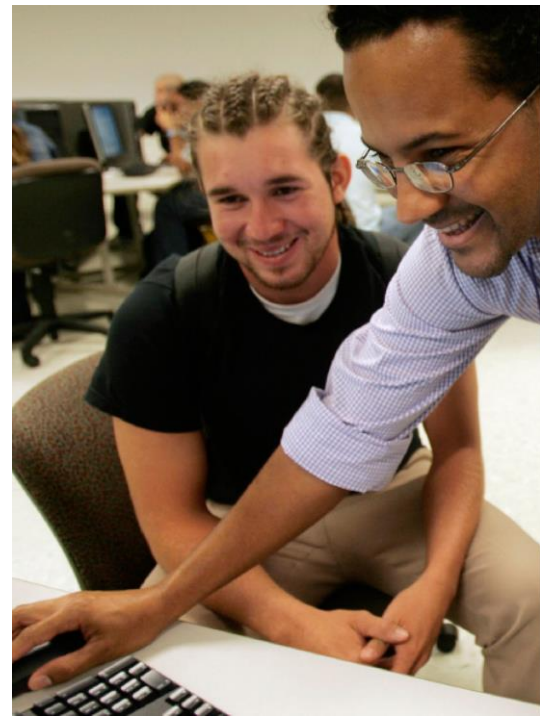


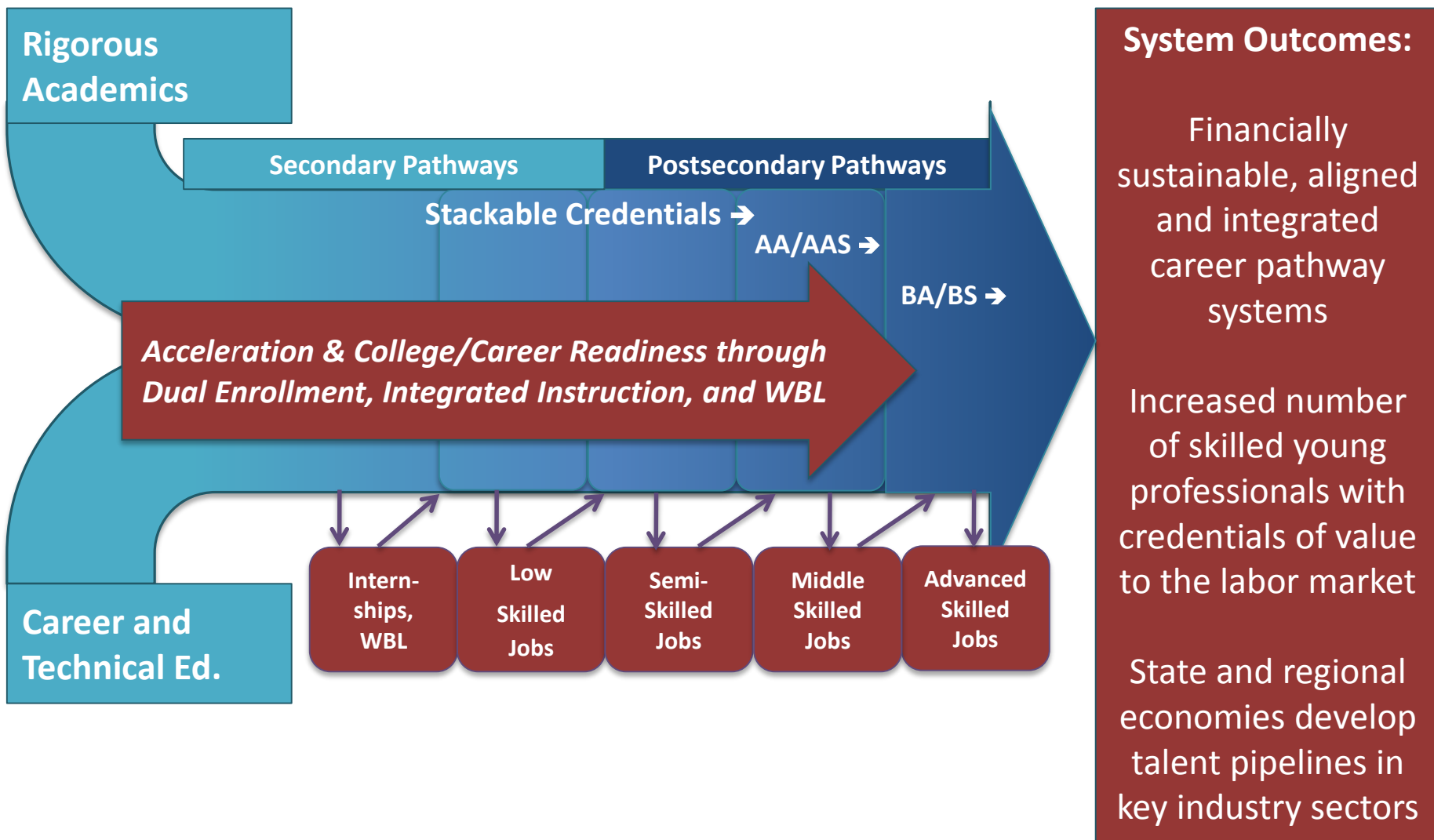
# Building Pathways: *Integrating and Aligning High School and College*

