

**College or Career Ready
or
Both College and Career Ready**

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What happened to young men? Declining Access to Opportunities for Young Men in the 21st Century

GEORGETOWN UNIVERSITY



Georgetown Public
Policy Institute

Center on Education and the Workforce

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Failure to Launch

Delayed
career launch

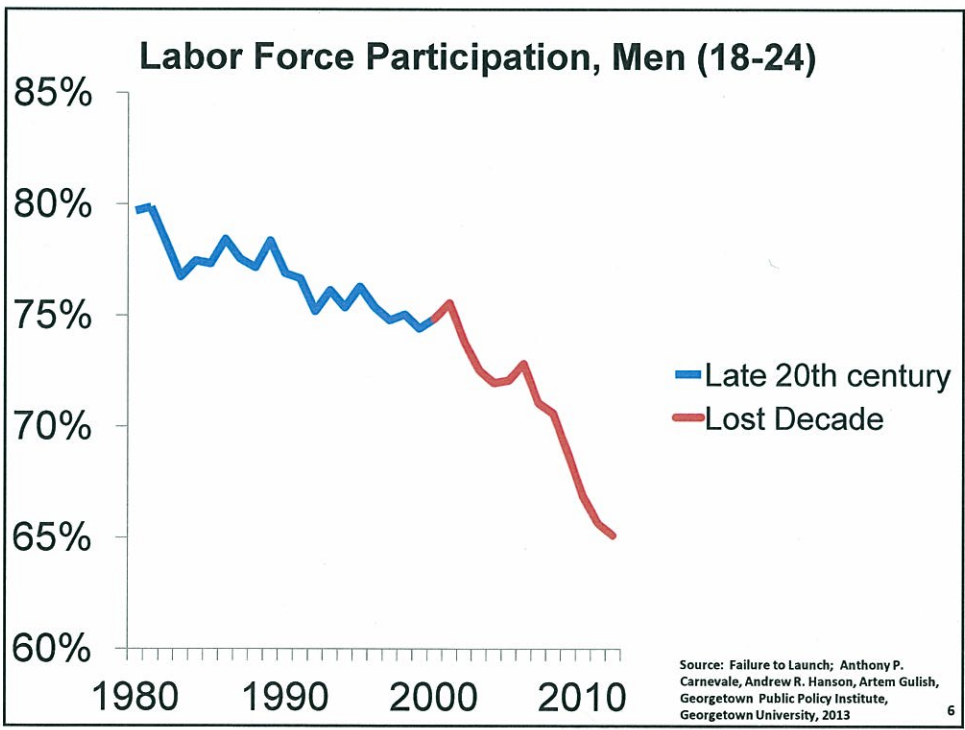
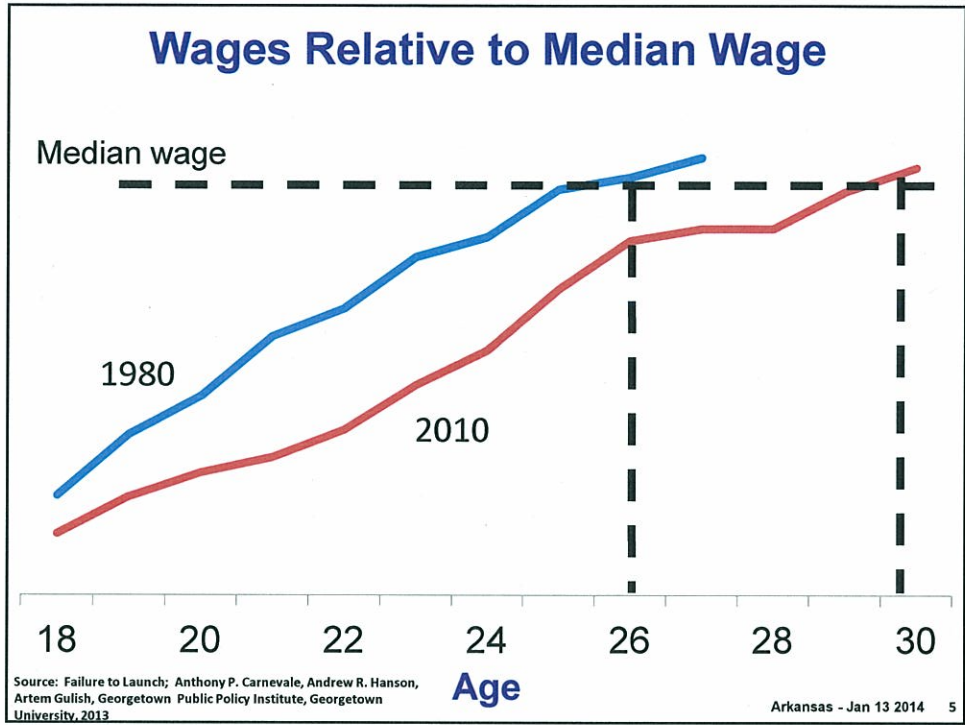
Declining
employment

