# Transitions American Style: Emerging Lessons from Building Early College Pathways from Grades 9-14 in the U.S.

July 2013

Bridging the Divides: Transitions from Secondary to Tertiary and into Employment

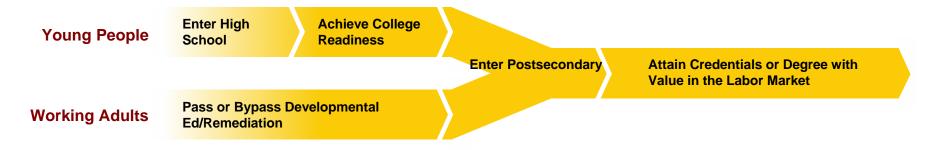
New Zealand's Third National Conference on Multiple Pathways and Transitions



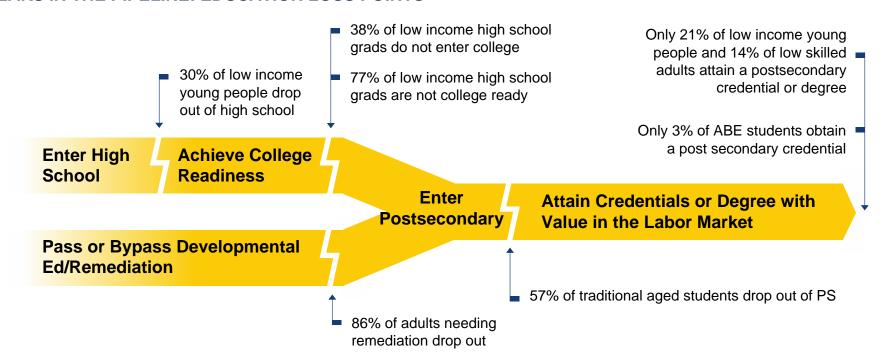


# JFF: ENSURING UNDERPREPARED YOUTH & ADULTS HAVE POSTSECONDARY CREDENTIALS WITH LABOR MARKET VALUE

#### THE EDUCATION TO ECONOMIC OPPORTUNITY PIPELINE



#### LEAKS IN THE PIPELINE: EDUCATION LOSS POINTS





#### **HOW JFF DOES ITS WORK**





### DEVELOP EVIDENCE-BASED INNOVATIONS

- Develop promising education and career advancement innovations
- Prototype, test, evaluate and continuously improve models based on evidence
- Codify strongest strategies, including documenting costs and financing



### BUILD FIELD CAPACITY FOR SCALE

- Create products, tools and technology platforms to accelerate implementation of successful solutions
- Assist states, districts, community colleges and intermediaries in implementing proven teaching and learning models
- Accelerate knowledge development through technologyenhanced networks

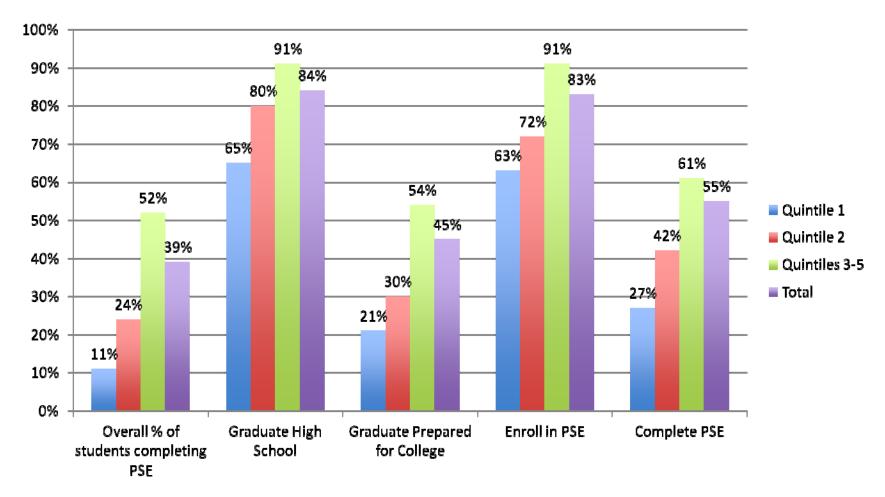


# ADVOCATE & INFLUENCE POLICY

- Craft state and federal policies, including sustainable funding streams, to promote the widespread adoption of proven solutions
- Elevate visibility of and demand for evidence-based solutions
- Remove policy barriers to increasing supply
- · Increase incentives for adoption



