CCRC COMMUNITY COLLEGE RESEARCH CENTER

TEACHERS COLLEGE, COLUMBIA UNIVERSITY

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# The National Concurrent Enrollment Movement and Lessons for Idaho

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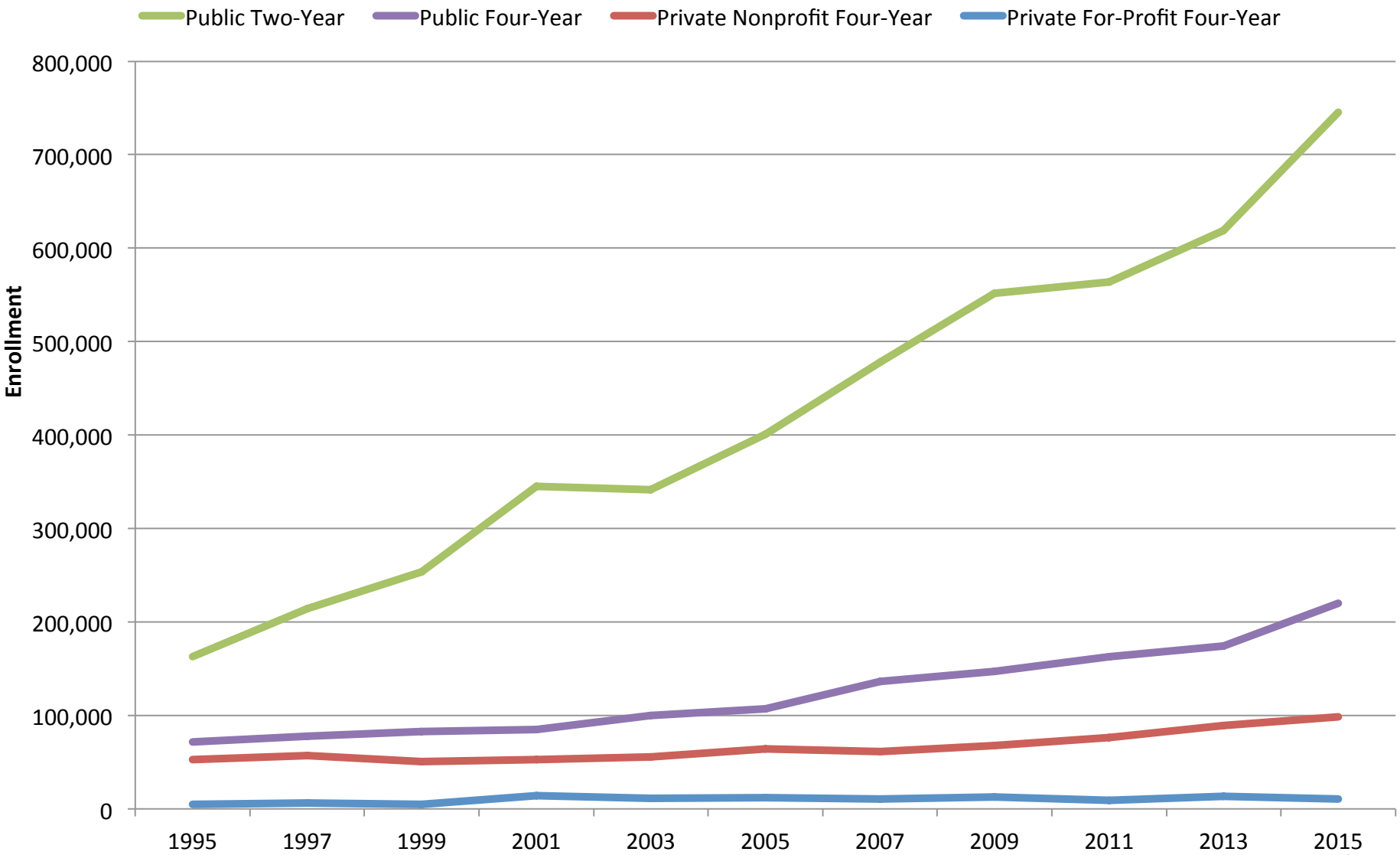
#RedesigningCCs