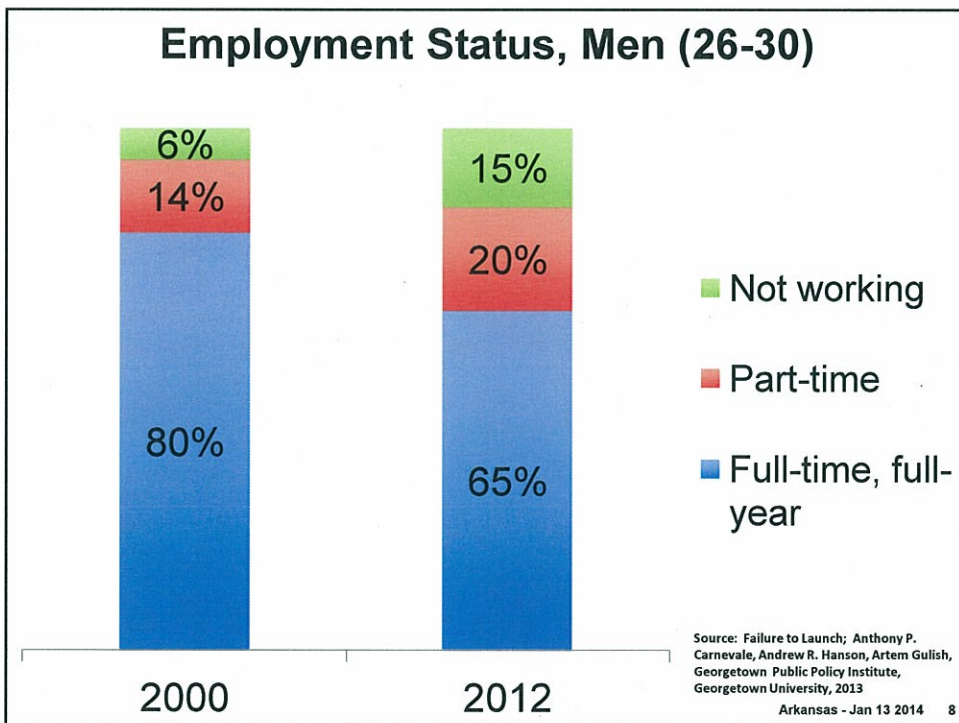
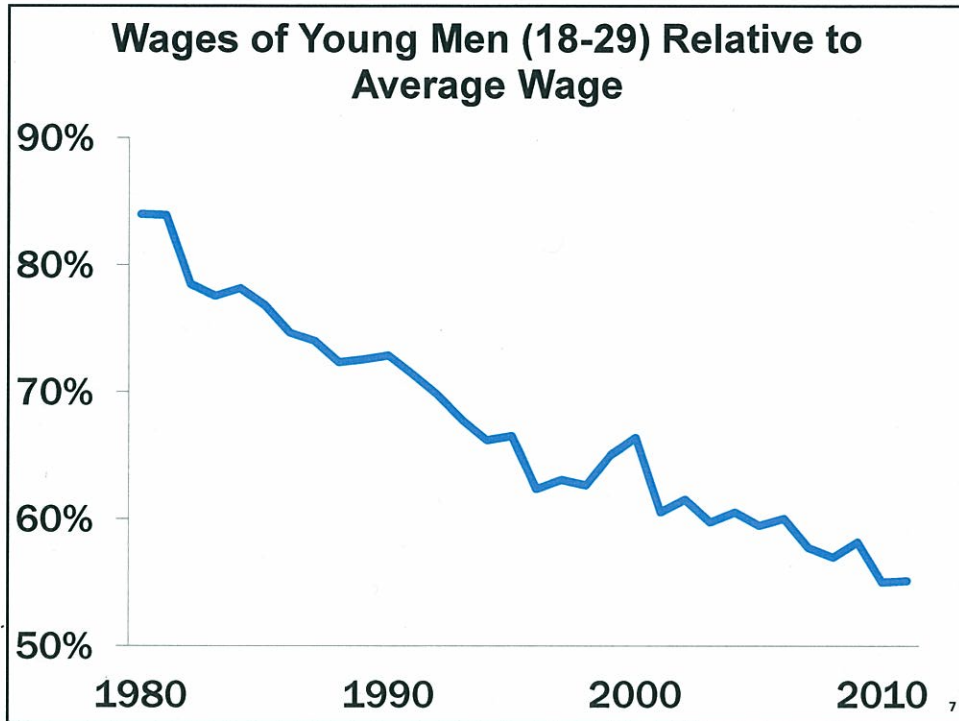
Stagnant
earnings

