Teacher Credentialing, Teacher Supply and Equity Issues in Concurrent Enrollment

Aaron Thompson, Ph.D.
Executive Vice President & Chief Academic Officer
Council on Postsecondary Education

1. Teacher supply and credentialing
2. The Big Picture
3. Why Dual Credit Matters?
   1. Proven to support retention/graduation
   2. Key element to curriculum pathways
   3. Affordability strategy
4. Dual Credit in KY
   1. The impetus – SB1
   2. The implementation
   3. The impact
5. What else is KY doing to support student success
   1. Performance funding
   2. Diversity policy
   3. Co-req
The Big Picture: Kentucky’s Big Goal

• To increase educational attainment (certificate and above) to 60% by 2030.

• KY’s current attainment level for working-age adults is 45%.

• Based on HB 1 (1997) goal to achieve “a standard of living and quality of life that meets or exceeds the national average,” to be “accomplished through increased educational attainment at all levels.”

The Big Picture: Three Focus Areas

• **OPPORTUNITY.** How can Kentucky encourage more people to take advantage of postsecondary opportunities?

• **SUCCESS.** How can Kentucky increase degree and certificate completion, fill workforce shortages, and guide more graduates to a career path?

• **IMPACT.** How can Kentucky’s postsecondary system create economic growth and development and make our state more prosperous?
Who are our future teachers?

Teacher Candidate Admissions by Gender, 2016

- Undergraduate: 77% female, 23% male
- Graduate: 65% female, 35% male

Source: Kentucky Center for Education and Workforce Statistics, Teacher Feedback Report, March 2018

Who are our future teachers?

Teacher Candidate Admissions by Race/Ethnicity, 2016

- Undergraduate
- Graduate

Source: Kentucky Center for Education and Workforce Statistics, Teacher Feedback Report, March 2018
What initial teacher certification programs are producing the most graduates?

<table>
<thead>
<tr>
<th>Certification Area</th>
<th>Number of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Language</td>
<td></td>
</tr>
<tr>
<td>Social Studies</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td></td>
</tr>
<tr>
<td>School Media Librarian</td>
<td></td>
</tr>
<tr>
<td>Physical Health</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td></td>
</tr>
<tr>
<td>Exceptional Children</td>
<td></td>
</tr>
<tr>
<td>English/Language Arts</td>
<td></td>
</tr>
<tr>
<td>Elementary Education</td>
<td></td>
</tr>
<tr>
<td>Career &amp; Technical Education</td>
<td></td>
</tr>
<tr>
<td>Arts &amp; Humanities</td>
<td></td>
</tr>
</tbody>
</table>

Source: Kentucky Center for Education and Workforce Statistics, Teacher Feedback Report, March 2018

Where are teachers employed one year after completion?

Source: Kentucky Center for Education and Workforce Statistics, Teacher Feedback Report, March 2018
Are we meeting the demand for teachers?
Source: Kentucky Center for Education and Workforce Statistics, Teacher Supply and Demand Report, March 2018

Are student teachers/interns confident they can impact student learning?
Source: Kentucky Center for Education and Workforce Statistics, KY EPSB New Teacher Survey, 2015-16
In what areas do teachers say they want additional training?

<table>
<thead>
<tr>
<th>Area</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content area</td>
<td>1500</td>
</tr>
<tr>
<td>Common Core standards</td>
<td>1000</td>
</tr>
<tr>
<td>Instructional Technology</td>
<td>800</td>
</tr>
<tr>
<td>Reading strategies</td>
<td>600</td>
</tr>
<tr>
<td>Instructional Practices</td>
<td>500</td>
</tr>
<tr>
<td>English Language Learners</td>
<td>400</td>
</tr>
<tr>
<td>Gifted and Talented</td>
<td>300</td>
</tr>
<tr>
<td>Students with disabilities</td>
<td>250</td>
</tr>
<tr>
<td>Student assessment</td>
<td>200</td>
</tr>
<tr>
<td>Classroom management techniques</td>
<td>150</td>
</tr>
<tr>
<td>Closing achievement gaps</td>
<td>100</td>
</tr>
<tr>
<td>Differentiated instruction</td>
<td>50</td>
</tr>
</tbody>
</table>

Source: Kentucky Center for Education and Workforce Statistics, KY EPSB New Teacher Survey, 2015-16

What is Student Success?

- Students meet college readiness standards, applies for admission to postsecondary education and successfully transitions to a postsecondary institution.
- Students persist to completion and attainment of their degree, program, or educational goal.
- Students achieve satisfactory or superior levels of academic performance as they progress through and complete their college experience.