# Transitions from High School to & through College Lose Many Youth, Primarily Low-SES Students

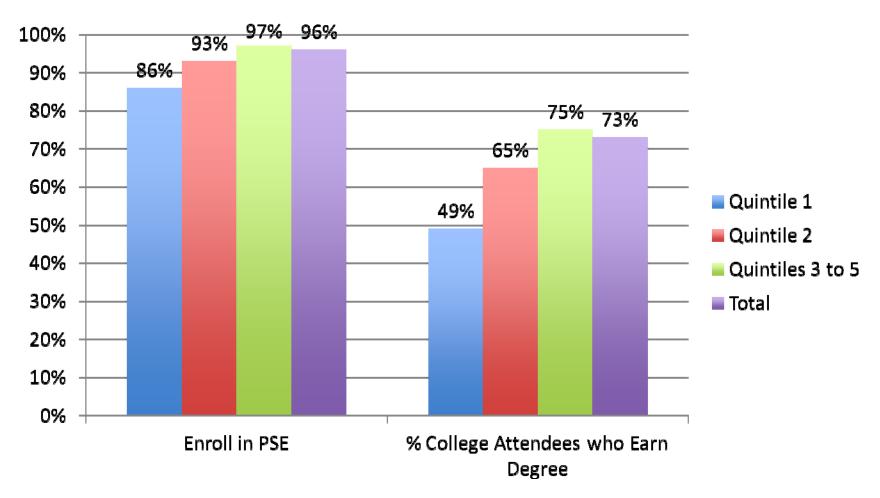


Percentage of 8th graders by SES who attain different levels of education

Source: Analysis of NELS data by Optimal Solutions for JFF



# Academic Preparation is an important, but not the only, factor in PSE access & success — especially for low-income youth



Outcomes of "Somewhat to Highly Prepared" College-Ready High School Graduates by SES

Source: Analysis of NELS data by Optimal Solutions for JFF



### You don't know what you don't know

12th Grade Student: "I know there was this one instance where [my mentor] wanted me to take either physics or chemistry or something like that. And I was kind of sketchy on taking it, and she was trying to get me to take it. And I'd go to my counselor and ask her about it. And she said, 'Oh, you know, you really don't need to take it to graduate. Whatever, whatever.' Because she didn't really expect me to go to college or anything anyway. So, she's like, 'You know you don't really need to take it to graduate. And you can take this other class instead.' And so, I just took the other class." [chuckles]

Citation: Vargas, J. (2003) Interactions Between College Access Programs and High Schools: Sorting out the Role of Individualization in Students' Access to Courses. Dissertation. Cambridge, MA: Harvard University Graduate School of Education.



### **Academic Press + Support Often Lacking in Schools**

Adult Advocate: "When students start to struggle in classes, their first thought is, "This isn't right for me. I can't do it.' They don't have a parent at home saying, you know, 'Of course you're going to college. Of course this is the right track for you. Of course you can succeed.' And so their first inclination is to say, 'I'm reaching too far. I can't do this. . . .' If they get a D on the test, it's like, 'I should drop this class."

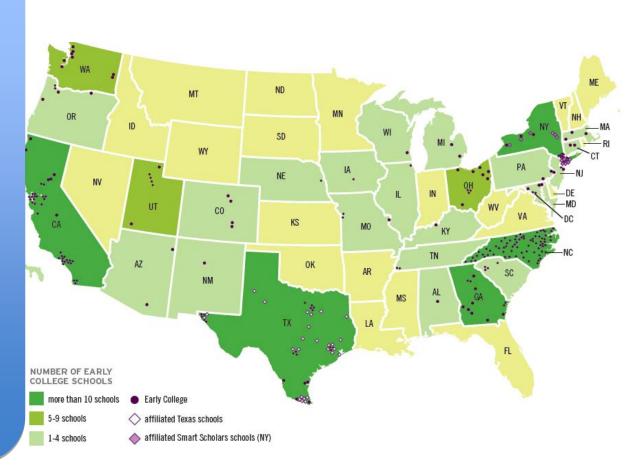
Citation: Vargas, J. (2003) Interactions Between College Access Programs and High Schools: Sorting out the Role of Individualization in Students' Access to Courses. Dissertation. Cambridge, MA: Harvard University Graduate School of Education.