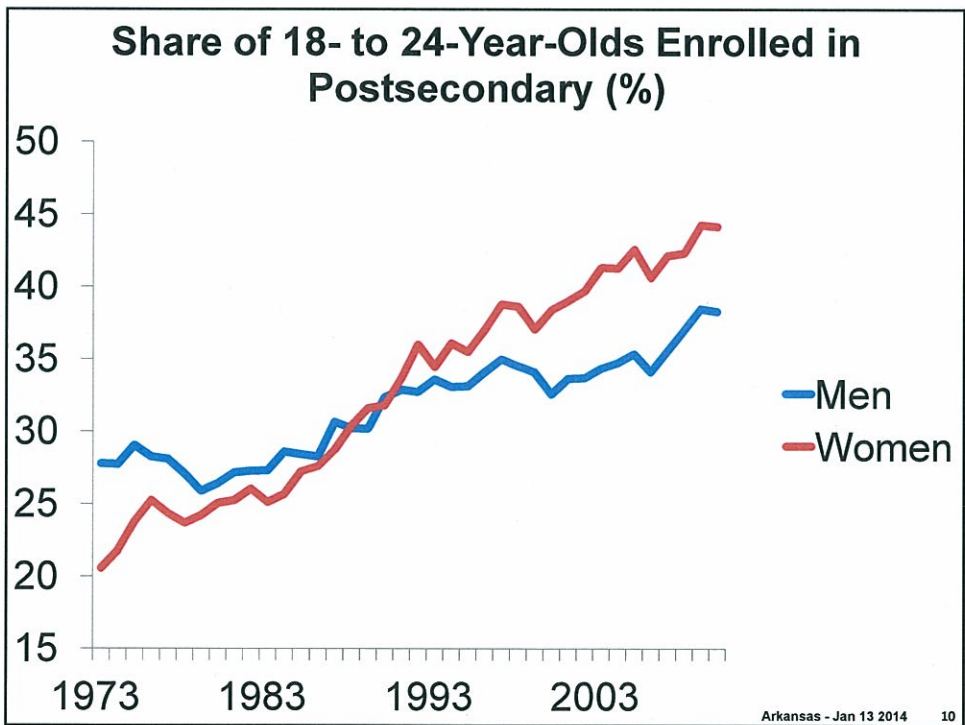
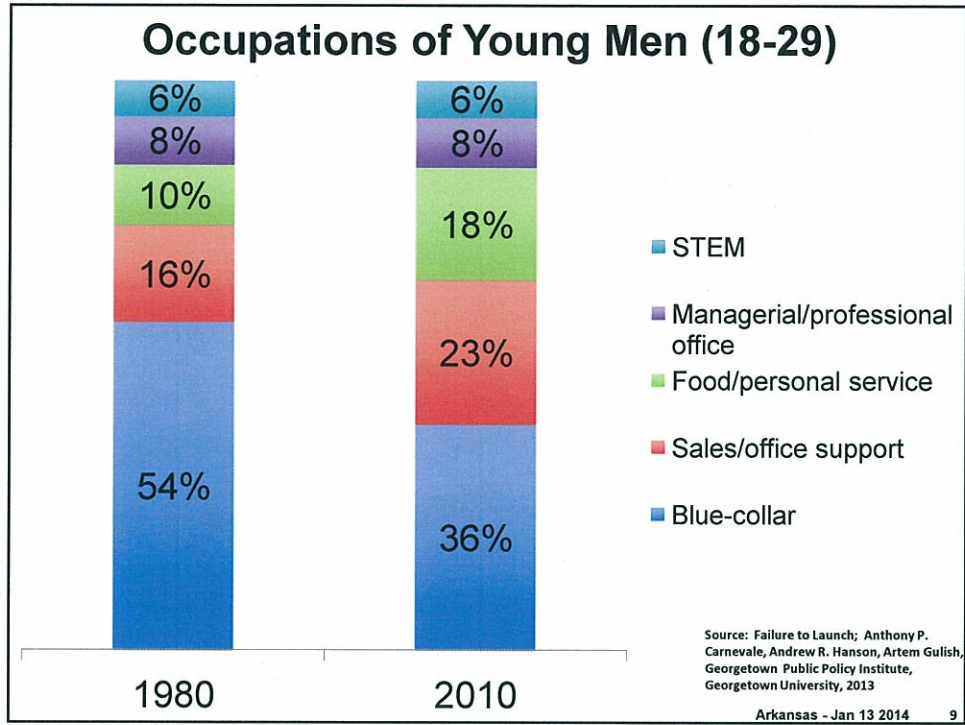
Educational
Deficits