✓ Students develop as a “whole person” as they progress through and complete their college experience.
Why do some students not succeed?

1. Academic Under-preparedness
2. Low Initial Commitment
3. Low Motivation for Academic Learning
4.Competing Commitments
5. Lack of Social Integration
6. Personal (Psychosocial) Adjustment Issues
7. Institutional Frustration/Dissatisfaction

Four Pillars of Student Success

- Self
- Institution
- Family
- Community
Four Pillars of Student Success

Self  Institution  Family  Community

Seven Principles of Student Success

1. Personal Validation
2. Self-Efficacy, Growth Mindset, & Grit
3. Finding Meaning and Purpose
4. Active Involvement (Engagement)
5. Reflection
6. Social Integration
7. Self-Awareness
Connections = Success

Four particular forms of interaction have been found to be strongly associated with improving student performance:

- Student-Faculty Interaction
- Student Interaction with a Guidance Counselor
- Student Interaction with a Mentor
- Student-Student (Peer) Interaction

Why Dual Credit?

- Increases access to affordable college opportunities
- Increases college enrollment
- Improves on-time college graduation rates
- Key element of curriculum pathways
**Unified Strategy for College and Career Readiness (SB1 2010)**

- **Accelerated Learning Opportunities** - Expand access to Advanced Placement and International Baccalaureate and dual credit opportunities
- **Secondary Intervention Programs** – Develop & implement transition coursework (middle & high school intervention programming, free & online)
- **Advising** - Implement Individual Learning Plans and comprehensive advising programs (Operation Preparation)
- **Postsecondary Success** - Implement bridge programming, supplemental credit-bearing coursework, and student support and intervention systems

---

**Dual Credit in KY: The Impetus**

Accelerated Learning Opportunities:
Dual Credit Policy and Early College Programming

- Ensures quality dual credit programming is affordable and transferable.
- All dual credit courses must meet the general education and career and technical education pathway requirements established in policy.
- Requires a minimum of 3 general education and 3 career and technical education courses within a recognized career pathway are available to every high school graduate.
- The policy can be found at [http://cpe.ky.gov/policies/dualcredit.html](http://cpe.ky.gov/policies/dualcredit.html).
- Dual Credit and Early College Admissions criteria are being developed for consideration by the CPE board in early 2018.
Dual Credit Scholarship Program

- Every Kentucky high school student can earn credit for up to two college courses AT NO COST TO THE STUDENT
- Participating colleges and universities agree to charge no more than the dual credit tuition ceiling rate, which is 1/3 of the KCTCS hourly tuition rate ($54 per credit hour for the 2017-18 year
- Started in Fall 2016 with Governor Bevin’s Executive Order.
- In March 2017, the Dual Credit Scholarship Program was codified in statute.

Source: KHEAA, October 2017

Dual Credit in KY: The Impact

KY high school student participation in dual credit programs

↑69%
in 2 years

Source: Kentucky Department of Education.
Dual Credit in KY: The Impact

Dual Credit Scholarship Program

- In the first year of the scholarship program, 24,855 high school students took 30,803 dual credit courses using scholarship dollars.
- KHEAA disbursed $4.5 million in scholarship funding in 2016-17.
- In 2017-18, we are on track to significantly increase dual credit scholarship participation in Kentucky. Final data for 2017-18 will be available in the summer of 2018.

Source: KHEAA, October 2017

Dual Credit in KY: The Impact

Dual Credit/Dual Enrollment Participation is Increasing

<table>
<thead>
<tr>
<th>Year</th>
<th>Universities</th>
<th>KCTCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-2015</td>
<td>15,778</td>
<td></td>
</tr>
<tr>
<td>2015-2016</td>
<td>12,656</td>
<td>18,053</td>
</tr>
<tr>
<td>2016-2017</td>
<td>14,051</td>
<td>22,560</td>
</tr>
<tr>
<td></td>
<td>25,616</td>
<td>25,616</td>
</tr>
</tbody>
</table>

Source: Kentucky Council on Postsecondary Education Comprehensive Database, October 2017
Dual Credit in KY: The Impact

Dual Credit/Dual Enrollment Participation is Increasing

Dual Enrollment Credit Hours

<table>
<thead>
<tr>
<th>Year</th>
<th>Universities</th>
<th>KCTCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-2015</td>
<td>44,111</td>
<td></td>
</tr>
<tr>
<td>2015-2016</td>
<td>51,725</td>
<td></td>
</tr>
<tr>
<td>2016-2017</td>
<td>65,451</td>
<td>75,036</td>
</tr>
</tbody>
</table>