Inspiration: Amy Loyd, EdLD

**CHAIN 5 Conference 2016 Aalborg  
Ole Faaborg ABC & UCN**



# GRADES 9-14 INTEGRATED PATHWAYS



# WHAT ARE CAREER PATHWAYS?

## These pathways:

- Are a **partnership** linking and integrating a high school and community/technical college that enable students to earn dual credit ( $\geq 12$  credit hours) at no cost to them and make a **seamless transition**
- Are **informed by labor market** needs and culminate in a **postsecondary credential** that regional employers value
- Serve a **student body that is representative** of the high school, district, and/or college's student population
- **Integrate academic and CTE** curriculum across high school and community college in a Common Core-aligned program of study
- Embed **authentic work-based learning** experiences tied to careers
- Like a hybrid of ***Early College High Schools + Career Academies***; **actual indicators of college and career readiness and success!**

## CHALLENGES: NATIONAL CONTEXT

### **When building pathways, many regions struggle with:**

- Recent HS grads counseled into transfer programs
- Adults taking spaces in high demand career programs
- Lack of articulated/structured pathways
- Dearth of internship opportunities
- Few intermediaries to link employers, community colleges and schools
- Inconsistent employer engagement
- Stigma and lack of info about middle skills salaries and career ladders

## WHAT IS EARLY COLLEGE?

- Early college is an **educational transformation model**, developed and implemented by Jobs for the Future and our national partners over the last ten years.
- Early colleges are high schools and feeder middle schools that **bring college into high school** to provide underserved youth with a path to and through postsecondary education.



## EARLY COLLEGE CORE BELIEFS

- Early College High Schools have **high expectations for all students**
- Every student is **capable of college-level work** or college and career readiness.
- Students need **acceleration**, not remediation.
- Students learn best when **challenged and engaged** by instruction and **rigorous** academic work.





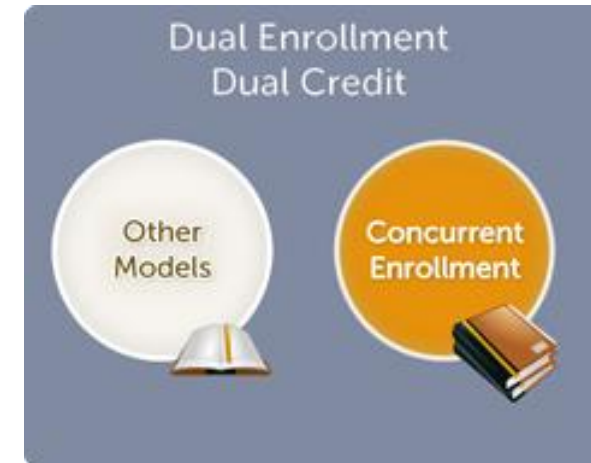
## EARLY COLLEGE FEATURES

- Students **earn a high school diploma and** up to two years of transferrable **college credit** – at no cost to them/tuition free
- A **rigorous instructional framework** aligned to college-ready standards
- A strong **college-going culture** throughout the school
- Student-centered learning and **student support**
- Location on or near **college campuses** to build students' identity as college goers

# EARLY COLLEGE MODELS

## Concurrent / Dual Enrollment

- Programs in which the high school student travels to the college campus or college faculty travel to the high school
- Programs where the student takes a course from a college instructor via distance education
- Articulation agreements so that student receives high school and college credits for the same course.