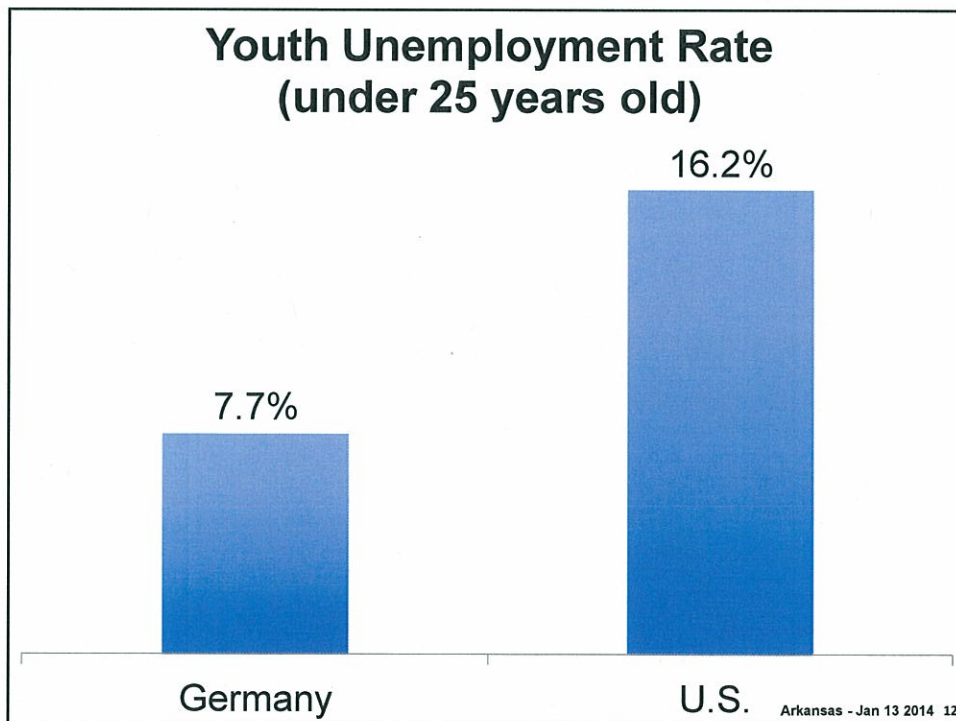
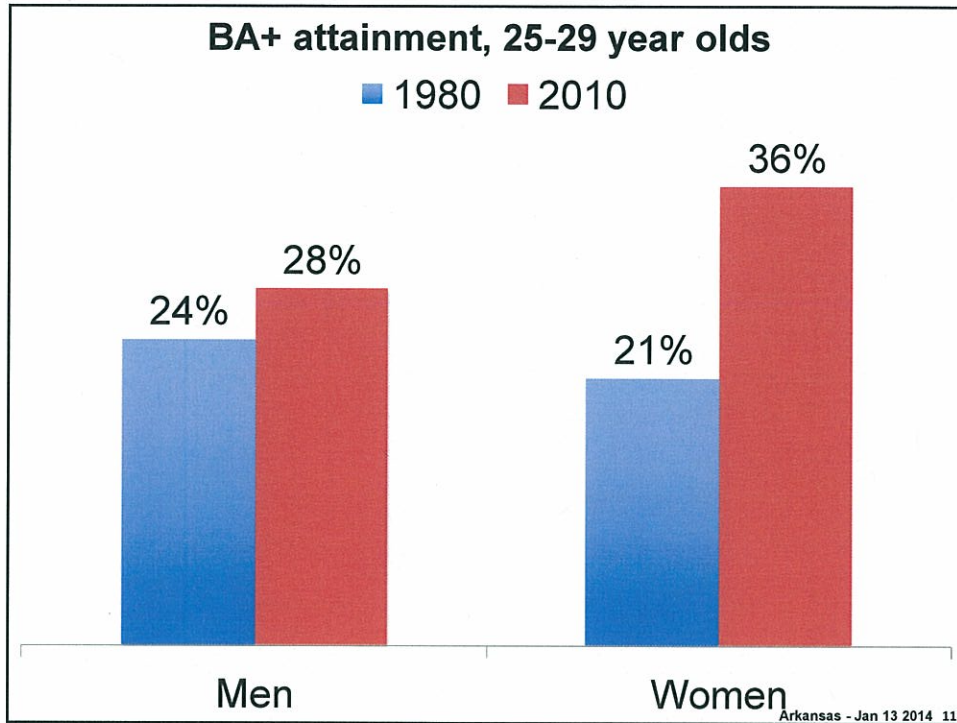
Source: Failure to Launch; Anthony P. Carnevale, Andrew R. Hanson,
Artem Gullish, Georgetown Public Policy Institute, Georgetown
University, 2013