### **EARLY COLLEGE HIGH SCHOOLS: NATIONAL PICTURE**

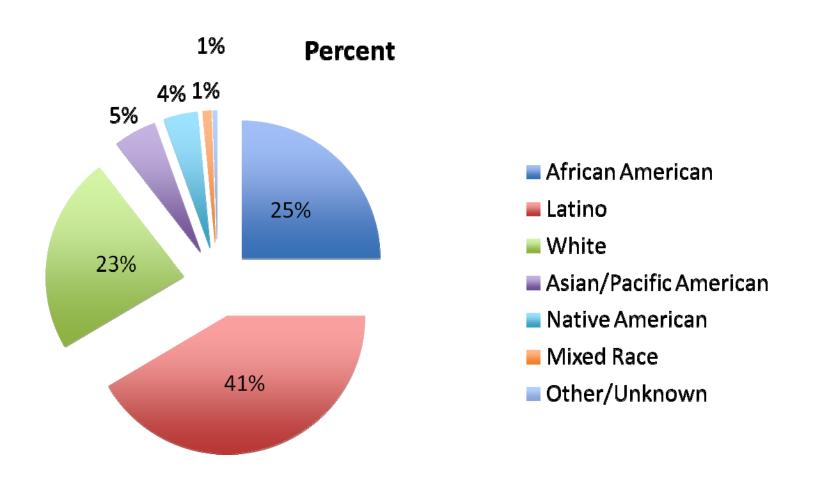
#### Early College High Schools

- Small, autonomous schools, operated in close connection with postsecondary institutions
- Students can earn an
   Associate's degree or up to 2
   years of transferable college
   credit
- Schools enroll about 100 students per grade and can start in grades 6, 7, or 9
- Can be a STEM or CTE-focused school
- Instructional coherence and continuous improvement are core to the design





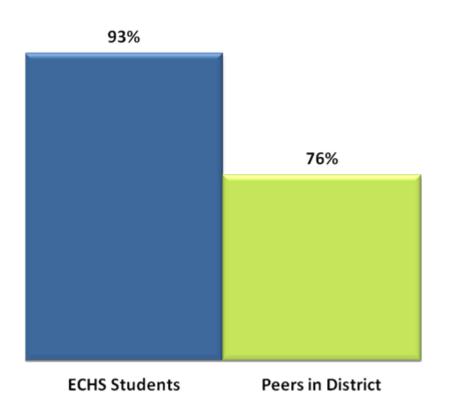
# WHO DO EARLY COLLEGE SCHOOLS SERVE?





### **EARLY COLLEGE RESULTS**

# **Graduation Rates**



# College Credit Attainment in High School

- 36 credits on average
- 23% earned an Associate's degree upon graduating

College Enrollment: 72% vs. 55%

College Persistence: 82% vs. 69%



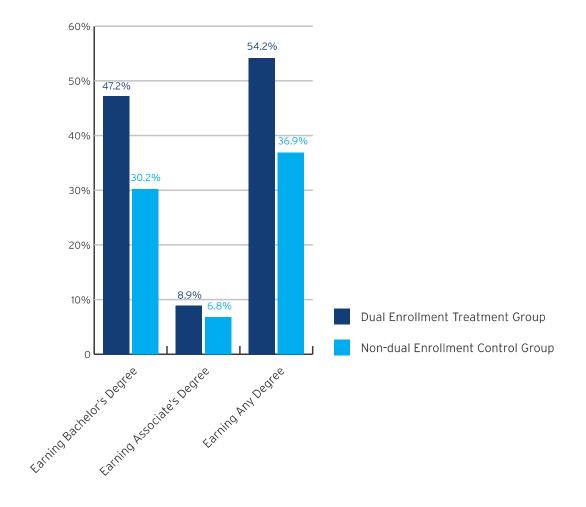
# Early College Research using Experimental and Quasi-Experimental Design

- (1) Edmunds, J.A.; Willse, J.; Arshavsky, N.; Dallas, A. (2012). *Mandated engagement: the impact of early college high schools*. Under revision for Teachers College Record;
- (2) Edmunds, J.A., Bernstein, L., Unlu, F., Glennie, E., Smith, A., Arshavsky, N. (2012). *Keeping students in school: Impact of the early college high school model on students' enrollment in school.* Paper presented at the Annual Meeting of the Society for the Research on Educational Effectiveness, Washington, DC.
- (3) SRI International. (2011). Evaluation of the Texas High School Project: Third comprehensive annual report. Austin, TX: Texas Education Agency.
- (4) Berger, A., et al. (Forthcoming): *Early College High School Initiative Impact Study*. Washington, D.C.: American Institutes for Research.