## Models

- Courses are held on college campus
- Courses are held on high school campus and taught by college staff or teachers who have adjunct faculty status
- Online / distance learning courses
- Hybrid models: combinations of the above



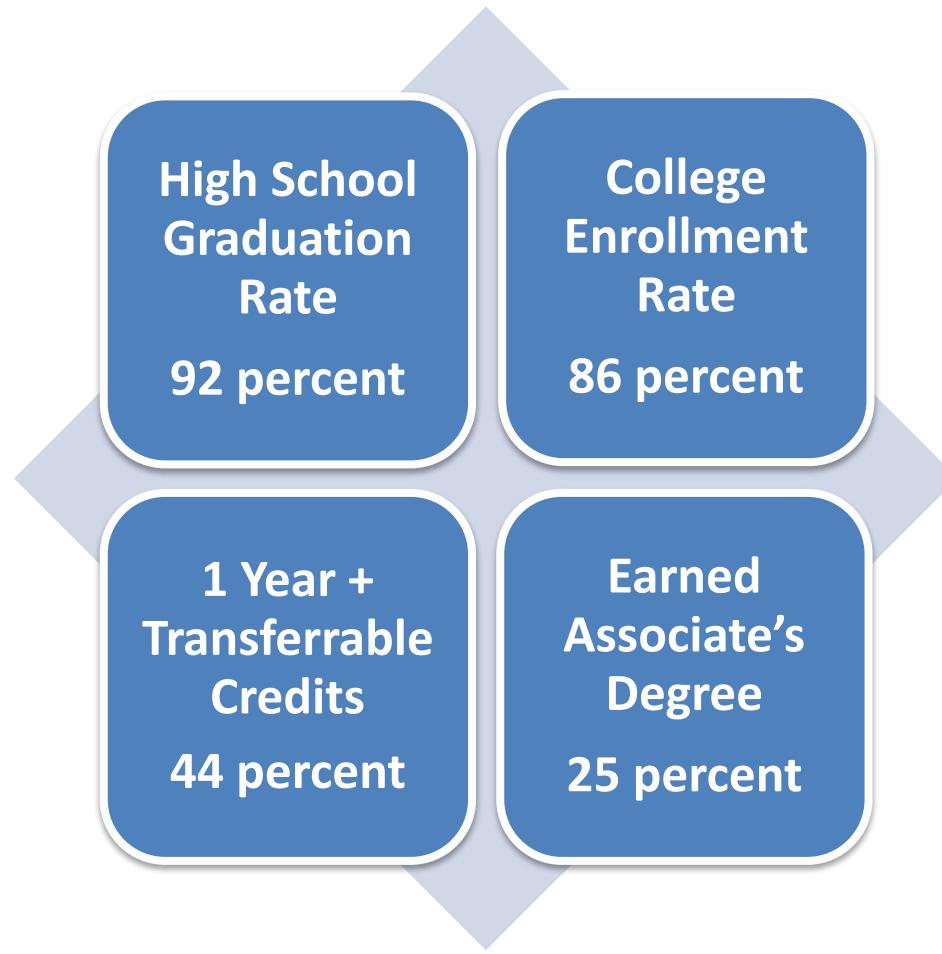