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Surveys: Employers have too few and too many qualified workers

- A recent survey from the Society for Human Resources Management shows that 66 percent of firms that are hiring have trouble finding workers for specific positions — up from 52 percent in 2011 to 60 percent in 2013

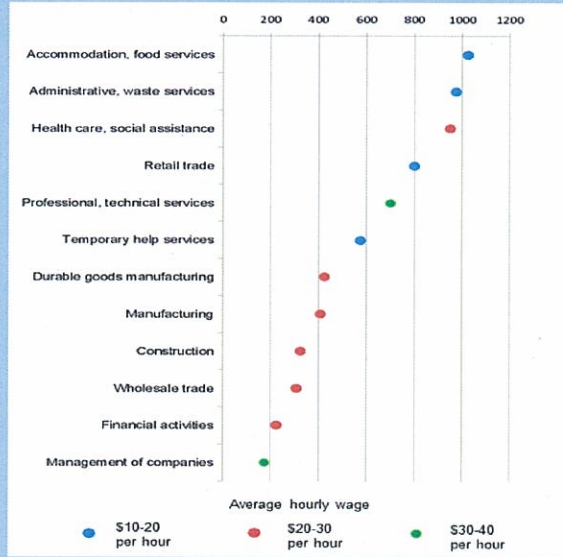
Source: U. S. News and World Report.com/news/articles, 03/28/13

Recovery Uneven

- The U. S. job recovery is proceeding on two separate tracks — with the young, less educated and unemployed seeing hardly any rebound.

