Impact of Dual Credit Course Taking on Postsecondary Success

P16 Texas Prospect Summit
Pathways Alignment Strand
November 01, 2017
Welcome!

• What is your current understanding of the IMPACT of Dual Credit course taking?

• What questions do you have about student outcomes for those enrolled in Dual Credit course taking?
THECB / RAND, AIR Study: Dual Credit Education in Texas

Phase I Results

Presented by
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Senior Director, Innovation and Policy Development
November 1, 2017

www.thecb.state.tx.us/dualcreditstudy
Overview of the THECB / RAND, AIR Study of Dual Credit Education in Texas

The Potential Promise of Dual-Credit Education
  • 60X30TX
  • Motivation

Phase I
  • Research Questions
  • Key Findings

Phase II
  • Research Questions
  • Timeline and Next Steps
Overview of Study

THECB / RAND, AIR Study of Dual Credit Education in Texas
Overview of Study

• Goals
  o To establish baseline data on dual-credit education programs in Texas
  o To develop targeted guidance on how to reform dual-credit policies and practices, if needed

• Research Partners
  o RAND Corporation: Phase I [COMPLETE]
  o American Institutes for Research: Phase II [UNDERWAY]

• Funders: College for All Texans Foundation
  o The Communities Foundation of Texas/Educate Texas
  o Greater Texas Foundation
  o Houston Endowment
  o The Meadows Foundation
The Potential Promise of Dual Credit Education

60X30TX: The Higher Education Plan for Texas (2015-2030)
60x30TX: The Higher Education Plan for Texas

60x30 Educated Population

Completion
Marketable Skills
Student Debt

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THE OVERARCHING GOAL: 60x30
At least 60 percent of Texans ages 25-34 will have a certificate or degree.
- Supports the economic future of the state

THE SECOND GOAL: COMPLETION ★
At least 550,000 students in 2030 will complete a certificate, associate, bachelor’s, or master’s from an institution of higher education in Texas.
- Requires large increases among targeted groups

THE THIRD GOAL: MARKETABLE SKILLS
All graduates from Texas public institutions of higher education will have completed programs with identified marketable skills.
- Emphasizes the value of higher education in the workforce

THE FOURTH GOAL: STUDENT DEBT
Undergraduate student loan debt will not exceed 60 percent of first-year wages for graduates of Texas public institutions.
- Helps students graduate with manageable debt
What do we know about dual credit?

- Lack of consensus over the exact benefits of dual credit education to students
- National and state research is incomplete
  - Qualitative or descriptive
  - Short-term outcomes
  - No data on implementation, efficiency or cost
- Dual credit education in Texas merits attention
  - High growth in dual credit participation
  - Legislation relaxing restrictions on dual credit participation and deliver
Growth in Dual Credit Participation in Texas

Total Number of Dual Credit SCHs Delivered in Texas between 2000–2015

Total dual credit SCH

- 2000
- 2005
- 2010
- 2015

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Relaxed Restrictions on Dual Credit

• Passage of House Bill 505
  o Prohibits the state from:
    − Restricting dual-credit education to only 11th and 12th grade students
    − Limiting the number of dual credit semester credit hours or courses a student may take while enrolled in high school

• Repeal of Texas Education Code 130.008
  o Allows higher education institutions to deliver dual-credit education programs to high schools outside of their local service area
Phase I

Research Questions and Findings
Research Questions

1. What are the academic outcomes of high school students who took dual credit courses versus those who did not, prior to HB 505?

2. How have participation rates among different student groups and course delivery changed over time?

3. What institutional policies and practices shape how institutions advise, teach, and determine student eligibility?

4. Did high school students who took dual credit complete college more efficiently than students who never took dual credit courses?
Key Findings (KF): Summary

1. Dual credit students (prior to HB 505) had better college outcomes than high school graduates who did not take dual credit courses. [RQ 1]

2. Prior to HB 505, disparities in dual credit participation rates changed across demographic groups over time. [RQ 2]

3. Dual credit instruction and advising varied across colleges and universities. [RQ 3]

4. Dual credit students took about the same time and the same semester credit hours to complete a college degree as their non-dual credit counterparts. [RQ 4]
Compared to students who did not enroll in dual credit education, dual credit students:

- Higher grades in introductory follow-on course in the same subject
- More likely to enroll in college, in particularly at a four-year institution
- Less likely to require developmental education
- More likely to persist through and complete college

**NOTE:** DUAL CREDIT STUDENTS ARE AN ACADEMICALLY SELECT GROUP OF STUDENTS
Dual Credit Students More Likely to Complete College

Probability That a Student Graduated from a 2- or 4-Year Public Institution
KF #2: Disparities in dual credit participation rates persisted prior to HB 505

- Wide disparities in dual credit participation rates by race / ethnicity, income, urbanicity, and academic background

- Hypotheses for the existence of these disparities:
  - Academic eligibility requirements to enroll in dual credit courses
  - Access to dual credit courses
  - Access to other college preparatory courses, i.e. AP or IB courses
  - Differences in advising practices
KF #3: Dual credit instruction & advising varied

• Systematic differences in context and instructor characteristics between dual credit and college-credit only courses
  o Dual credit courses more likely to be taught by college faculty who is employed as a high school teacher

• Similarities in use of common syllabi and departmental oversight of instruction and assessment; differences in the way courses are taught in the classroom

• Advising models and practices across dual credit programs differed, particularly in terms of contact with high school partners and students
KF #4: Little Evidence That Taking DC Courses Was Less Efficient Than Taking College-Credit Only Courses

• Relative to native college students, students who took dual credit courses:
  o Took less time to complete college degrees
  o Completed their degrees with roughly the same number of semester credit hours

• Little incidence of students who retook dual credit courses once they enrolled in college
Little difference in SCH and Time to Degree between dual credit students and counterparts

SCH Earned Toward a 4-year degree

Years Taken Toward a 4-year degree

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Phase II

Research Questions and Timeline
Phase II Research Questions, 1-3

Causal Impact Study: To what extent did dual-credit education, in and of itself, improve achievement outcomes among participating students prior to HB 505?

Racial Disparities Study: Why do racial and income disparities in dual-credit course taking exist and persist?

Content, Curriculum, Assessment Study: Are there systematic differences in curricula, course content, assessment methods and standards, and/or teaching approaches between dual-credit and college-credit-only courses?
Phase II Research Questions, 4-6

**Advising Study:** How can dual-credit advising be improved to reduce the number of SCHs a dual-credit student earns toward a college degree?

**Cost Study:** What are the financial costs of administering dual-credit programs, and how do costs compare to benefits?

**H.B. 505 Study:** Are institutions expanding dual-credit programs in response to HB 505? If so, which students are gaining access to and benefitting from dual-credit education?
**Timeline and Next Steps**

- **Qualitative tasks**
  - September 2017: Finalize qualitative protocols and recruit partnerships to participate in the study.
  - Fall 2017 – Collect qualitative data
  - Spring 2018 – Analyze qualitative data
- **Quantitative analysis is underway**
- **Reporting**
  - September 2017: Incorporate feedback on research design from webinar and other stakeholders
  - July 2018: Draft report for public comment
  - Fall 2018: Revise report based on public comment and other feedback
  - December 2018: Final report posted to AIR and THECB websites
  - All materials posted to [www.thecb.state.tx.us/dualcreditstudy](http://www.thecb.state.tx.us/dualcreditstudy)
Questions About the Study

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Questions from the Audience
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UT System Study: Dual Credit and Success in College

Quantum Leap One: Texas Prospect Initiative

Dr. David Troutman,
Associate Vice Chancellor of Institutional Research and Decision Support, Office of Strategic Initiatives
Study Purpose

• To obtain a better understanding of the relationship between students’ dual credit participation during high school, and their outcomes once they matriculate to UT System academic institutions.