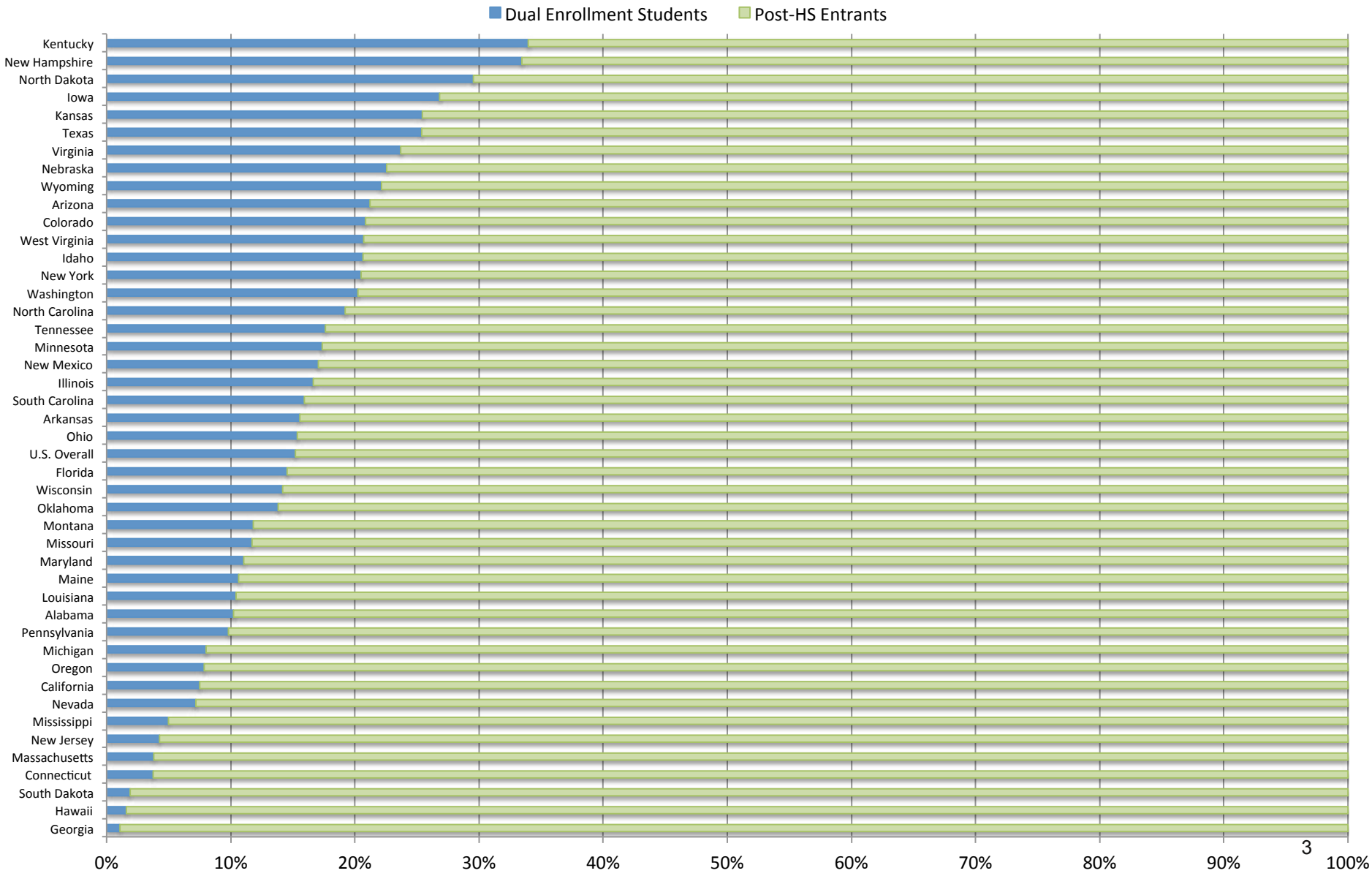
**ADVANCED OPPORTUNITIES CONFERENCE**
Boise, ID

# Fall Enrollments Among Students Aged 17 or Younger by Sector, 1995–2015




Data: IPEDS