Source: Kentucky Council on Postsecondary Education Comprehensive Database, October 2017

Dual Credit in KY: The Impact

Dual Credit Scholarship Program 2016-17

<table>
<thead>
<tr>
<th>Institution</th>
<th>Scholarship Courses</th>
<th>Earned Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>KCTCS</td>
<td>15,080</td>
<td>42,661</td>
</tr>
<tr>
<td>4-Year Public Universities</td>
<td>11,193</td>
<td>31,624</td>
</tr>
<tr>
<td>4-Year Private (AIKCU)</td>
<td>4,530</td>
<td>12,998</td>
</tr>
<tr>
<td>Totals for 2016-17</td>
<td>30,803</td>
<td>87,283</td>
</tr>
</tbody>
</table>

Source: KHEAA, October 2017
Dual Credit in KY: The Impact

Percent of College Entrants Meeting Readiness Benchmarks

<table>
<thead>
<tr>
<th>Year</th>
<th>58.2%</th>
<th>68.3%</th>
<th>70.1%</th>
<th>70.5%</th>
<th>78.6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012-13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2013-14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014-15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015-16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Kentucky Department of Education

How else is KY supporting student success?

Performance Funding

35% Student Success
- Degrees and credentials awarded.
- Degrees per 100 full-time enrollments.
- STEM+H degrees.
- Degrees earned by minority and low-income students.
- Student progression.

35% Course Completion
Based on each institution's share of sector total student credit hours earned, weighted to account for cost differences, degree level and academic discipline.

10% Maintenance and Operations
Based on each institution's share of square footage dedicated to student learning.

10% Academic Support
Based on each institution's share of sector total full-time enrollment.

10% Institutional Support
Based on each institution's share of sector total instruction and student services spending.
How else is KY supporting student success?

Statewide Diversity, Equity & Inclusion Policy (2016)

- Public colleges and universities establish annual diversity plan with specific performance targets:
  - Enrollment of underrepresented minority students
  - First-to-second year retention of underrepresented minority students
  - Graduation rates and degrees awarded to underrepresented minority students
  - Percent of faculty/tenure track employees and administrators who are from an underrepresented minority group
- Report progress annually to Committee on Equal Opportunities
- Institutions that do not meet standards will lose automatic eligibility to offer new academic programs
- [http://cpe.ky.gov/policies/diversity.html](http://cpe.ky.gov/policies/diversity.html)
How else is KY supporting student success?

Corequisite Education Model

Corequisite Education Model Impact

<table>
<thead>
<tr>
<th>Comprehensive 4-year Public Universities</th>
<th>Traditional Developmental Education Model</th>
<th>New Corequisite Education Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completion Rate of a College-Level Course</td>
<td>Completion Rate of a College-Level Course</td>
<td></td>
</tr>
<tr>
<td><strong>WITHIN TWO YEARS</strong></td>
<td><strong>WITHIN ONE SEMESTER</strong></td>
<td></td>
</tr>
<tr>
<td>ENGLISH 56%</td>
<td>ENGLISH 70%</td>
<td>24% increase</td>
</tr>
<tr>
<td>ALGEBRA 38%</td>
<td>ALGEBRA 66%</td>
<td>74% increase</td>
</tr>
</tbody>
</table>

24% increase

74% increase
How else is KY supporting student success?

Corequisite Education Model Impact

<table>
<thead>
<tr>
<th></th>
<th>KCTCS Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Developmental Education Model</td>
<td>New Corequisite Education Model</td>
</tr>
<tr>
<td>Completion Rate of a College-Level Course</td>
<td>Completion Rate of a College-Level Course</td>
</tr>
<tr>
<td><strong>WITHIN TWO YEARS</strong></td>
<td></td>
</tr>
<tr>
<td>ENGLISH</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td><strong>74% increase</strong></td>
</tr>
<tr>
<td>ALGEBRA</td>
<td>18%</td>
</tr>
<tr>
<td></td>
<td><strong>172% increase</strong></td>
</tr>
<tr>
<td><strong>WITHIN ONE SEMESTER</strong></td>
<td></td>
</tr>
<tr>
<td>ENGLISH</td>
<td>59%</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>ALGEBRA</td>
<td>49%</td>
</tr>
</tbody>
</table>

What Can You Do?

Strategies to support greater dual credit access and quality

1. Scale policy implementation guidelines
2. Middle and high school intervention programming for academic readiness
3. Advising initiatives
4. Professional development for faculty and staff
5. Communication efforts with parents and families
6. Oversight of coursework, including student learning outcomes
7. Monitor student progress and success
8. Monitor achievement gaps in participation
QUESTIONS?