# **Texas Dual Enrollees Complete College at Higher Rates than Peers**

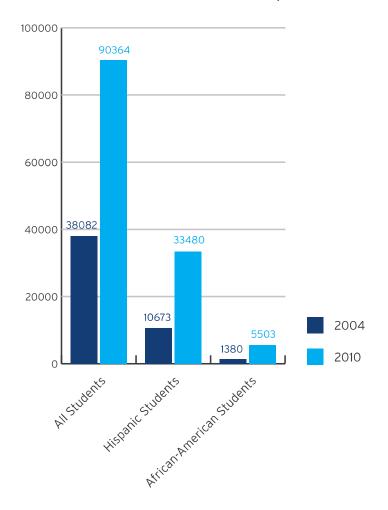
# COLLEGE COMPLETION RATES FOR STATISTICALLY MATCHED COLLEGE ENROLLEES, TEXAS, 2004 HIGH SCHOOL GRADUATING CLASS





# **Growth of Dual Enrollment in Texas**

FIGURE 1.
DUAL ENROLLMENT PARTICIPANTS, 2004-10



# **Policy Issues**

# Do No Harm

- --Funding
- --Regulatory Assumptions

# **Level Playing Field**

- --Advanced Placement
- --Low-Income Student Preparation and Access

# **Incentives for Partnerships**

- --Finance
- --Accountability



### **ECHS 2.0: EARLY COLLEGE DESIGNS**

### Early College High Schools

- Small, autonomous schools, operated in close connection with postsecondary institutions
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- Schools enroll about 100 students per grade and can start in grades 6, 7, or 9
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### Early College Designs

- Accelerated pathways for all starting in ninth grade, with course sequences aligned to collegeready standards
- Designed so that as many students as possible complete a minimum of 12 college credits, including gatekeeper courses in math and English composition
- Dual enrollment options may also include STEM and CTE options
- Aligned with postsecondary programs of study
- Instructional coherence and continuous improvement are core to the design



#### STEM-EARLY COLLEGE SCHOOLS

- 60 early colleges in ECHSI explicitly have a STEM focus.
- Students earn 1-2 years of transferable college credit or an Associate's Degree
- Examples:
  - Academy for Math, Engineering, and Science (Utah)
    - Senior Project, Applied Technology-Internship/Work-Based Learning, Course alignment with first year Engineering major (University of Utah)
  - College Connection Academy (California)
    - Paid Summer Apprenticeship or Internships, Career Exploration in energy/ecology, engineering, and health/medical fields and performing arts, service learning requirement
  - Metro Early College High School (Ohio)
    - Mastery in Core High School Subjects (18 credits) permits students to enroll in Ohio State
      U. courses; time is flexible as students work on independent studies/short term extensions
      on content they have yet to master.
  - 25% of graduates earn an Associate's Degree



# EMERGING MODELS: GRADE 9-14 PATHWAYS

- Serve a broad range of students
- Integrate academic and CTE curriculum across high school and community college
- Enable students to meet Common Core State Standards and to complete a minimum of 12 college credits before high school graduation
- Incorporate work-based learning experiences and outcomes set in collaboration with employers
- Embed support structures such as cohorts, learning communities, and sustained advising
- Culminate in a credential that regional employers value



CS

CS

Intro to STEM

Intro to STEM

Degree Technical

Degree

(Networking) - AAS

Technical (IT /

Database & Web

Design) - AS Degree CS

Solving

Intro to

Problem

Solving

Intro to

Problem

Solving

# **GRADES 9-14 IN DEVELOPMENT (DRAFT)**

**Programming** 

Intro to

**TBD** 

Systems

	9th	10th	11th	12th	1	2	1	2
English	English I	English II		English IV or Eng 101	Eng 102	Speech		
Math	Algebra I (10x)	Geometry	Algebra II	Pre-Calc (CCC) or Statistics (CCC)	Calc I (CCC)	Calc II (CCC) optional		
	Physics or Biology	Biology or Chemistry	Chemistry or Physics		Science I		Science II	
Soc Science	World Studies	US History		Soc Science (CCC)	Humanities I	Humanites II Social Sciences II	Humanities II Social Sciences II	
World Lang.		World Lang I	World Lang II					
Fine Arts			Fine Arts I	Fine Arts II (CCC)				
PE	PE I	PE II	PE III	PE IV				
Career/ROTC/ Adv. Acad.	(see Intro to STEM CS)	(see Intro to Problem Solving)						
Electives (3 additional)	Reading		(see CCC Tech Course)	(see CCC Tech Course)				
Technical (CS) - AS	Intro to STEM	Intro to Problem	Intro to	Program	Program	Information		

Design I

Cisco I & II

**TBD** 

Design II

**TBD** 

Cisco III & IV

Ntwrk Security

13 - semester 13 - semester 14 - semester 14 - semester

Architechture

**TBD** 

Practicum

Practicum

**TBD** 

18

**TBD** 

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