• Mixed Methods Study
  • Data Discovery
  • Quantitative Analysis
  • Qualitative Analysis
  • Policy and Program Review
Research Questions

**QUANTITATIVE**

1. Who takes dual credit, how many hours are being accrued, and what courses are most often taken?

2. What short- and long-term student outcomes (e.g., retention, subsequent course completion, graduation, GPA, student debt) are associated with students’ dual credit participation?

**QUALITATIVE**

3. Based on the perspective of students, faculty, enrollment management officers, and academic advisors, does dual credit participation contribute to student access to higher education and student success during their academic career? What are the advantages and disadvantages?

4. What campus programs, processes, and policies have been established by UT System academic institutions in response to the rapid growth of dual credit participation?
Question 1

- Who takes dual credit, how many hours are being accrued, and what courses are most often taken?
## Question 1: Participation

### PRIMARY FOCUS

- Who takes dual credit?
- How many hours are being accrued?
- What courses are most often taken?

### ADDITIONAL INSIGHT

- Who teaches DC and where is it taught?
- Motivation to take DC
- Who told you about DC?
- How much did DC cost?
- High school feeders
Question 1: Who Takes Dual Credit?

- Student-level data set
  - 129,661 students
    - DC: 34,375 (27 percent) transferred in one or more DC courses
    - AP/IB: 30,595 (24 percent) applied one or more AP/IB courses to transcript
    - Both: 17,351 (13 percent) transferred one or more DC and applied AP credit
Question 1: How many hours are being accrued?

- Student who took DC
  - Median number of hours did not increase significantly between the 2010 and 2015 cohorts (from 12 to 15) however, 90th percentile increased from 33 to 60
  - Online Survey: 30 percent of students to 10-18 hours

- Dual credit obtainment range
  - Credit hours range from 1 hour to 90+ hours

- Early College High School mission is to have a student graduate from high school with 60 dual credit hours
Question 1: Who Takes Dual Credit?

- **Ethnicity/Race (White is the Reference Group)**
  - Asian Americans more likely to take AP only or Both
  - Hispanics more likely to take DC or Both
  - African Americans less likely to take DC, AP, or Both

- **First Generation**
  - Non First Generation students more likely to take DC, AP, and Both

- **Gender**
  - Women more likely than men to take DC, AP, and Both

- **SAT (less than 1100; reference group)**
  - 1100-1300 more likely to take DC, AP, and Both
  - 1300-1600 more likely to take AP and Both; DC not significant
  - Among students with SAT scores less than 1100, 33 percent took DC only, 8 percent took AP only, and 5 percent took both
Question 1: What courses are most often taken?

<table>
<thead>
<tr>
<th>Course</th>
<th>Students</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>83,179</td>
<td>22.0</td>
</tr>
<tr>
<td>History</td>
<td>63,934</td>
<td>17.0</td>
</tr>
<tr>
<td>Math/Stats</td>
<td>41,936</td>
<td>11.0</td>
</tr>
<tr>
<td>Government</td>
<td>35,163</td>
<td>9.0</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>26,370</td>
<td>7.0</td>
</tr>
<tr>
<td>Business/Economics</td>
<td>23,575</td>
<td>6.0</td>
</tr>
<tr>
<td>Physics/Astronomy</td>
<td>20,394</td>
<td>5.0</td>
</tr>
<tr>
<td>Biology</td>
<td>19,768</td>
<td>5.0</td>
</tr>
<tr>
<td>Chemistry</td>
<td>14,152</td>
<td>4.0</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>13,368</td>
<td>4.0</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>7,592</td>
<td>2.0</td>
</tr>
<tr>
<td>Communication/Speech Comm</td>
<td>6,159</td>
<td>2.0</td>
</tr>
</tbody>
</table>
Question 1: Additional Insight

• Motivation to enroll in Dual Credit (based on focus groups and online surveys)
  o Saving time/money (mentioned most often)
  o Seeking challenge, exploring courses, enjoyment of learning
  o “Knocking out” courses due to disinterest or perceived irrelevance
  o Strategic reasons (advantage in the college application process, improving class rank, satisfying diploma requirements)

• “I wish I had known”
  o Students most often say they wish they had known which courses would transfer or be applied to their degree plans
Question 1: Additional Insight
Wild Wild West of Experiences

**Location:** Community college, 4 year campus, high school campus

**Instructor:** High school based college instructors, community college instructors, facilitators

**Model:** Traditional, Early College HS, Middle College HS

**Delivery:** physical classroom, synchronous online/streaming, asynchronous online/streaming

**Classmates:** other DC students, mixed with traditional college students, cohorts

**Unique combinations such as:** AP + DC, community college + four year, STEM academy + ECHS

**Program supports such as:** specialized tutors, limits on SCH in 9th and 10th grade, courses on a high school campus then community college courses
Question 1: Additional Insight

• Recruitment
  o Most likely to hear from high school counselors, high school teacher, or a peer

• Cost (online survey)
  o 51% indicated courses and books were free; 12% indicated spending $200-$400 per course (including textbooks)

• AP vs DC
  o Overwhelmingly, students say they prefer Dual Credit to AP courses, primarily because the credit does not hinge on one test. Others note that when a choice is available, students should consider factors like whether they plan to attend college in-state or out-of-state.
Question 2

• What short- and long-term student outcomes (e.g., retention, subsequent course completion, graduation, GPA, student debt) are associated with students’ dual credit participation?
## Question 2: Student Outcomes

<table>
<thead>
<tr>
<th>PRIMARY FOCUS</th>
<th>ADDITIONAL INSIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retention and Graduation</td>
<td>Inverse Propensity Weighting</td>
</tr>
<tr>
<td>Grade Point Average</td>
<td>Time to Degree</td>
</tr>
<tr>
<td>Subsequent course completion</td>
<td>Attempted In Residence SCH</td>
</tr>
<tr>
<td>Student Debt</td>
<td>Percent D, F, and W</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Same Institution</th>
<th>Other Institution</th>
<th>Max-rescaled R-Square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dual Credit</td>
<td>AP/IB</td>
<td>Both</td>
</tr>
<tr>
<td><strong>Second Fall Enrollment</strong></td>
<td>2.24</td>
<td>3.29</td>
<td>5.47</td>
</tr>
<tr>
<td><strong>Third Fall Enrollment</strong></td>
<td>2.19</td>
<td>2.73</td>
<td>4.60</td>
</tr>
<tr>
<td><strong>Four Year Graduation</strong></td>
<td>2.99</td>
<td>3.27</td>
<td>5.29</td>
</tr>
<tr>
<td><strong>Five Year Graduation</strong></td>
<td>2.34</td>
<td>2.90</td>
<td>5.06</td>
</tr>
<tr>
<td><strong>Six year Graduation</strong></td>
<td>2.15</td>
<td>2.79</td>
<td>5.45</td>
</tr>
</tbody>
</table>