## NATIONAL SCOPE FOR EVIDENCE BASE

### Early College High Schools

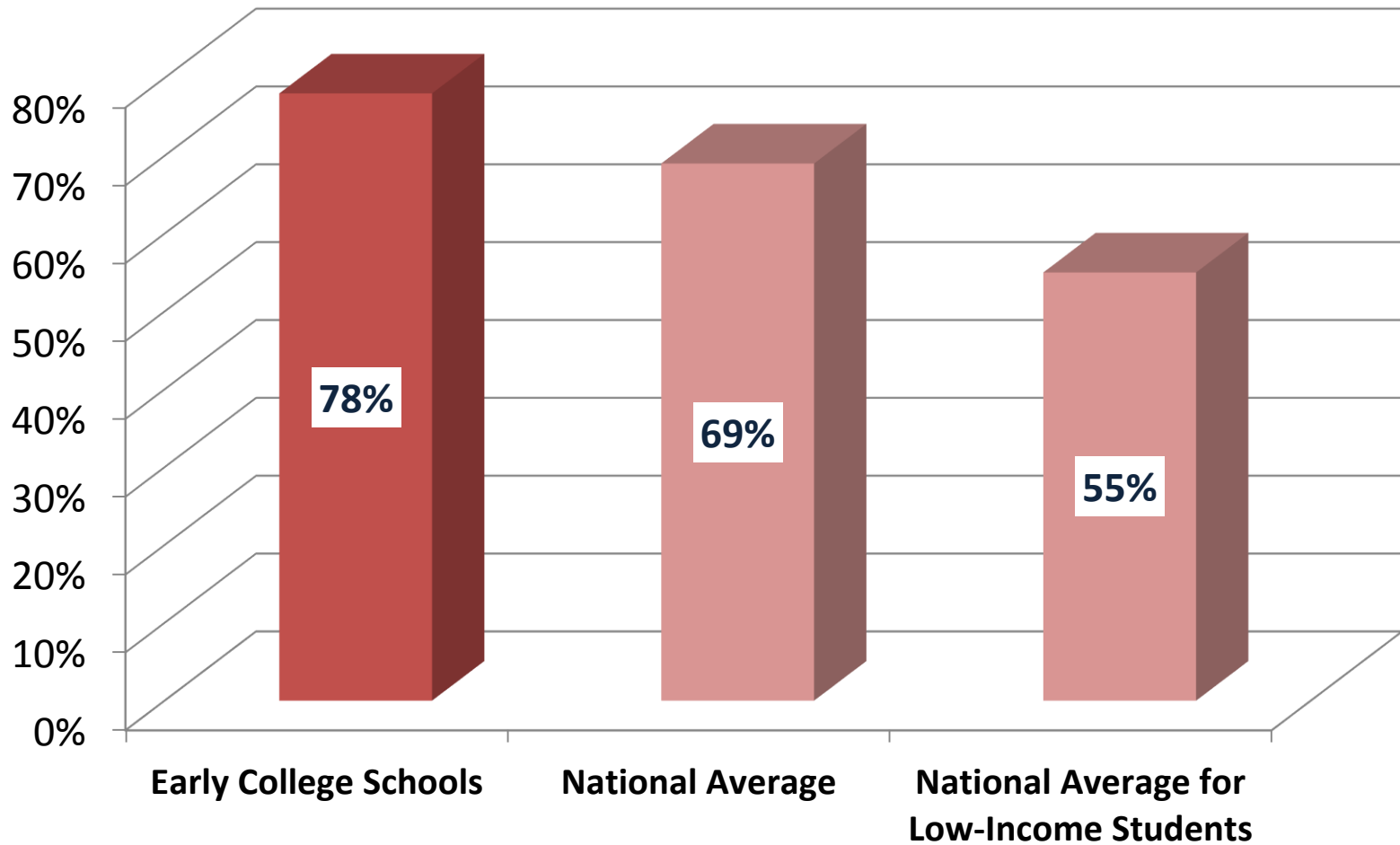


- Located in 26 states and the District of Columbia
- Around 300 schools from initial JFF Gates initiative; others started on their own
- Serve over 100,000 students
- Annual gathering of ~600 faculty, principals, and leaders