## Percent of Community College Entrants who are in High School Dual Enrollment, by State



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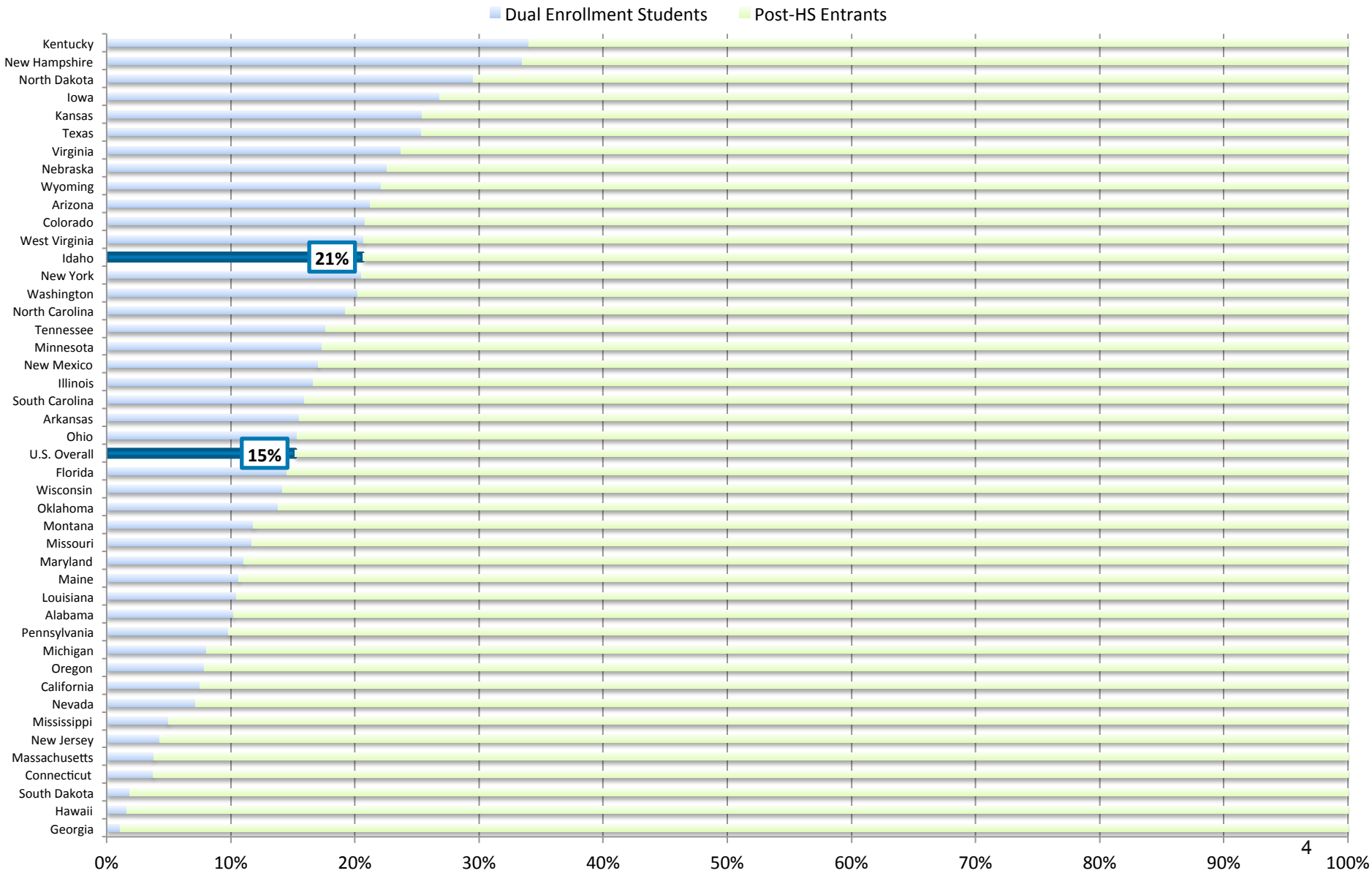
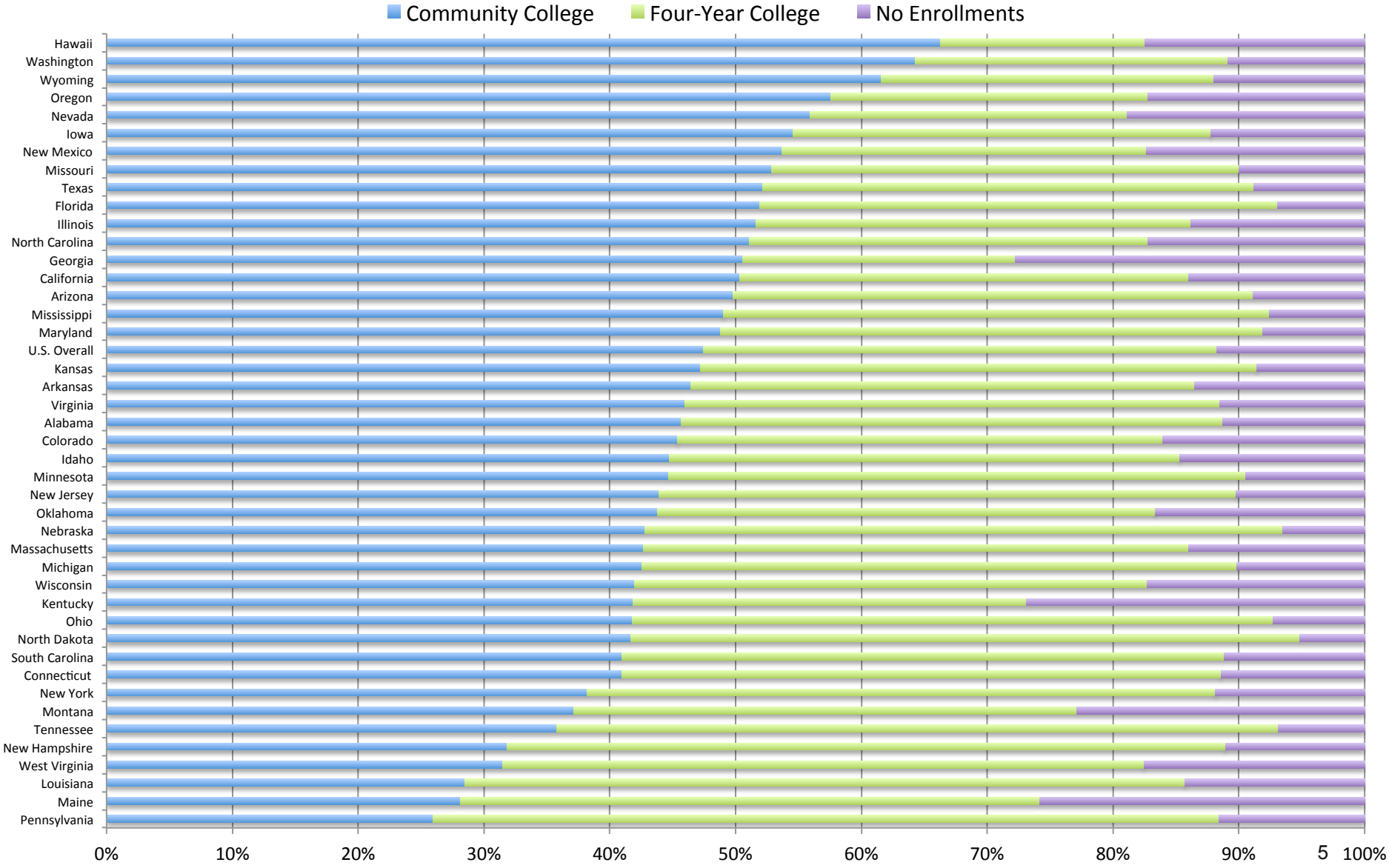


# Former Dual Enrollment Students' First College Matriculations at Ages 18-20, by