Reference Group (No Credit)

Number of hours: Not predictive of Retention; Predictive of Graduation
Question 2: Student Debt

<table>
<thead>
<tr>
<th>UT System: Average Debt for Texas Residents who Graduated</th>
<th>Student Debt (Graduated-Four Years)</th>
<th>Student Debt (Graduated-Five Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 15 Dual Credit Hours</td>
<td>$67</td>
<td>-$268</td>
</tr>
<tr>
<td>16 - 30 Dual Credit Hours</td>
<td>-$160</td>
<td>-$676</td>
</tr>
<tr>
<td>31 - 59 Dual Credit Hours</td>
<td>-$979</td>
<td>-$1,549</td>
</tr>
<tr>
<td>60+ Dual Credit Hours</td>
<td>-$3,826</td>
<td>-$5,011</td>
</tr>
<tr>
<td>Mean</td>
<td>$16,900</td>
<td>$18,183</td>
</tr>
</tbody>
</table>

Saving money was #2 for student motivator to take dual credit on the online survey. Focus groups indicated saving money as a motivator.
# Question 2: Grade Point Average

|                      | Dual Credit Mean | Dual Credit Estimate | Approx Pr > |t| | AP/IB Mean | AP/IB Estimate | Approx Pr > |t| | Both Mean | Both Estimate | Approx Pr > |t| |
|----------------------|------------------|----------------------|--------------|------------------|--------------|------------------|--------------|------------------|--------------|------------------|--------------|------------------|
| **First Year GPA**   | 2.88             | 0.35                 | <.0001       | 0.47             | <.0001       | 0.56             | <.0001       |
| **Second Year GPA**  | 3.03             | 0.18                 | <.0001       | 0.29             | <.0001       | 0.35             | <.0001       |
| **Third Year GPA**   | 3.10             | 0.13                 | <.0001       | 0.22             | <.0001       | 0.28             | <.0001       |
Question 2: Subsequent Course Completion

• Cross listing matrix by institution
  – Math
    • College Algebra, Precalculus, Calculus 1 and 2
  – Science
    • Biology 1 and 2, Chemistry 1 and 2
  – Writing
    • Composition 1 and 2
    • Limitations
## Subsequent Course Completion Findings

### GPA for Courses Requiring Calculus I or Equivalent

<table>
<thead>
<tr>
<th>Prereq Met By</th>
<th># Subsequent Courses</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP/IB</td>
<td>7425</td>
<td>3.31</td>
</tr>
<tr>
<td>DC</td>
<td>3085</td>
<td>2.95</td>
</tr>
<tr>
<td>Postmat/Test</td>
<td>44735</td>
<td>2.92</td>
</tr>
<tr>
<td>Premat/Postmat*</td>
<td>295</td>
<td>2.74</td>
</tr>
</tbody>
</table>

* Took prerequisite as DC with a grade of C or higher (or had a passing AP/IB score) and repeated the course at UT campus.
## Subsequent Course Completion Findings

### GPA for Courses Requiring Biology 1 or Equivalent

<table>
<thead>
<tr>
<th>Prereq Met By</th>
<th># Subsequent Courses</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP/IB</td>
<td>797</td>
<td>3.30</td>
</tr>
<tr>
<td>DC</td>
<td>1163</td>
<td>3.00</td>
</tr>
<tr>
<td>Postmat/Test</td>
<td>18428</td>
<td>3.07</td>
</tr>
<tr>
<td>Premat/Postmat*</td>
<td>394</td>
<td>2.99</td>
</tr>
</tbody>
</table>

* Took prerequisite as DC with a grade of C or higher (or had a passing AP/IB score) and repeated the course at the starting UT campus.
Question 2: Additional Insight

- **Inverse Propensity Score Weighting**
  - Statistical technique for calculating statistics standardized to a population different from that in which the data was collected

- **Time to Degree**
  - Decrease in time to degree for Dual Credit Students

- **Attempted SCH**
  - Fewer attempted SCH hours
  - The more Dual Credit hours the fewer attempted SCH students take in residence
Question 2: Student Pipeline

- DFW rates
  - DC students have a higher average of D, F, W rates than AP and Both but a lower average than general population

- Pulling data together to create an informative table
  - Student Pipeline
Question 3

• Based on the perspective of students, faculty, enrollment management officers, and academic advisors, does dual credit participation contribute to student access to higher education and student success during their academic career? What are the advantages and disadvantages?
ADVANTAGES

- Saving time/ money
- Increased high school challenge and college preparation
- Dual credit courses seem easier and/or students feel better supported
- Increased flexibility
- Knocking out courses/getting to major courses sooner
- Increasing competitiveness in college application process

CAUTIONS

- Time/money savings not realized
- Potential credit loss
- Don’t rush. Seek balance.
- Seek preparation vs credits
- DC (or AP) not the same as “college”
- Quality varies
- Reduced flexibility
- Getting to the major too soon
- GPA policies vary
Faculty’s Perspectives
College Readiness

- **Analytical Writing Skills**
  - “After teaching lower division courses, I would say that the ability to write analytically, at least in history is of utmost importance”

- **Academic Ability**
  - “Think, if the students could have a more rigorous high school curriculum that will prepare them for college, then I don't think we have to worry, right?”

- **Maturity**
  - “I had taught composition over there before and I went in and they told me, teach just like how you teach it to the 18-19-20-year olds. No way. They couldn't write at that ... They just didn't have the life experience or the maturity to handle it”
Advantages of Dual Credit

• **Encourages Students to Go to College**
  – “I think the big advantage is getting students interested in college, and getting them to [inaudible]. That's by far in a way the biggest advantage I see”

• **Provides an Introduction to the College Environment**
  – “If they're on-campus, on our campus, I would say there's a big advantage because, even if they fail the class that they're taking, they will know what college is like”

• **Better Students Going Forward**
  – “The adult older ones are coming back and it's a perfect match, because they feel they're being shown up by these younger ones who are pushing them harder. Then they have to step up and everybody steps up”
Disadvantages of Dual Credit

• Not Prepared for Junior-Level Classes
  – “those who had come presenting credit from elsewhere were less secure in their knowledge than those who had taken the courses with us or from another four-year institution”

• High School Students Not Ready for College and Not Succeeding in Dual Credit Classes
  – “They put them in there and they don't last a full week or two, if that”
  – “Well, I think part of that too is a paradigm shift. I mean we're taking teenagers to college students. I think that's a huge leap and what they're used to doing and now what's expected of them, I mean we're talking comparing apples to oranges here”
Disadvantages of Dual Credit

• **Credits Don’t Transfer/Unnecessary Courses**
  – “they end up with 60 credit hours, how many of them actually end up counting and how many of them end up being sort of dead credits off here on the side?”