## OUTCOMES FROM EXTERNAL EVALUATION

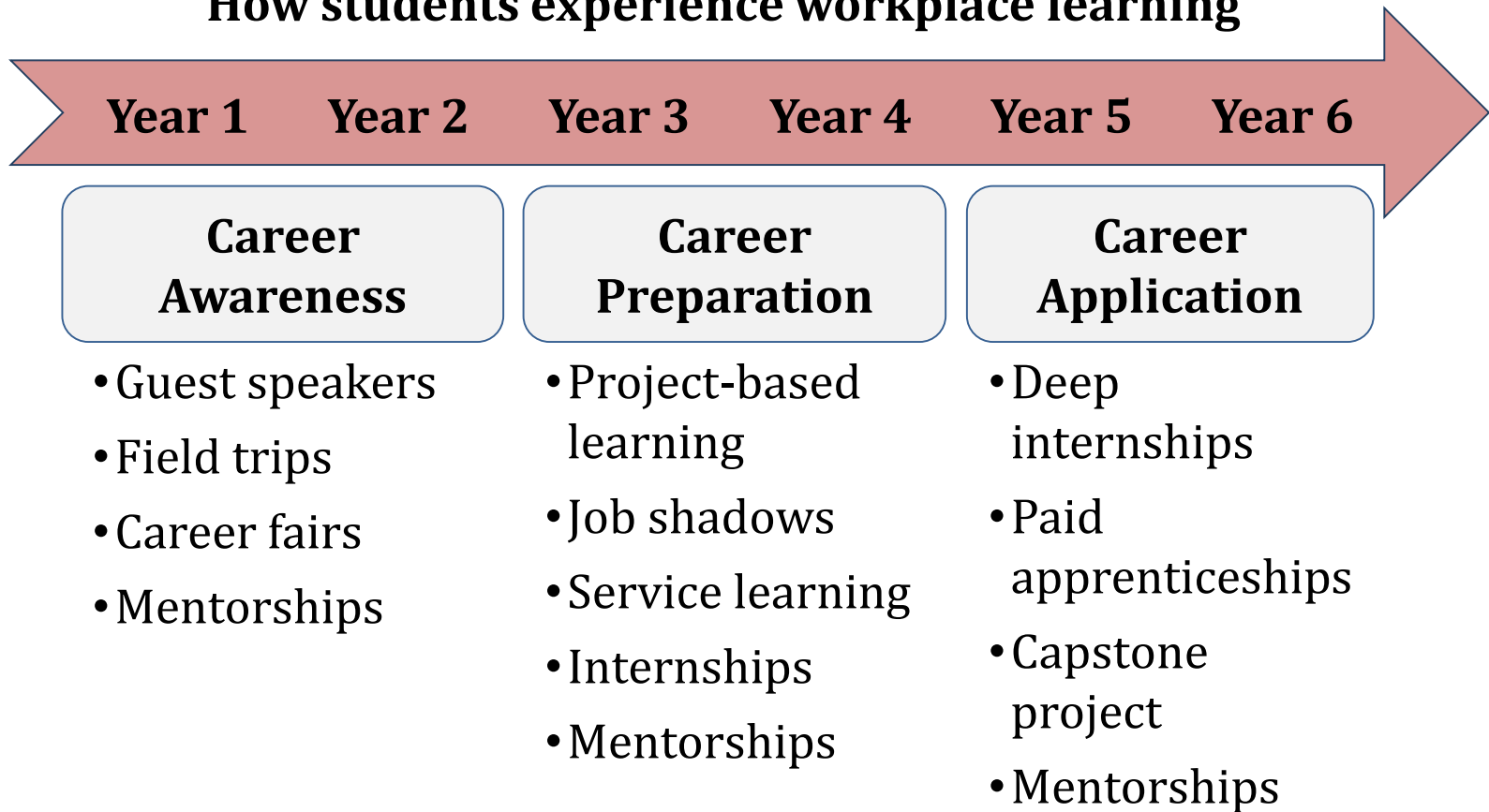


## % OF GRADUATES ENROLLING IN COLLEGE



# GRADES 9-14 WORK-BASED LEARNING

## How students experience workplace learning



GRADE	ENGLISH	MATH	SCIENCE	SOCIAL STUDIES	REQUIRED COURSES RECOMMENDED ELECTIVE COURSES OTHER ELECTIVE COURSES CAREER AND TECHNICAL EDUCATION COURSES			CREDENTIAL CERTIFICATE DIPLOMA DEGREE	SUGGESTED OCCUPATIONS
9	English I	Algebra I	Science	Social Studies	Computer Literacy - IT	Fundamentals of IC3		STRATA Fundamentals	PC Repair Technician
10	English II	Geometry	Science	History of Art	CompTIA A+	Introduction to Networking	Network +	Comptia A+	Networking Associate
11	English III	Algebra II	Health & PE	Social Studies	Network+	Approved Networking Elective		CCENT Comptia Net +	Telecom Cable Technician
12	English IV	Math Elective	Science	Social Studies	Security +	Approved Networking Elective		Security + Server + Linux + KOSSA Networking	Network Cable Installer
13: 1st Semester	Gen Ed - ENG 101 Writing I (3)	Gen Ed/Prereq - MT 150 College Algebra (3)			CIS 120 Program Design (3)	CIS 107 Database Apps (1 hr)	IT 130/132 Web Page Dev (4/3)	CIW Foundations	Networking Security Technician
13: 2nd Semester	Gen Ed - ENG 102 Writing II (3)	Gen Ed - Science with a lab (4)			IT 170 Intro Database (3)	Beginning Programming (3)	CIS 130 Micro Apps (3)		Network Administrator
14: 1st Semester	Gen Ed - Oral Communications (3)	Gen Ed - Social Interactions (3)			Networking Sequence I (3)	Networking Sequence II (3)	IT 250 Intro to Security (4)	Comptia Security +	
14: 2nd Semester	Gen Ed - Heritage / Humanities (3)			Security Elective (3)	Networking Sequence III (3)	IT 252 Attacks and Exploits (4)	IT 254 Firewalls & Perimeters (4)	Associate of Applied Sciences (AAS) KCTCS A+ Certification IT Fundamentals Certificate	

**Credit-Based Transition Programs (e.g. Dual/Concurrent Enrollment, Articulated Courses, 2+2+2)  
(Includes High School to Comm. College; Comm. College to 4-Yr Institution; Opportunity to test out)**

**Example pathway in IT: Network Administration/Information Security**, adapted from

<http://education.ky.gov/cte/cter/pages/ctecareerpathways.aspx>; funded by the U. S. Department of Education (VO51B020001)



