Middle-wage 650,000, Low-wage 573,000
- Healthcare: Middle-wage 139,000, Low-wage 196,000
- Managerial & professional office: Middle-wage 267,000, Low-wage 7,000
- STEM: Middle-wage 12,000, Low-wage 0
- Education & community services: Middle-wage 558,000, Low-wage -47,000

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The Great Skill Mismatch

*Job Openings Rise, Hiring Slows*

Looking for Jobs  Help Wanted
Skills most needed to succeed in a changing workforce

<table>
<thead>
<tr>
<th>APPLIED KNOWLEDGE</th>
<th>PERSONAL SKILLS</th>
<th>WORKPLACE SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>Integrity</td>
<td>Planning &amp; Organizing</td>
</tr>
<tr>
<td>Writing</td>
<td>Initiative</td>
<td>Problem Solving</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Dependability &amp; Reliability</td>
<td>Decision Making</td>
</tr>
<tr>
<td>Science</td>
<td>Adaptability</td>
<td>Business Fundamentals</td>
</tr>
<tr>
<td>Technology</td>
<td>Professionalism</td>
<td>Customer Focus</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td></td>
<td>Working with Tools &amp; Technology</td>
</tr>
</tbody>
</table>

PEOPLE SKILLS
- Teamwork
- Communication
- Respect
Too many students are headed for the shallow end of the employment pool.
We’re preparing 60% of students for the 33% of jobs that are low-wage.

We’re preparing 40% of students for the 67% of jobs that are good- and middle-wage.

60% Shallow learning

40% Deeper learning
## Unemployment Rates of Three Groups

*Select SREB states, 2015*

<table>
<thead>
<tr>
<th></th>
<th>Under Age 25</th>
<th>All Workers</th>
<th>Adults PS Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>State A</td>
<td>10%</td>
<td>4%</td>
<td>7%</td>
</tr>
<tr>
<td>State B</td>
<td>13%</td>
<td>5%</td>
<td>15%</td>
</tr>
<tr>
<td>State C</td>
<td>15%</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>State D</td>
<td>16%</td>
<td>6%</td>
<td>4%</td>
</tr>
</tbody>
</table>

*Source: Bureau of Labor Statistics*
Pathways vs. Expectations

National transcript outcomes of 2013 HS graduates

<table>
<thead>
<tr>
<th>Pathway / curriculum completed</th>
<th>% who completed</th>
<th>% who planned bachelor's or higher</th>
<th>% who planned associate or higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>College and Career Ready</td>
<td>8%</td>
<td>77%</td>
<td>11%</td>
</tr>
<tr>
<td>College Ready</td>
<td>31%</td>
<td>78%</td>
<td>12%</td>
</tr>
<tr>
<td>Career Ready</td>
<td>13%</td>
<td>52%</td>
<td>22%</td>
</tr>
<tr>
<td>No Cohesive Curriculum</td>
<td>47%</td>
<td>61%</td>
<td>17%</td>
</tr>
</tbody>
</table>

Source: Education Trust.
## Career and Technical Education Concentrations

*High Schools That Work schools, 2014*

<table>
<thead>
<tr>
<th>Completion Status</th>
<th>College-ready core + Rigorous career pathway</th>
<th>College-ready core + Weak career pathway</th>
<th>Weak academic core + Career-ready pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed all of HSTW-recommended academic core</td>
<td>15%</td>
<td>14%</td>
<td>71%</td>
</tr>
<tr>
<td>1. Met college-readiness standards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading</td>
<td>81%</td>
<td>64%</td>
<td>40%</td>
</tr>
<tr>
<td>Math</td>
<td>81%</td>
<td>64%</td>
<td>50%</td>
</tr>
<tr>
<td>Science</td>
<td>78%</td>
<td>62%</td>
<td>45%</td>
</tr>
<tr>
<td>2. Percentage with postsecondary aspirations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS degree or higher</td>
<td>73%</td>
<td>63%</td>
<td>46%</td>
</tr>
<tr>
<td>AA/AS/Postsecondary training</td>
<td>19%</td>
<td>20%</td>
<td>24%</td>
</tr>
</tbody>
</table>
High school career pathways must be aligned with postsecondary and workforce opportunities.

The number of students choosing CTE career clusters has declined since 2007, especially in high-demand clusters.

There is a disconnect between career pathway enrollments and labor market opportunities.

There are disparities between high school CTE concentrations and postsecondary career clusters.
Career and Technical Education (CTE) Enrollments — High School vs. Postsecondary

Five-year average percentages (2011-2015) by career cluster
## Projected Needs in Computer Science Workforce

*By 2020 for computer science-related occupations*

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Percent of Total by Education Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Computer software engineers, applications</td>
<td>593,000</td>
</tr>
<tr>
<td>Computer software engineers, system software</td>
<td>453,330</td>
</tr>
<tr>
<td>Database administrators</td>
<td>113,640</td>
</tr>
<tr>
<td>Computer systems analysts</td>
<td>597,800</td>
</tr>
<tr>
<td>Operations research analysts</td>
<td>63,690</td>
</tr>
<tr>
<td>Computer programmers</td>
<td>358,530</td>
</tr>
</tbody>
</table>
A vision for new high schools that **work:**