• **Not Learning Life Skills/Not Developing**
  – “there's a danger or a threat with that in that students are gaining all of these courses, the hours but that's only one part of their development. That it's not a holistic approach to becoming a college student or becoming a young adult”
Disadvantages of Dual Credit for Faculty/School

- **Grade Inflation**
  - “The other thing I would say to watch for is horrible grade inflation. That's one of the things that I've seen, in the rural school that we were looking at, they had 90 biology students and no one made a D or F.”
Disadvantages of Dual Credit for Faculty/School

- **Conflict of Interest Between High Schools and Colleges**
  - “I see a conflict of interest with a teacher that's working for 2 different educational entities at the same time. They're trying to satisfy a superintendent or a principal, and then they're also trying to satisfy a department chair or a Dean or a cohost”
  - “part of the problem with dual credit is sometimes the school steps and says, "Do not give these students this grade."
Thoughts about Dual Credit

• Poor Course Quality
  – “It would help if the courses were higher quality. If they weren't sitting in a class next to somebody earning high school credit for the course that they're earning college credit for. The quality is just not guaranteed”

• Poor Teacher Quality
  – “You're dipping further into a pool of people that couldn't possibly get a job at a community college and absolutely would never get a job in university as opposed to ... It's a different dilution you're getting and you're going down and down into the pool in terms of people that are qualified to teach university courses”
Thoughts about Dual Credit

• **Weak Course Rigor**
  – “Except just being a glorified high school class that they just get to have fun and build robots out of perfect loops. Teach them real engineering is what I'm saying”
  – “It's the rigor. It's not the topics. Yes, they checked off all these things but there's no way that they are in the same place”
Possible Improvements

• **Standardization of Courses with UT System**
  – “If UT System wants to establish that say dual credit math courses, they should meet a certain standard and then those students will be guaranteed that they're going to feed into the UT System school because they've got what we want and what many people need”

• **End of Course Exam**
  – “This sounds kind of archaic or some really bad way to do it, but I would say that if you wanted dual credit to work then if they're taking general chemistry dual credit, then in order for them to get credit for the dual credit, they take their final”
Possible Improvements

• **Teacher Quality Checks**
  
  – “You have to have a PhD or whatever your terminal degree is or you have to pass this test”
  
  – “I would say credentialing the teachers. The credentials hold those teachers accountable for the rigors that they're teaching. To me, that seems like that's where it's starting so, some kind of accountability”
Questions from the Audience
Caitlin Hamrock, Ph.D.
Senior Research Associate
E3 Alliance
The Impact of College Level Mathematics on Postsecondary Success

11/1/17

Thanks to Our Partner:

GREATER TEXAS FOUNDATION
3 Major Components of House Bill 5 (2013)

- **Reform**: Largest change to Texas education policy in decades

- **Opportunity**: Career alignment could keep more students in school with viable pathways to future

- **Concern**: Could changes to math course-taking requirements hurt students?
Texas HS Graduation Requirements in Flux

1997-98
- 3 years math
- Algebra 1 and Geometry required

2004-05
- 3 years math
- Algebra 2 required

2007-08
- 4 years of math
- Algebra 2 required

2013-14
- 3 years math
- Algebra 2 required only for Distinguished or STEM

HB5
3 in 4 Students with College Level Math Complete Higher Education Within 6 Years

Texas Higher Education Enrollees’ 6 Year Completion Rates by Highest Math, Texas 2006 First Time 9th Grade Cohort

Odds ratios take into account demographics & prior achievement; 2004 cohort
Source: E³ Alliance analysis of data at the UT Austin Education Research Center
Quantitative Longitudinal Analysis

Pathways of Promise: College Level (AP/IB/Dual) Math Course Taking
Only 1 in 5 Take a College Level Math Course During High School

Percent of 2012 Texas 9th Grade Cohort in High School for 4 Years Taking College Level Math Coursework

College Level Math = AP, IB or Dual Credit

College Level Math = 22%
No College Level Math = 78%

Source: E3 Alliance analysis of PEIMS data at the UT Austin Education Research Center © 2017 E3 Alliance
AP Math Still More Prevalent than Dual Credit Math

Enrollment Counts for Texas 9th Grade Cohorts in High School for 4 Years with College Level Math Coursework

- **Advanced Placement**
  - Class of 2014: 43,654
  - Class of 2015: 46,244

- **International Baccalaureate**
  - Class of 2014: 1,975
  - Class of 2015: 1,894

- **Dual Credit**
  - Class of 2014: 1,4300
  - Class of 2015: 1,4217

Source: E³ Alliance analysis of PEIMS data at the UT Austin Education Research Center
For AP, Calculus Outpaces Statistics & Comp Science

Course-Taking Patterns of 2012 Texas 9th Graders in High School for 4 Years with AP Math

- AP Computer Science: 11%
- AP Statistics: 40%
- AP Calculus AB: 57%
- AP Calculus BC: 17%

Source: E³ Alliance analysis of PEIMS data at the UT Austin Education Research Center
PreCalculus and Independent Study

Most Common Dual Credit Math

Course-Taking Patterns of 2012 Texas 9th Graders in High School for 4 Years with Dual Credit Math

- PreCalculus: 45%
- Independent Study 1: 47%
- Independent Study 2: 14%
- Independent Study 3: 3%
- Algebra 2: 7%
- Statistics and Risk Management: 1%
- Engineering Math: 1%
- Advanced Quantitative Reasoning: 1%

Source: E³ Alliance analysis of PEIMS data at the UT Austin Education Research Center
Wide Variance in Enrollment in College Level Math by District Type

Percent of 2012 Central Texas 9th Grade Cohort in High School for 4 Years with College Level (AP, IB or Dual Credit) Math Coursework

- Texas: 22%
- Charter School Districts: 29%
- Major Suburban: 24%
- Major Urban: 23%
- Other Central City Suburban: 20%
- Other Central City: 23%
- Non-Metropolitan: 19%
- Independent Town: 16%
- Rural: 15%

Source: E³ Alliance analysis of PEIMS data at the UT Austin Education Research Center
Rural Districts Utilize Higher Ed Partnerships to Offer Dual Credit Math Courses

Percent of 2012 Texas 9th Grade Cohort in High School for 4 Years with College Level (AP, IB or Dual Credit) Math Coursework

Source: E³ Alliance analysis of PEIMS data at the UT Austin Education Research Center
Texas

Higher Ed Enrollment Outcomes
Graduates with Dual Credit Math Enroll in Higher Ed Institutions at Highest Rate Nationally

Percent of High School Graduates in 2011 Texas 9th Grade Cohort Enrolled in Higher Education Nationwide

- Advanced Placement: 87%
- Dual Credit: 90%
- No College Level Math: 61%

Source: E³ Alliance analysis of data at the UT Austin Education Research Center
Graduates with Dual Credit Math Enroll in Texas Higher Ed Institutions at Highest Rate

Percent of High School Graduates in 2011 Texas 9th Grade Cohort Enrolled in Higher Education in Texas*

*Only includes enrollment in Texas Higher Education Institutions

Source: E³ Alliance analysis of data at the UT Austin Education Research Center
Enrollment Rates for Those with College Math in HS Vary Little By District Type

Percent of High School Graduates in 2011 Texas 9th Grade Cohort Enrolled in Higher Education in Texas*

<table>
<thead>
<tr>
<th>District Type</th>
<th>College Level Math</th>
<th>No College Level Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>79%</td>
<td>58%</td>
</tr>
<tr>
<td>Suburban</td>
<td>78%</td>
<td>59%</td>
</tr>
<tr>
<td>Rural/Small Town</td>
<td>80%</td>
<td>55%</td>
</tr>
<tr>
<td>Charter</td>
<td>76%</td>
<td>64%</td>
</tr>
</tbody>
</table>