**Pathways to  
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# CAREER PATHWAYS: PLANNING TOOL



## PATHWAYS VISION AND GOALS

- Is the pathway a **new** pathway to be created, or an **existing** pathway to be further developed?
- Is the pathway a **career academy** within a larger school, or a **standalone** school?
- Who are the high school and the community/technical college **partners**?
- What is the **postsecondary program of study** to which this pathway will link? What **credential** does it lead to?
- What is known about the **completion rates and labor market outcomes** of this postsecondary program?
- What do you want students to **know and be able to do** by the time they complete the pathway?
- What specific **culminating work-based experience** will students who complete this pathway have?

## 9-14 INTEGRATED PROGRAM OF STUDY

- What is the **course sequence** that will enable students to gain the identified skills? How are **curricula aligned/integrated** across high school and college?
- What **additional academic courses**, if any, will be part of this pathway?
- How will you ensure that **academics are taught in the context** of the pathway (e.g., through integrated projects and curriculum units, team teaching, lesson plans that embed CTE content in academic courses)?
- To what extent will **student supports**, such as cohorts, learning communities, and guidance, be built into the pathway?

## ENABLING POLICY & WBL

- What **community college and district policies and practices** enable or present barriers to:
  - Offering dual enrollment courses to a **broad range** of high school students?
  - **Financing the pathway**, including dual enrollment courses at no cost to the student?
  - Developing a program of study that **integrates academics with CTAE/STEM?**
  - Recruiting **qualified instructors** for courses in the pathway?
- Engaging **employers and work-based learning**:
  - How will the course sequences and curricula incorporate the **21st-century skills/“soft” skills** employers seek?
  - What **career exposure experiences** will you build into the pathway?
  - What **work-based learning experiences** will you build into your pathway?