State



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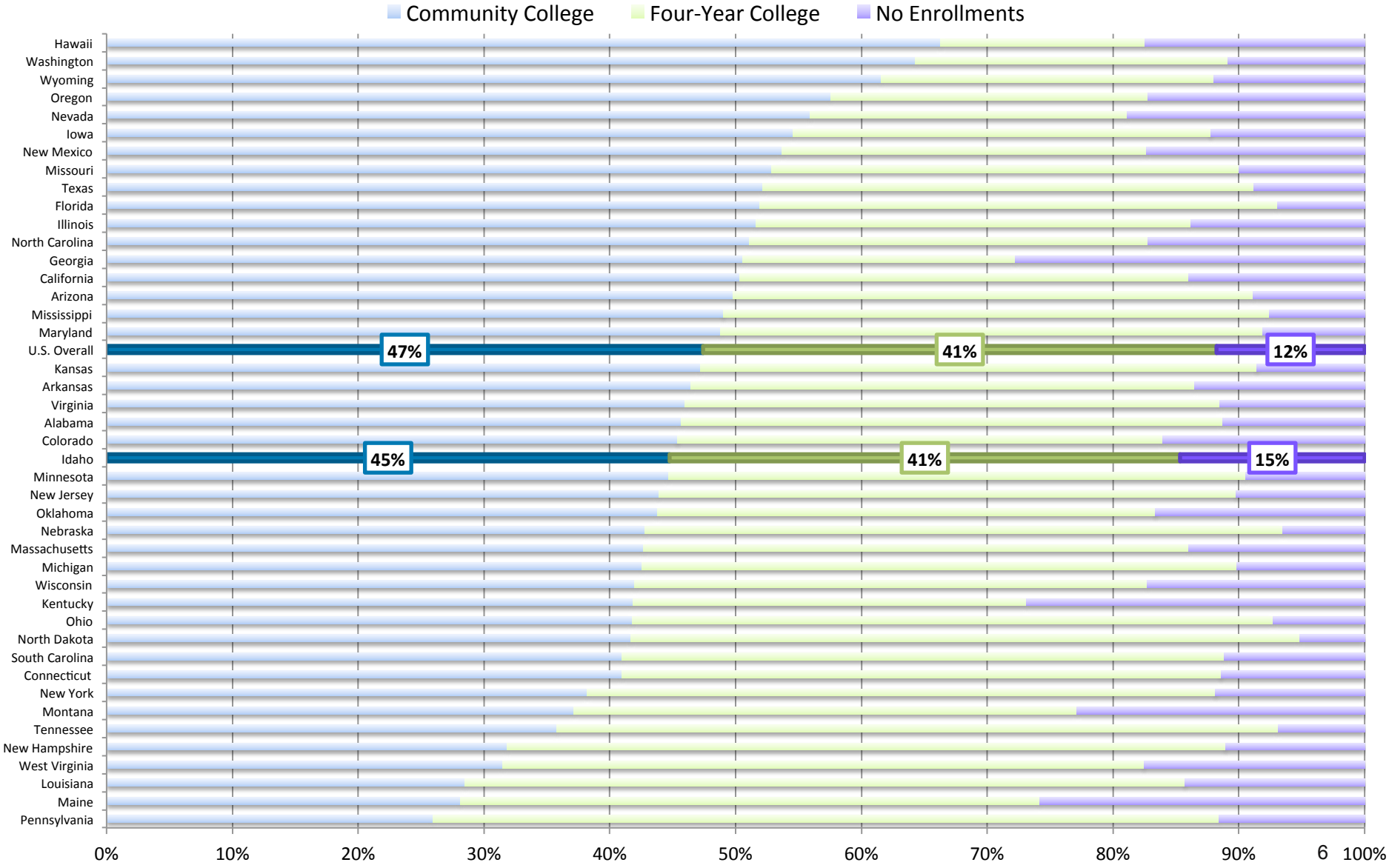
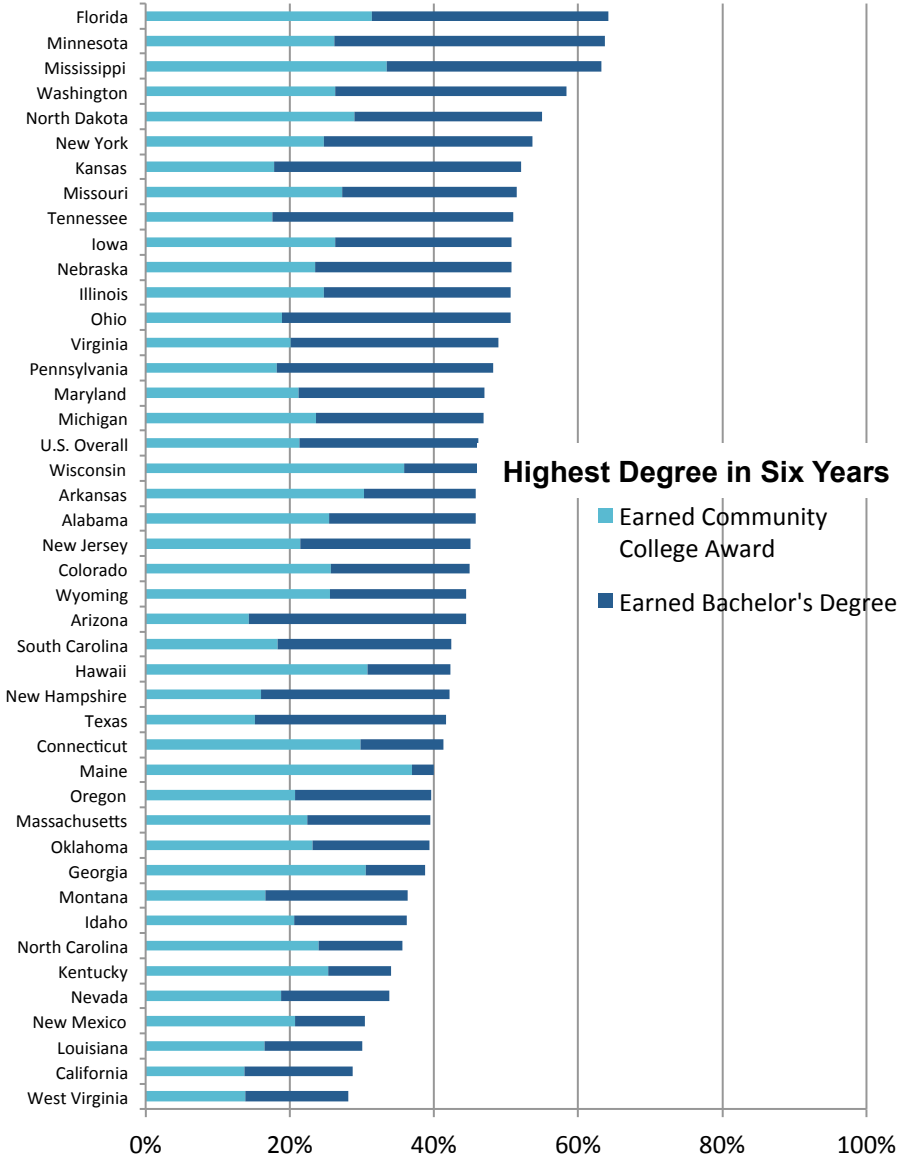