*Only includes enrollment in Texas Higher Education Institutions
Source: E³ Alliance analysis of PEIMS data at the UT Austin Education Research Center
Majority Students With College Level Math in High School Enroll in 4-Year Higher Ed Institution

Texas Higher Ed Enrollment Rates for High School Graduates by Highest HS Math and Institution Type, Texas 2011 9th Grade Cohort

- **Advanced Placement**:
  - Enrolled in 2-Year: 15%
  - Enrolled in 4-Year: 63%

- **Dual Credit**:
  - Enrolled in 2-Year: 19%
  - Enrolled in 4-Year: 66%

- **No College Level Math**:
  - Enrolled in 2-Year: 36%
  - Enrolled in 4-Year: 23%

Only includes enrollment in Texas Higher Education Institutions
Source: E³ Alliance analysis of data at the UT Austin Education Research Center
Persisting Rates Linked More to IHE Type Rather than High School Math

Percent of High School Graduates in 2011 Texas 9th Grade Cohort Enrolled in Higher Education in Texas*

<table>
<thead>
<tr>
<th></th>
<th>2-year IHE</th>
<th>4-Year IHE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Placement</td>
<td>84%</td>
<td>95%</td>
</tr>
<tr>
<td>Dual Credit</td>
<td>81%</td>
<td>93%</td>
</tr>
<tr>
<td>No College Level Math</td>
<td>70%</td>
<td>87%</td>
</tr>
</tbody>
</table>

*Only includes enrollment in Texas Higher Education Institutions
Source: E³ Alliance analysis of PEIMS data at the UT Austin Education Research Center
2- to 4-Year IHE Transfer Rates Highest Among Dual Credit Completers

Texas Higher Ed Persistence Rates for High School Graduates by Highest HS Math, 2-Year Enrollees, Texas 2011 9th Grade Cohort

- Advanced Placement: 7%
- Dual Credit: 11%
- No College Level Math: 3%

Only includes enrollment in Texas Higher Education Institutions
Source: E³ Alliance analysis of data at the UT Austin Education Research Center
Key Implications

• Dual credit less common than AP, but similar graduation and higher education enrollment outcomes
  ▪ Dual credit students slightly more likely to enroll in higher ed. AP students more likely to enroll out of state
  ▪ Persistence rates similar among AP and Dual credit completers

• Many consider Dual Credit to be less rigorous or preparation for 2 year IHE, however our data does not support this

Question: What do YOU see as implications?
Questions from the Audience
Synthesize

- Who do you need to share this information with?
- What action steps will move your regional response to this research forward?
Thank You!

**Ginger Gossman, Ph.D.**
Texas Higher Education Coordinating Board
Ginger.Gossman@THECB.state.tx.us

**David Troutman, Ph.D.**
The University of Texas System
dtroutman@utsystem.edu

**Caitlin Hamrock, Ph.D.**
E3 Alliance
chamrock@e3alliance.org
Building Strong Career Pathways

P16 Texas Prospect Summit
Pathways Alignment Strand
November 01, 2017
I. Israel Cordero – Dallas ISD’s Collegiate Academies

II. Shasta Buchanan, Ph.D. – ACC’s Partnership to Pathways

III. Lily Laux, Ph.D. – TEA’s Strategic Priorities & ECHS’s

IV. Charlotte Cayhill, Ph.D. – Pathways to Prosperity: A National Policy Perspective

V. Q&A from Audience

VI. Table Activity – Opportunities for Action
Dallas ISD Collegiate Academies
Creating Opportunities for our Students

Israel Cordero, Deputy Superintendent
What does the Data tell us?

Dallas Leads All Five Major Urban Texas Regions With Almost 1 in 4 Adults With Less Than a High School Degree

Educational Attainment: Adults 25 and Over
2014 U.S. Census American Community Survey Estimate

Dallas ISD 6-Year College Completion Rate at 21%
What does the Data tell us?

Equity Indicator 5a: Bachelor’s degree attainment by age 24 for dependent family members by family income quartile: 1970-2013

How Are We Doing? High Inequality and Widening Gap
In 2013 those from high-income families were 8 times more likely to obtain a bachelor’s degree by age 24 than those from low-income families. In 1970 individuals from high-income families were 6 times more likely to obtain a bachelor’s degree than those from low-income families.
Dallas ISD Program Goals

Outputs:

✓ High School Diploma
✓ Graduation Endorsements
✓ Up to 60+ College Credit Hours at No Cost to Students and Parents
✓ Associate of Applied Sciences Degree
✓ Career and Technology Certifications
✓ 4 Year University Options
✓ College and Career Ready
College Partnership

- Strategic partnership between Dallas ISD and the Dallas County Community College District
Pathways and Crosswalks

- Guided Pathways from AAS to BAAS
- University Transfer Options for Dallas County Community College District (DCCCD) - AAS Degrees
- A Collaborative Partnership through the North Texas Community College Consortium (NTCCC)

Dual Credit

College Credit

HS Graduation / Endorsement

AAS Pathways

BAAS Pathways
## Crosswalks and Pathways

### AAS earned from DCCCD

<table>
<thead>
<tr>
<th>Participating ISD:</th>
<th>Dallas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating HS:</td>
<td>Pinkston, Madison, Roosevelt Collegiate Academies</td>
</tr>
<tr>
<td>Career Pathway Program – 4-yr Plan (Recommended Graduation Plan)</td>
<td></td>
</tr>
<tr>
<td>Participating Colleges:</td>
<td>El Centro College</td>
</tr>
<tr>
<td>Certificate(s):</td>
<td>Supervisor Certificate (A) and Management Certificate (B) and Retail Mgmt Certificate (C)</td>
</tr>
</tbody>
</table>

| HS Plan: | Management |

### Academic Year 2016 – 2017

| AAS Degree: | Management AAS |

### Highland Secondary

<table>
<thead>
<tr>
<th>Periods</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>Semester I (Fall)</th>
<th>Semester II (Spring)</th>
<th>Semester III</th>
<th>Semester IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>English I</td>
<td>English II</td>
<td>English III</td>
<td>#2723 AQR (*) MATH 1332 Contemporary Math</td>
<td>#2918 Independent Study Math I (*) MATH 1324 Math for Bus &amp; Social Sciences</td>
<td>#1520 English IV (I) ENGL 1302 Composition I</td>
<td>#1521 English IV (II) ENGL 1302 Composition II</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Geometry</td>
<td>Algebra II</td>
<td></td>
<td>#7161 Business Management (II) BMGT 1327 – Principles of Management</td>
<td></td>
<td>#7161 Business Management (II) BMGT 1327 – Principles of Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td>US History</td>
<td></td>
<td>Government</td>
<td>#2532 Economics</td>
<td></td>
<td>#7170 Retailing &amp; eRetailing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>World History</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAPS (TSI Preparation)</td>
<td>Spanish I</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fine Arts</td>
<td>PE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12th</td>
<td>7473 Touch Screen Data Entry &amp; Intro to Keyboarding (32 hours)</td>
<td>PE (0.5 credit)</td>
<td>#7151 Principles of Business, Marketing &amp; Finance</td>
<td>#7163 Practicum in Business Management (I) BMGT 1382 – Co-Op Bus. Admin. &amp; Mgmt.</td>
<td>#7499 Practicum in Business Management II (I) BMGT 1383 – Co-Op Bus. Admin. &amp; Mgmt.</td>
<td>#7499 Practicum in Business Management II (II) BMGT 2383 – Co-Op Bus. Admin. &amp; Mgmt.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7309 Principles of Information Technology</td>
<td>Health</td>
<td></td>
<td>Health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Total possible college credits completed in high school = 70**