Source: The Wall Street Journal November 12, 2013

Changes Since October 2010 in the Number of Jobs in Select Industries, in Thousands



Source: The Wall Street Journal, November 12, 2013

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Advanced Career

Getting Serious About Preparing Students for Middle-Skill Jobs

- 47% of all new job openings from 2010 to 2020 will fall into the middle-skill range

Source: Harvard Business Review, 2012/12, *Who Can Fix the "Middle Skills" Gap?*

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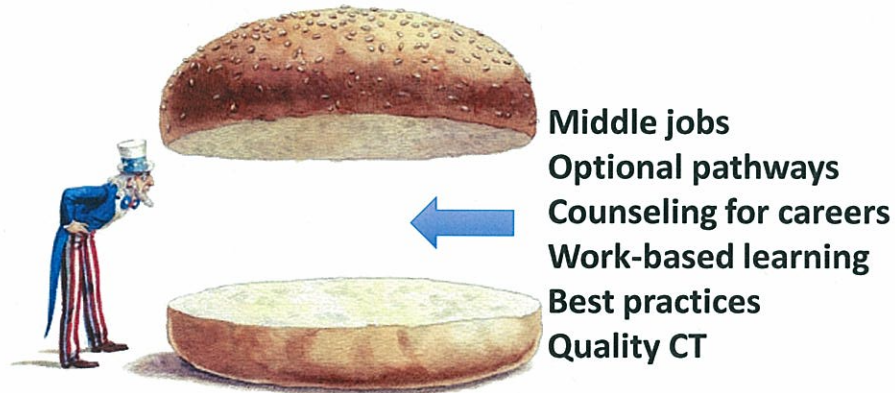
Breaking Out of the Low-Skill Trap Percentage of Jobs Requiring Some PSE

	Today	2020	↑
U. S.	59%	66%	+7%
South	54	59	+5

Anthony P. Carnevale, Nicole Smith, July 2012

Why is there declining access for young men in the 21st century?

America Education's Missing Middle



Source: Failure to Launch; Anthony P. Carnevale, Andrew R. Hanson, Artem Gulish, Georgetown Public Policy Institute, Georgetown University, 2013

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Advanced Career

Employer Response to Current Offerings at CT Centers

What's wrong with current manufacturing programs at your CT Centers — machine tool technology, industrial maintenance, computerized manufacturing, metal fabrication?

I do not employ graduates out of those programs because:

- Technology is old.
- They lack skills to manage automated technology.
- They lack foundational learning skills.
- They lack trouble-shooting/problem-solving skills.
- They lack digital skills.

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HSTW
MMGW/TCTW

What should we do about it?



The Next Generation of School Accountability

- **Principle 6:** Recognize that one path to graduation does not fit all students.
- **Principle 7:** Broaden the definition of academic rigor to — Join a “college-ready” academic core with quality CT studies.
- **Principle 8:** Make quality CT an essential feature of reforming low-achieving and low-graduation rate high schools.

Source: SREB High School Commission Report, 2009

Building Pathway Options That Join Career and Academic Studies to Employment and Postsecondary Studies

One Diploma/Multiple Endorsements

- **College Ready** — Prepared for college with advanced academic studies
- **College and Career Ready** — Advanced CT studies joined with college-ready academic core
- **Career Ready** — Academics joined with intensive CT studies in high-demand, high-skill career fields