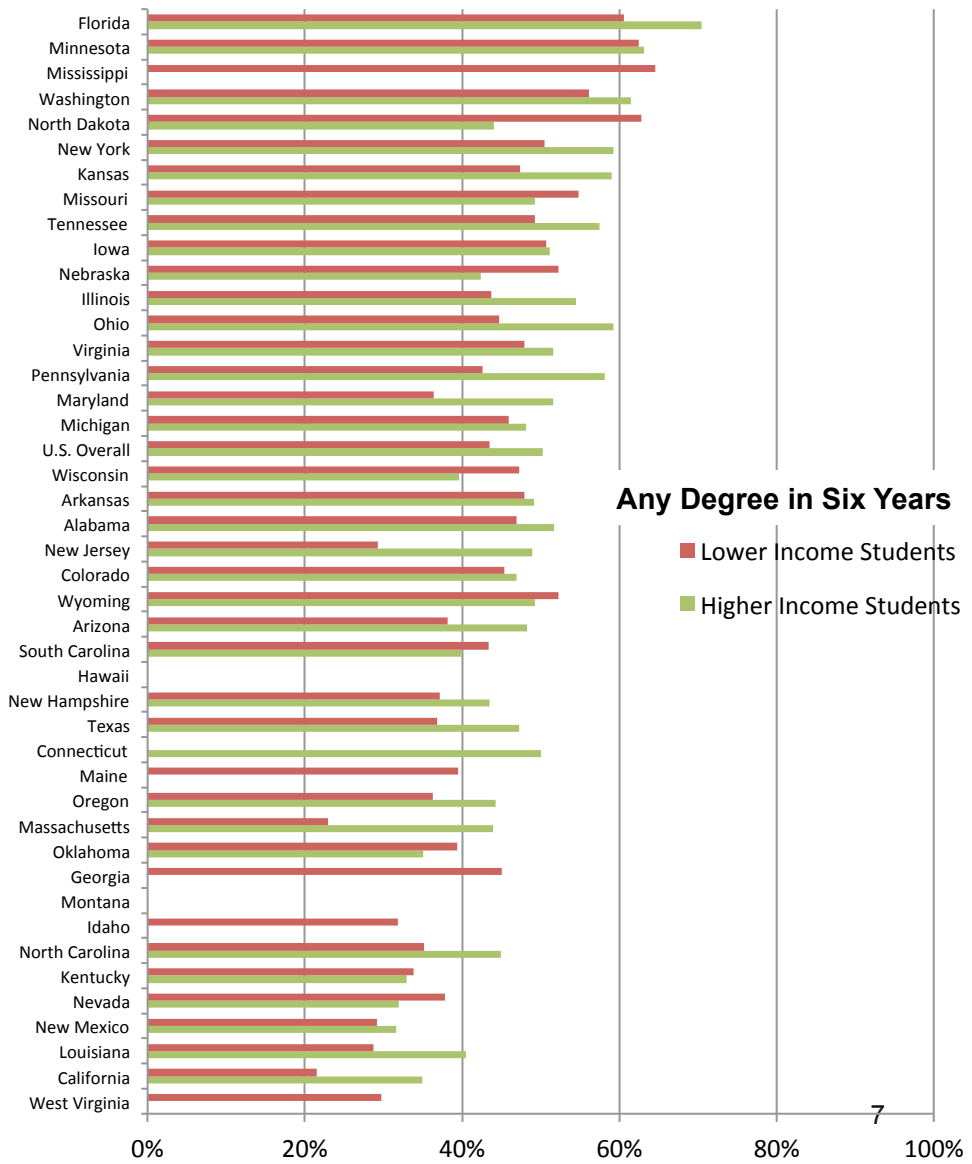


# Degree Completion Rates among Former Dual Enrolled 17 year-olds who first matriculated at a **community college** at ages 