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# ***ARE WE READY FOR THIS*** **CAREER PATHWAYS:** **SELF-ASSESSMENT QUESTIONS**

# CORE FEATURES



**Explicit Culture focused on College and Careers**



**Integrated Program of Study**



**Work-based Learning**



**Personalized Guidance and Supports**

# COLLEGE & CAREERS-FOCUSED CULTURE

## C

### Explicit Culture Focused on College and Careers

In Place

In Development

Not Yet

Staff creates a learning environment focused on academic and professional norms, mindsets, and practices as well as personal responsibility for one's own learning, career and life goals. [Guiding Questions](#)

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Staff continually assesses progress through strategic use of data, using attainment of a postsecondary credential valued in the labor market as the ultimate measure of success. [Guiding Questions](#)

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Staff creates a learning environment focused on academic and professional norms, mindsets, and practices as well as personal responsibility for one's own learning, career and life goals. [Guiding Questions](#)

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From the time of their enrollment, the physical setup and artifacts in the building, and the opportunities to experience college classes and college life, enable students to perceive themselves as college students. [Guiding Questions](#)

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Work-based exploration and learning is designed so students envision themselves as attaining their career goals.

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# INTEGRATED PROGRAM OF STUDY

## I

### Integrated Program of Study

In Place

In Development

Not Yet

The high school curriculum is aligned with Common Core State Standards and the Common Career Technical Core. [Guiding Questions](#)

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The full pathway curriculum culminates in a postsecondary credential with currency in the labor market. [Guiding Questions](#)

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The pathway is designed to enable students to complete a minimum of 12 dual enrollment college credits toward the postsecondary credential by high school graduation.

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Curriculum and course sequences are informed by employer needs and expectations. [Guiding Questions](#)

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Curriculum and course sequences map to the local community college and four-year degree requirements.

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Students' academic courses—in high school and college—are taught in the context of STEM/CTE pathways through, for example, integrated projects and curriculum units, team teaching, lesson plans that embed CTE content in academic courses, and real-world applications and problems.

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College coursework is transferrable to the state's four-year public system. [Guiding Questions](#)

☐☐☐

# WORK-BASED LEARNING

**W**

## Work-based Learning

In Place

In Development

Not Yet

Students follow a coherent sequence of work-based learning opportunities, ranging from career exploration to workplace internships.

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Work-based learning opportunities are pegged to employer needs and the pathway curriculum.

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Work-based learning opportunities allow students to apply their skills and knowledge to real-world problems, use multiple investigative methods, and create products of value.

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Work-based learning opportunities are organized to enable students to see connections to postsecondary programs of study.

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Work-based learning opportunities enable students to see all aspects of the career field and are sequenced to enable students to master higher levels of work within that career field.

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Where possible, students attain credits toward high school graduation and a college credential for work-based learning.

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# PERSONALIZED GUIDANCE AND SUPPORTS

## P

### Personalized Guidance and Supports

In Place

In Development

Not Yet

Students develop a clear, realistic, and detailed postsecondary and career plan that serves as a guide for ongoing career guidance and support. [Guiding Questions](#)

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Dual enrollment courses are accompanied by formal, intense academic support and scaffolding to ensure early college success. [Guiding Questions](#)

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Students develop an understanding of how they learn best, reflecting regularly on what they still must accomplish or master to achieve college and career success.