**Accelerated Career Academies**

Connecting high school, postsecondary studies and the workplace
The road to the **middle class** begins with:

1. Increasing greatly the **college- and career-readiness** of high school graduates

2. Structuring **career pathway programs** that
   - span high school and postsecondary studies
   - align with good career opportunities
   - are combined with a college-ready academic core
Actions States Can Take

*Developing career pathways that align with the workforce and postsecondary studies*

Pay attention to the Council of Chief State School Officers’ (CCSSO) grant for career pathway needs assessments:

- Delaware
- Kentucky
- Louisiana
- Mississippi
- North Carolina
- Oklahoma
- South Carolina
- Tennessee
Six Areas of **Focus**

*Addressed by state needs assessments for career pathways*

1. Labor market **data**
2. **Rigor and quality** in career pathway programs of study for all students
3. Career-focused **accountability** system
4. **Scaled pathways** that culminate in credentials of value
5. Alignment of state and federal **funding streams**
6. Cross-institutional **alignment**
Accelerate the Pace: **Redesign Senior Year**  
*Blend high school and postsecondary studies*

1. **Allow** students to earn 30 hours of college credit
2. **Blend** college and high school studies
3. **Retain** the senior-year high school experience
4. **Personalize** the design for:  
   - Earning an advanced credential  
   - Earning 30 hours toward an associate or bachelor’s degree  
   - Creating a transitional bridge between high school and postsecondary education.
Accelerate the Pace: **Give Accountability Points**

Award them to each career pathway student who:

- **Completes a true college-ready core** and at least 4 quality courses in a career pathway
- **Meets college readiness standards** in literacy and math or meets career academic readiness standards in literacy and math (KY)
- **Meets technical readiness standards** by acquiring a credible industry credential that earns significant credit toward an advanced postsecondary credential or degree (FL)
Accelerate the Pace: **Give Accountability Points**

Award them to high schools that:

- **Adopt new career pathway programs** aligned with growing job opportunities (DE)
- **Redesign existing pathways** to reflect changing workplace requirements and provide more advanced postsecondary credits (TN)
- **Redesign the senior year** so it leads to an advanced credential or significant credit toward an associate or bachelor’s degree (GA)
# Kentucky College & Career Readiness Measures

<table>
<thead>
<tr>
<th>College Ready</th>
<th>Career Ready</th>
<th>College &amp; Career Ready</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>(1 Point)</strong></td>
<td><strong>(1 point)</strong></td>
<td><strong>(1.5 Points)</strong></td>
</tr>
<tr>
<td>A student must meet benchmarks on one of the following</td>
<td>A student must meet benchmarks on one from each of the following columns</td>
<td>A Student must meet benchmarks on one from each of the following columns</td>
</tr>
<tr>
<td></td>
<td>Career Ready Academic</td>
<td>Career Ready Technical</td>
</tr>
<tr>
<td></td>
<td>ACT or COMPASS or KYOTE</td>
<td>ASVAB or WorkKeys</td>
</tr>
<tr>
<td></td>
<td>KOSSA or Industry Certificate</td>
<td>ACT or COMPASS or KYOTE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>KOSSA or Industry Certificate</td>
</tr>
</tbody>
</table>

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Kentucky Career Ready: **Accelerating Change**

<table>
<thead>
<tr>
<th>College and Technical Career Ready</th>
<th>Academic and Technical Career Ready Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2012</td>
<td>2011-2012</td>
</tr>
<tr>
<td>13%</td>
<td>8%</td>
</tr>
<tr>
<td>2012-2013</td>
<td>2012-2013</td>
</tr>
<tr>
<td>18%</td>
<td>12%</td>
</tr>
<tr>
<td>2013-2014</td>
<td>2013-2014</td>
</tr>
<tr>
<td>27%</td>
<td>18%</td>
</tr>
<tr>
<td>33%</td>
<td>21%</td>
</tr>
</tbody>
</table>
Kentucky half-point Bonus:  
**Accelerating Readiness** for Career-Oriented Students

Administrators, counselors, and teachers provide students with a **program of study** that includes:

- a college-prep academic core
- a four-course sequence of CTE courses

CTE teachers are trained to design more **rigorous assignments** with embedded applied academics.
Accelerating Readiness: Fix Low-Performing Middle Grades and High Schools

Redesign low-performing high schools with rigorous pathways that
  • align with a solid academic core
  • lead to postsecondary credentials that help secure good jobs

Restructure low-performing high schools to include elements in the “Credentials for All” report • See: SREB.org/CTECommission

Reform middle schools feeding into low-performing high schools using “A New Mission for the Middle Grades” report

Align students’ assignments with grade-level work

Create a strong career and college counseling program
SUMMARY
Accelerate the Pace to Meet Workforce Needs

• Align more high school and postsecondary pathways to high-demand and high-paying career fields

• Combine a college-ready core with a career pathway program of study

• Redesign the senior year to allow prepared students to earn an advanced credential or significant credit toward a AA/AS/BS degree.
SUMMARY
Accelerate the Pace of Change by:

• **Redesigning assignments** in the middle grades and high school in all core academic courses to state college- and career-readiness standards

• Establishing an **accountability system** that values both college- and career-readiness standards

• Using SREB’s **CTE commission report** as a framework for redesigning low-performing middle grades and high schools