**High School Courses**
- Certificate A (Dual Credit)
- Certificate B (Dual Credit)
- Certificate C (Dual Credit)
- Remaining AAS Dual Credit courses

**College courses that are NOT taught as dual credit**
## AAS to BAAS Guided Pathways

### Degree - Management
**Career Cluster - Business, Management & Administration**

- **BAAS School** | **Pathway**
  - University of North Texas-PACS | Management DCCCD UNT PACS
  - Texas Woman’s University | Management DCCCD TWU
  - Tarleton State University | Management DCCCD TSU
  - Texas A&M University-Commerce | Management DCCCD TAMUC

### Degree - Electronics Technology
**Career Cluster - Science, Technology, Engineering & Mathematics**

- **BAAS School** | **Pathway**
  - University of North Texas-PACS | Electronics Technology DCCCD UNT PACS
  - Texas A&M University-Commerce | Electronics Technology DCCCD TAMUC
  - University of Texas - Tyler | Electronics Technology DCCCD UTT

### Degree - Interactive Simulation & Game Tech Art/Animation/Design
**Career Cluster - Arts, A/V Technology & Communications**

- **BAAS School** | **Pathway**
  - Texas A&M University-Commerce | Interactive Simulation and Game Technology DCCCD TAMUC
  - Tarleton State University | Interactive Simulation and Game Technology DCCCD TSU
  - University of North Texas-PACS | Interactive Simulation and Game Technology DCCCD UNT PACS
  - University of Texas – Tyler | Interactive Simulation and Game Technology DCCCD UTT

### Degree - Visual Communications Web Design Specialization
**Career Cluster - Arts, A/V Technology & Communications**

- **BAAS School** | **Pathway**
  - Texas A&M University-Commerce | Visual Communications Web Design Specialization DCCCD TAMUC
  - University of North Texas – PACS | Visual Communications DCCCD UNT PACS
  - University of Texas - Tyler | Visual Communications DCCCD UTT
A collaborative project site to store project documents and track progress updates.

The Dallas ISD is preparing to transform some of its current high schools into collegiate academies, with the eventual plan to earn an Early College High School (ECHS) status.

The first phase will include a cohort of 8 existing high schools, with the plan to expand to additional schools (cohort #2) in the subsequent school year. With the ECHS designation, each school would partner with a local Dallas County Community College District (DCCCD) campus, and would have the ability to offer students an opportunity to earn up to 60 credit hours of college curriculum and an Associate's Degree of Applied Science.

Additionally, the ECHS would seek to become a 'Pathway to Technology' ECHS in which the schools would align with an industry partner and allow the students to gain industry experience through internships, mentorship, and industry certifications.
A collaborative **project site** for College Workplace Coordinators to track Activities with Industry Partners

---

**Reports**

- **Industry Partner Summary Report**
  - **Total # of Industry Partners**: 45
  - **Average Activity per Industry Partner**: 0.89
  - **Industry Partners with 0 Activities**: 43

- **Industry Partner Activity Totals**
  - **Industry Partner Summary Data**
  - **Industry Partner Activity Details**
  - **Number and Type of Activities per Industry Partner**
  - **Industry Partner Activities (by Type)**

---

**Collegiate Workplace Coordinator Website**

Welcome to the Collegiate Workplace Learning Coordinator site. This site can be used to share documents, keep track of contacts, track activities, and even view reports. The site is only shared with Workplace Learning Coordinators and central staff who are deemed necessary to track Collegiate Academy activities.
Industry Partners

- Industry Partner Reveal and Recognition Events
Year 1 Results
**Cohort 1 Student Retention**

<table>
<thead>
<tr>
<th>Campus</th>
<th># Enrolled BOY 2016</th>
<th># Retained EOY 2017</th>
<th>% Retention BOY - EOY</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Carter Collegiate Academy</td>
<td>118</td>
<td>114</td>
<td>97%</td>
</tr>
<tr>
<td>Emmett Conrad Collegiate Academy</td>
<td>115</td>
<td>113</td>
<td>98%</td>
</tr>
<tr>
<td>Thomas Jefferson Collegiate Academy</td>
<td>124</td>
<td>120</td>
<td>97%</td>
</tr>
<tr>
<td>James Madison Collegiate Academy</td>
<td>95</td>
<td>90</td>
<td>95%</td>
</tr>
<tr>
<td>Pinkston Collegiate Academy</td>
<td>113</td>
<td>111</td>
<td>98%</td>
</tr>
<tr>
<td>Franklin Roosevelt Collegiate Academy</td>
<td>113</td>
<td>105</td>
<td>93%</td>
</tr>
<tr>
<td>Seagoville Collegiate Academy</td>
<td>115</td>
<td>112</td>
<td>97%</td>
</tr>
<tr>
<td>South Oak Cliff Collegiate Academy</td>
<td>113</td>
<td>107</td>
<td>95%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>906</strong></td>
<td><strong>872</strong></td>
<td><strong>96%</strong></td>
</tr>
</tbody>
</table>

*Note: BOY=Beginning of Year--October 31, 2016, EOY=End of Year--April 3, 2017. There were two students who transferred between Collegiate Academy campuses.*
Shasta Buchanan, Ph.D.
Executive Director of College and High School Relations
Austin Community College District
COLLEGE & HIGH SCHOOL RELATIONS
Career – Focused High School Educational Partnerships

Shasta Buchanan, Ed.D.
Executive Director
College and High School Relations
College & High School Relations

The role of College and High School Relations is to enable students to experience college and potential careers by enrolling in courses at Austin Community College (ACC) while still in high school.

Our commitment to students is to provide guided access to college through quality instruction, support, and guidance to ensure academic success.
## Partnership Planning

### CHECKLIST

<table>
<thead>
<tr>
<th>Task</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Careers:</strong> Identify High Demand Careers (Central Texas)</td>
<td></td>
</tr>
<tr>
<td><strong>Credential:</strong> Identify College Certifications aligned with careers</td>
<td></td>
</tr>
<tr>
<td><strong>Locations:</strong> Identify campus locations for certification offerings</td>
<td></td>
</tr>
<tr>
<td><strong>Enrollment:</strong> Recommended enrollment per cohort</td>
<td></td>
</tr>
<tr>
<td><strong>Faculty:</strong> Identify faculty needed to support program</td>
<td></td>
</tr>
<tr>
<td><strong>Inaugural Year:</strong> Identify potential district/high school partners</td>
<td>Summer</td>
</tr>
<tr>
<td><strong>Future:</strong> Identify additional district/high school partners</td>
<td></td>
</tr>
<tr>
<td><strong>Alignment:</strong> Collaboration between College/School District to align college workforce and CTE courses</td>
<td>Fall (September – October)</td>
</tr>
<tr>
<td><strong>Student Recruitment:</strong> School Visits, marketing, communication to students and parents regarding opportunities</td>
<td>Fall (October – December)</td>
</tr>
<tr>
<td><strong>Choice Sheets:</strong> Ensure pathway is an option for student selection</td>
<td>Spring (January – February)</td>
</tr>
<tr>
<td><strong>Monitor Registration:</strong> Ensure cohort enrollment is met</td>
<td>Spring (February – May)</td>
</tr>
<tr>
<td><strong>Orientation:</strong> Prepare new students for certification program</td>
<td>(May – June)</td>
</tr>
<tr>
<td><strong>Communication:</strong> Continued communication with students/parents</td>
<td>(June – August)</td>
</tr>
</tbody>
</table>
Career Academies

Career Academies enable high school students to earn entry-level certificates. Through the Academies, students can earn a Level I Certificate or Marketable Skills Award (MSA) and fulfill college course requirements that apply to a variety of academic degrees. Career Academy students also are guaranteed a paid internship or clinical rotation based on their pathway.