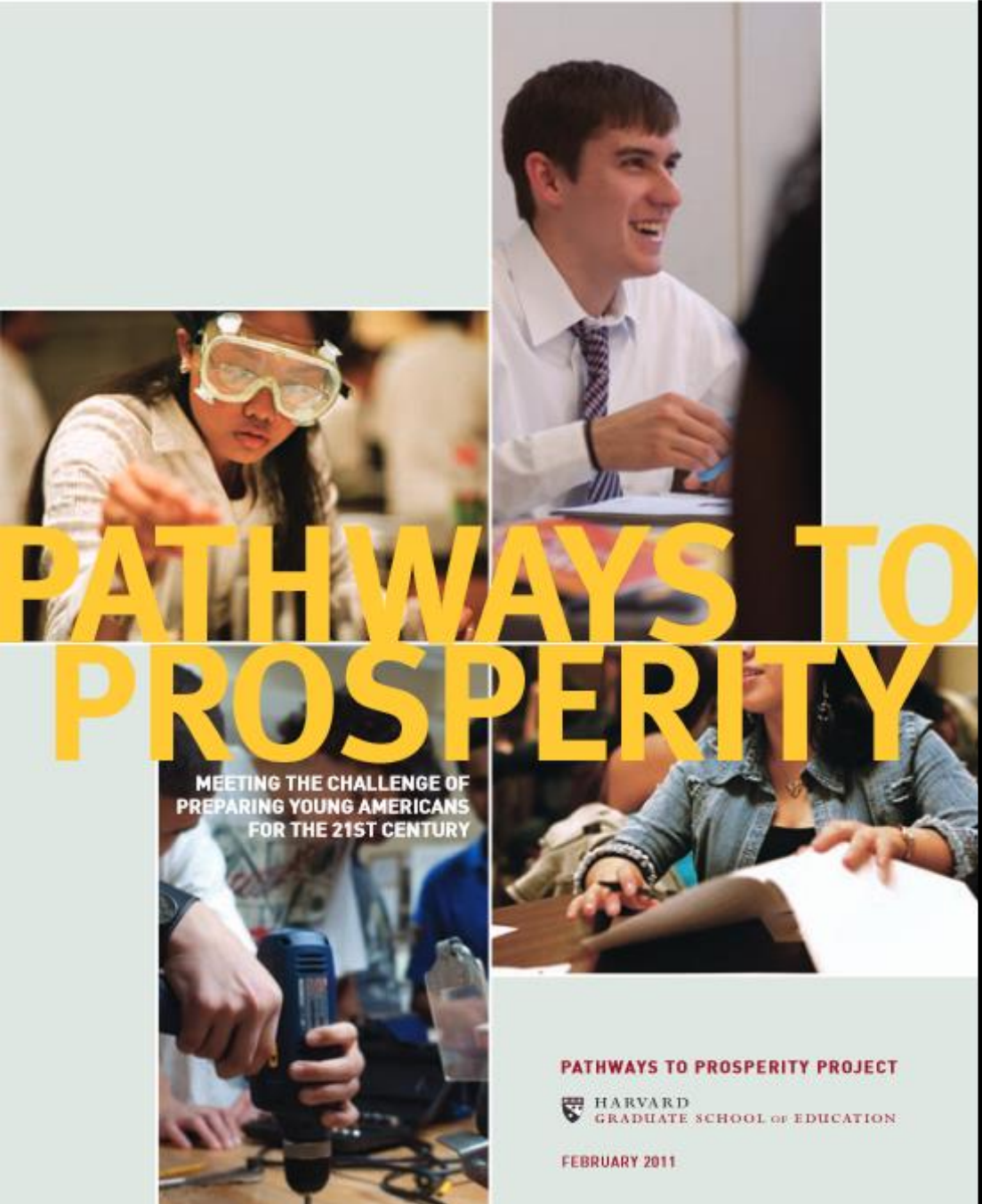
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Both the academic and work-based components of the pathway are designed to build students' agency, self-advocacy, and key academic and career behaviors—such as persistence and time management.

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Program utilizes a cohort-based approach to leverage peer connections, expand students' social network, and build additional postsecondary support using both face-to-face and online strategies.

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**FOR MORE INFORMATION,  
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Workshop 3 CHAIN 5  
Conference 2016 in Aalborg  
DK

Presentation and EU handouts  
by Ole Faaborg, Aalborg

- Cost
- Higher education institutions, especially community colleges, have to deal with the expensive and time consuming process of **remediation**, which is estimated to cost community colleges about **\$1.4 billion** each year
- The United States loses **\$3.7 billion** a year because students do not learn the basic skills needed to succeed in college and careers (Paying Double 2006).
- Accelerated learning can take on several forms including Advanced Placement (AP), International Baccalaureate (IB), dual or concurrent enrollment, and early college.
- International Baccalaureate Diploma Programme (IB)
- Dual enrollment programs enable high school students to take college courses that generally count toward both their high school diploma and college degree. They offer, administer and teach courses in partnership with a higher education institution.

- Outreach programs that increase college exposure – There are many other efforts that might not be as extensive as those listed above, but have great impact.
- “Students take a campus tour, engage in discussions on how college works, including college scheduling, and ask any questions they want. It really demystifies college,”
- Early College – Early colleges are schools where students graduate with a high school diploma in addition to an associate’s degree or the two-year college credit equivalent. Early colleges are often physically located on, or adjacent to, a college campus. Some early colleges in more rural areas use online courses for their curriculum.