Programs of Study for Multiple Diploma Endorsements

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	Career-Ready Endorsement
English	4 Literacy Credits: English I, II, III, IV, or P/S Literacy -Ready or Work-Ready Literacy
Math	3 Math Credits: Algebra I, Geometry, Algebra II or Statistics, Technical/Business Math, CT Embedded Math, P/S or Work-Ready Math
Science	3 Science Credits: Physical Science, Biology and one other: Chemistry, Physics, CT Embedded Science, Contextually Developed Science Course
Social Studies	3 Social Studies Credits
Academic or Career Concentration	4-8 Credits in CT Concentration

Programs of Study for Multiple Diploma Endorsements

HSTW
MMGW/TCTW

	College- and Career-Ready Endorsement
English	4 College-Prep English
Math	4 College-Prep Math: Algebra I, Geometry, Algebra II or Statistics, CT-Embedded Math, or P/S Math-Ready or Work-Ready Math
Science	3 Science Credits: Physical Science, Biology, and Chemistry or Physics, Environmental Science or CT-Embedded Science
Social Studies	3 College-Prep Social Studies Courses
Academic or Career Concentration	4 Credits in Advanced Career Concentration

Programs of Study for Multiple Diploma Endorsements

	College-Ready Endorsement
English	4 College-Prep English: Pre-AP, AP, IB Courses
Math	4 College-Prep Math: Algebra I, Geometry, Algebra II, Statistics, Calculus and other Approved College-ready Math Courses
Science	4 Science Credits: Physical Science, Biology, Chemistry, Physics, Environmental Science, AP, IB Courses
Social Studies	4 College-Prep Social Studies Courses
Academic or Career Concentration	3 Credits in Humanities/Fine Arts/AP, Math/Science/AP or other Advanced Study Options

Accountability Framework to Support Optional Pathways

- **Career-ready pathway**
 - Students will meet basic graduation requirements.
 - Students will pass at least one state-approved IRC exam.
 - Students will meet state academic career-readiness standards.
 - The career-ready pathway will carry equal weight to college-ready pathway in state accountability system.

Accountability Framework to Support Optional Pathways

■ College-ready pathway

- Students will complete college-ready academic core.
- Students will complete concentration in AP, IB or advanced studies.
- Students will meet college-readiness standards.
- The college-ready pathway will carry equal weight to career-ready pathway in state accountability system.

Accountability Framework to Support Optional Pathways

■ College- and career-ready pathway

- Students will meet college-readiness standards.
- Students will pass at least one state-approved IRC exam linked to next level IRC.
- Students will complete CT-approved dual credit.
- The combined pathway will carry more weight than either college- or career-ready pathway.

Can you have a college-ready and a career-ready path?

Total Number of CT Completers	11,834
Academic Ready – College and Career	63%
Career-ready	49%
College- and career-ready	40%

Source: 2013 CT completers from high school CT centers in one SREB state

What does an Advanced Career (AC) Program Look Like?

- **10 signature features — pages 2-3**
- **Careers for Health informatics graduates — pages 5-7**
- **Health informatics course description and sample projects — pages 8-10**
- **Technology and software students will use to complete projects — pages 12-16**

What does an Advanced Career (AC) Program Look Like?

- Literacy standards in Health informatics — pages 17-20
- Mathematics standards — pages 20-23
- Science standards — pages 24-25
- Health informatics program of study — pages 26-27

Partner States

Alabama	Aerospace Engineering*
Arkansas	Innovations in Science and Technology*
Kansas	STEM Education and Training
Kentucky	1. Informatics* 2. Advanced Manufacturing*
New Jersey	1. Entrepreneurship 2. Global Logistics
North Carolina	Project Management
Ohio	1. Automated Materials Joining Technologies 2. Health Informatics*
South Carolina	Clean Energy Technology*
West Virginia	Energy and Power*

*Ready for adoption in fall of 2014.

Why Advanced Career (AC)?

In Light of Rising Workplace Requirements and Opportunities

“The new economy requires not just white-collar workers but also workers with outstanding technical skills and highly developed problem-solving abilities. These workers will be the backbone of tomorrow’s prosperity.”

Source: A Sharper Focus on Technical Workers How to Educate and Train for the Global Economy. NGA Center for Best Practices, 2010.