Current Career Academies

• **Information Technology**
  - User and Computer Support
  - Web Specialist
  - Apple SWIFT Coding (Fall 2018)
  - *Computer Programming (future pathway)*

• **Health Sciences**
  - Phlebotomy
  - Pharmacy Technician
  - Emergency Medical Technician
  - *Certified Nurse Aide (future pathway)*

• **Construction Trades**
  - Carpentry
  - Electrician
<table>
<thead>
<tr>
<th>ISD</th>
<th>ISD COURSE NAME</th>
<th>PEIMS NUMBER</th>
<th>ACC COURSE NUMBER</th>
<th>ACC COURSE NAME</th>
<th>SEMESTER</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>User Computer Support Certificate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Business Information Management I</td>
<td>13011400</td>
<td>COSC 1301</td>
<td>Introduction to Computing</td>
<td>Fall</td>
</tr>
<tr>
<td></td>
<td>Business Information Management II (if BIM I has been completed)</td>
<td>13011500</td>
<td>COSC 1301</td>
<td>Introduction to Computing</td>
<td>Fall</td>
</tr>
<tr>
<td></td>
<td>Telecommunications &amp; Networking</td>
<td>13027400</td>
<td>ITNW 1325</td>
<td>Fundamentals of Networking Technologies</td>
<td>Fall</td>
</tr>
<tr>
<td></td>
<td>Computer Maintenance</td>
<td>13027300</td>
<td>ITSC 1325</td>
<td>Personal Computer Hardware</td>
<td>Spring</td>
</tr>
<tr>
<td></td>
<td>Virtual Business</td>
<td>13012000</td>
<td>ITNW 1337</td>
<td>Introduction to the Internet</td>
<td>Spring</td>
</tr>
<tr>
<td></td>
<td><strong>Marketable Skills Award granted after these 4 courses are completed</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Computer Technician</td>
<td>13027500</td>
<td>ITSC 2339</td>
<td>Personal Computer Help Desk</td>
<td>Fall</td>
</tr>
<tr>
<td></td>
<td>Business Information Management II (if not previously completed)</td>
<td>13011500</td>
<td>ITSW 1304</td>
<td>Introduction to Spreadsheets</td>
<td>Fall</td>
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<tr>
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<td>Problems &amp; Solutions I</td>
<td>12701500</td>
<td>ITSC 2335</td>
<td>Application Problem Solving Support</td>
<td>Spring</td>
</tr>
<tr>
<td></td>
<td>Problems &amp; Solutions II</td>
<td>12701510</td>
<td>ITMT 1400</td>
<td>Implementing &amp; Supporting Microsoft Windows</td>
<td>Spring</td>
</tr>
</tbody>
</table>
Innovative Academies enable high school students to earn an Associate Degree while completing high school. Innovative Academies also provide students with access to specific industry partners for mentorship, job shadowing, and internships/clinical rotations.

Current Innovative Academies supported by Austin Community College

- **Computer & Information Technology**
  - **Degree:** Associate Degree – Computer Science
  - **Industry Partner:** Dell

- **Health Sciences**
  - **Degree:** Associate Degree – Pre-Health Sciences
  - **Industry Partner:** Seton Family

- **Technology & Manufacturing:**
  - **Degree:** Associate Degree – Automation, Robotics, and Controls Technology
  - **Industry Partners:** Samsung & Applied Materials
Re-Imagining Articulated Credit
(formerly Tech Prep Program)

Beginning Fall 2018, ACC will offer articulated credit for students enrolled in 9th and 10th grade classes followed by Workforce/Dual Credit for students enrolled in 11th and 12th grade classes. This allows students to explore college-level courses in the first two years and become more thoughtful of their course choices in the final two years of high school. This plan provides a four-year pathway for students, which in most cases, can lead to a Level 1 Certificate or Occupational Skills Award by high school graduation.

Phase I

- **Automotive.** Occupational Skills Award or Level I Certificate
- **Information Technology – Software Testing.** Level I Certificate
- **Computer Programming.** Java Track Certificate
- **Culinary Arts.** Level I Certificate
- **Pastry Arts.** Level I Certificate
- **Hospitality Management.** Level I Certificate
College and High School Relations
Supporting high school students in college credit classes

Access & Programming

Advising & Workshops

Communications
Questions & Discussion

Shasta Buchanan, Ed.D.
Executive Director – College and High School Relations
shasta.buchanan@austincc.edu
512.223.7679
Lily Laux, Ph.D.
Executive Director, School Programs
Texas Education Agency
# TEA Strategic Priorities

**One Mission. One Strategy.**

<table>
<thead>
<tr>
<th>Strategic Priorities</th>
<th>Enablers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recruit, support, and retain teachers and principals</strong></td>
<td>Increase transparency, fairness and rigor in district and campus <strong>academic</strong> and <strong>financial</strong> performance</td>
</tr>
<tr>
<td><strong>Build a foundation of reading and math</strong></td>
<td>Ensure compliance, effectively implement legislation and inform policymakers</td>
</tr>
<tr>
<td><strong>Connect high school to career and college</strong></td>
<td>Strengthen <strong>organizational foundations</strong> (resource efficiency, culture, capabilities, partnerships)</td>
</tr>
<tr>
<td><strong>Improve low-performing schools</strong></td>
<td></td>
</tr>
</tbody>
</table>

Every child, prepared for success in college, a career or the military.
Priority 3: Theory of Action

If the agency and its partners identify current and future career opportunities in Texas…

and if the agency and its partners collaborate to identify the educational requirements that prepare for successful entry in these careers…

and if the agency creates, supports and incentivizes the implementation of innovative and rigorous school models and courses that support these requirements…

and if the agency develops and facilitates access to resources for families, educators and partners to increase adoption of these pathways…

and if the agency markets the dissemination and effective use of these resources…

…then the agency will empower educators in connecting high school to career and college
New Look and Feel

https://tea.texas.gov/ECHS/
Texas Early College High School

Design Elements

All designated ECHSs (Provisional, Early College, Distinguished Early College) are required to meet all of the design elements for each benchmark annually.

Outcomes-Based Measures (OBMs)

All designated ECHSs (Provisional, Early College, Distinguished Early College) are required to meet OBM on data indicators related to access, achievement, and attainment.

Provisional Early Colleges are new ECHSs that demonstrate they can implement all the design elements for each benchmark and meet the Provisional Early College OBM. For public purposes, campuses are identified as Early College.

Early College designees maintain designation by demonstrating they can implement all of the design elements for each benchmark and meet the Early College OBM.

Distinguished Early Colleges have been designated as Early Colleges for at least five years, and demonstrate that they can implement all of the design elements for each benchmark and meet the Distinguished Early College OBM.

Needs Improvement

At any time, if an ECHS doesn’t meet the OBM, the ECHS may be categorized as needs improvement and will receive targeted technical assistance and has no more than two years to meet the OBM or no longer receive designation. If a Distinguished Early College doesn’t meet the OBM, the ECHS will be designated as an Early College, given that they meet the Early College OBM.
Existing Early College High School Designation Process

Existing ECHS reapply to become designated for the 2018-2019 school year.

Required to meet all design elements.

Meet OBM for 9th grade cohort for 2018-2019 school year.

Meet OBM for 9th & 10th grade cohorts for 2019-2020 school year.

Meet OBM for 9th, 10th, & 11th grade cohorts for 2020-2021 school year.

Meet OBM for 9th, 10th, 11th, & 12th grade cohorts for 2021-2022 school year.

ALL OBM MET:
Redesignated as an Early College or Distinguished Early College

NEEDS IMPROVEMENT:
ECHS will receive targeted technical assistance

If OBM not met:
New Early College High School Designation Process

District interested in opening new ECHS campus

Apply for a planning year

Once accepted into the planning year, engage in one year of planning with the TEA selected technical assistance provider and meet the planning year requirements

Engage TA Provider

One year of planning

... apply to become a Provisional Early College

After the planning year requirements are met, then...

Apply to become Provisional Early College

Once designated, spend the next four years growing cohorts, improving programming, and building strong partnerships

Provisional Early College

Four years

Each year, the provisional ECHS should be meeting design elements and targets.

Grow

Improve

Build

Meet all design elements and provisional outcomes year

After first graduating cohort, district can apply to become an Early College

Blueprint

Early College

Texas Education Agency

Texas Early College High School
Charlotte Cahill, Ph.D.
Associate Director, Pathways to Prosperity Network
Jobs for the Future
Building Strong Regional Career Pathways
A National Perspective

CHARLOTTE CAHILL
NOVEMBER 1, 2017
OUR MISSION

Jobs for the Future (JFF) works to ensure that all lower-income young people and workers have the skills and credentials to succeed in our economy.

OUR VISION

The promise of education and economic mobility in America is achieved for everyone.
**OUR GOALS**

**EVERY REGIONAL AND STATE ECONOMY**
Thriving and providing opportunities for upward mobility to its citizens

**EVERY EMPLOYER**
Strong pipeline of young professionals with the skills needed to contribute to and lead the workforce

**EVERY YOUNG PERSON**
Clear college and career goals that are responsive to labor market, with the supports to achieve them

**EACH OF US**
Partnering across silos and sectors to build systems of in-demand, high-quality pathways
KEY IMPLEMENTATION LEVERS

Engaged employers: work-based learning opps. & curricula support

Intermediary links between education & employers

Early, sustained career information, awareness, & exposure

Committed state leaders & favorable policy environment

Rigorous Academic & Career Grades 9-14+ Pathways

PATHWAYS TO PROSPERITY

JOBS FOR THE FUTURE

HARVARD GRADUATE SCHOOL OF EDUCATION
WHY GO REGIONAL?

- Shared learning
- Coordinated employer engagement
- Economies of scale and increased staff capacity
- Shared data, metrics, and analysis
- Coalition of policy advocates
LABOR MARKETS ARE REGIONAL

Source: https://onthemap.ces.census.gov/
WHO MAKES IT HAPPEN?
A REGIONAL PATHWAYS ECOSYSTEM

Intermediaries

- Business & Industry
- Colleges & Universities
- K-12 Schools
- Community-Based Organizations
- Government Agencies
INTERMEDIARIES: KEYS TO BUILDING A REGIONAL ECOSYSTEM

Convening functions

• Provides vision and voice
• Convenes key players
• Operationalizes the work
• Analyzes data and metrics
• Builds public support

Work-based learning functions

• Bridges education and industry
• Brokers and aggregates opportunities for sequenced WBL
• Recruits industry champions and partners
• Prepares both students and employers for WBL placements
• Analyzes labor market

“Glue” in the pathways ecosystem
IT TAKES A REGION:
CARROLL COUNTY, GEORGIA

PATHWAYS TO PROSPERITY
Questions from the Audience
Table Activity: Opportunities for Action

• *Each person at your table should get some stickie notes*

• Brainstorm opportunities within your region to better align college & career pathways (3 minutes)

• Begin silently grouping stickie notes together by emerging themes (2 minutes)

• Articulate themes (write title) and discuss opportunities for action (5 minutes)
Thank You!

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Guided Pathways

P16 Texas Prospect Summit
Pathways Alignment Strand
November 02, 2017
Carolyn Landel, Ph.D.
Managing Director, Charles A. Dana Center
WHY REDESIGN COMMUNITY COLLEGES?

• ½ of all undergraduate students in Texas attend community colleges

• Community colleges play critical role in meeting goals of 60X30TX

• In Texas:
  • 27% community college students earn degree or certificate within 6 years
  • Average time to associate degree: 4.4 years
  • Average semester credit hours earned for associate degree: 90 SCH

• Attainment of credentials with value in the workforce promotes social and economic mobility
• Paths to student end goals unclear
• Program requirements confusing
• Lack of curricular coherence and alignment with goals
• Optional orientation and advising
• Learning outcomes focus on courses, not programs
• Instructors isolated and rarely engage in professional development
• Student progress not monitored
• Poor communication between advisors and academic departments
• Scaling discrete best practices will not achieve substantial improvements in outcomes
• Effective organizations align practices to achieve goals

• Having too many choices leads to decision paralysis
• Simplified set of options with cost-benefit information can help people make optimal decisions

• Students benefit when they have clear learning goals and concrete sense of progress toward those goals
• Instructional program coherence improves learning
GUIDED PATHWAYS

• Integrated, system-wide approach
• Intentionally designed, clear, coherent and structured educational experiences
• Guide each student from the selection of their high school degree program to postsecondary entry through to attainment of high-quality credentials and careers with value in the labor market
Redesigning Students’ Educational Experience Across the Full Educational System

<table>
<thead>
<tr>
<th>K-12 Partners</th>
<th>CONNECT</th>
<th>ENTER</th>
<th>PROGRESS</th>
<th>SUCCEED</th>
<th>4-year &amp; Industry Partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th Grade – High School Graduation Adults</td>
<td>On-Ramps – Gateway Courses</td>
<td>Structured Programs of Study – Productive Persistence</td>
<td>Certificates Associate Degrees Meaningful Jobs Efficient Transfer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
GUIDED PATHWAYS IMPLEMENTATION

• Clarify the paths
• Get students on a path
• Help students stay on their path
• Ensure students are learning
• Pathways Institutes
• Regional meetings
• Board of Trustees Institutes
• Knowledge development
IMPLEMENTING GUIDED PATHWAYS
GUIDED PATHWAYS MODEL

- Programs fully mapped and aligned with transfer or employment goals
- Students guided in program selection
- Foundational skills integrated and contextualized in program courses
- Student learning outcomes specified across programs
- Faculty engage in professional development and assess program outcomes
- Student progress on academic plans is closely monitored
- Advisors work closely with program faculty
- Students know what they need to do to complete their programs
Thank You!

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