18-20, by state and income



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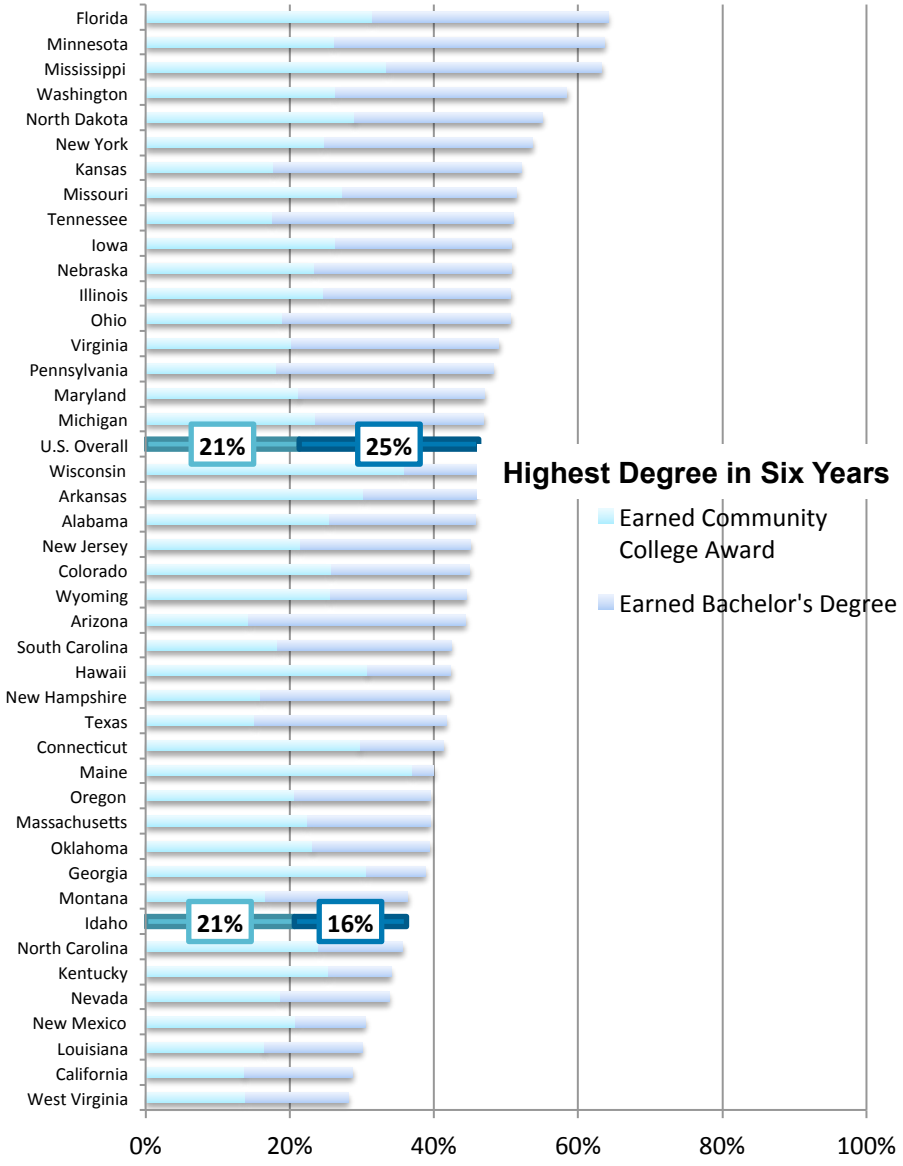
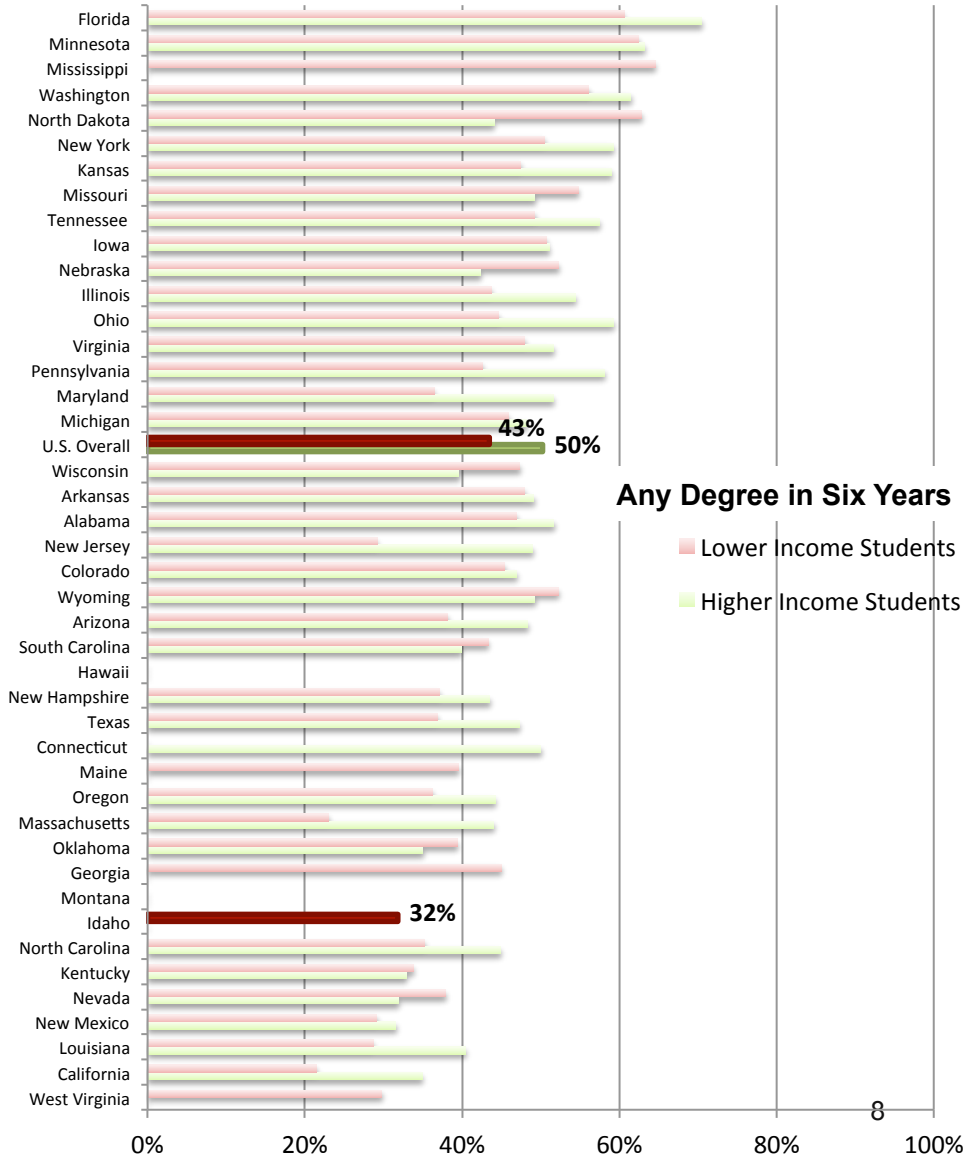
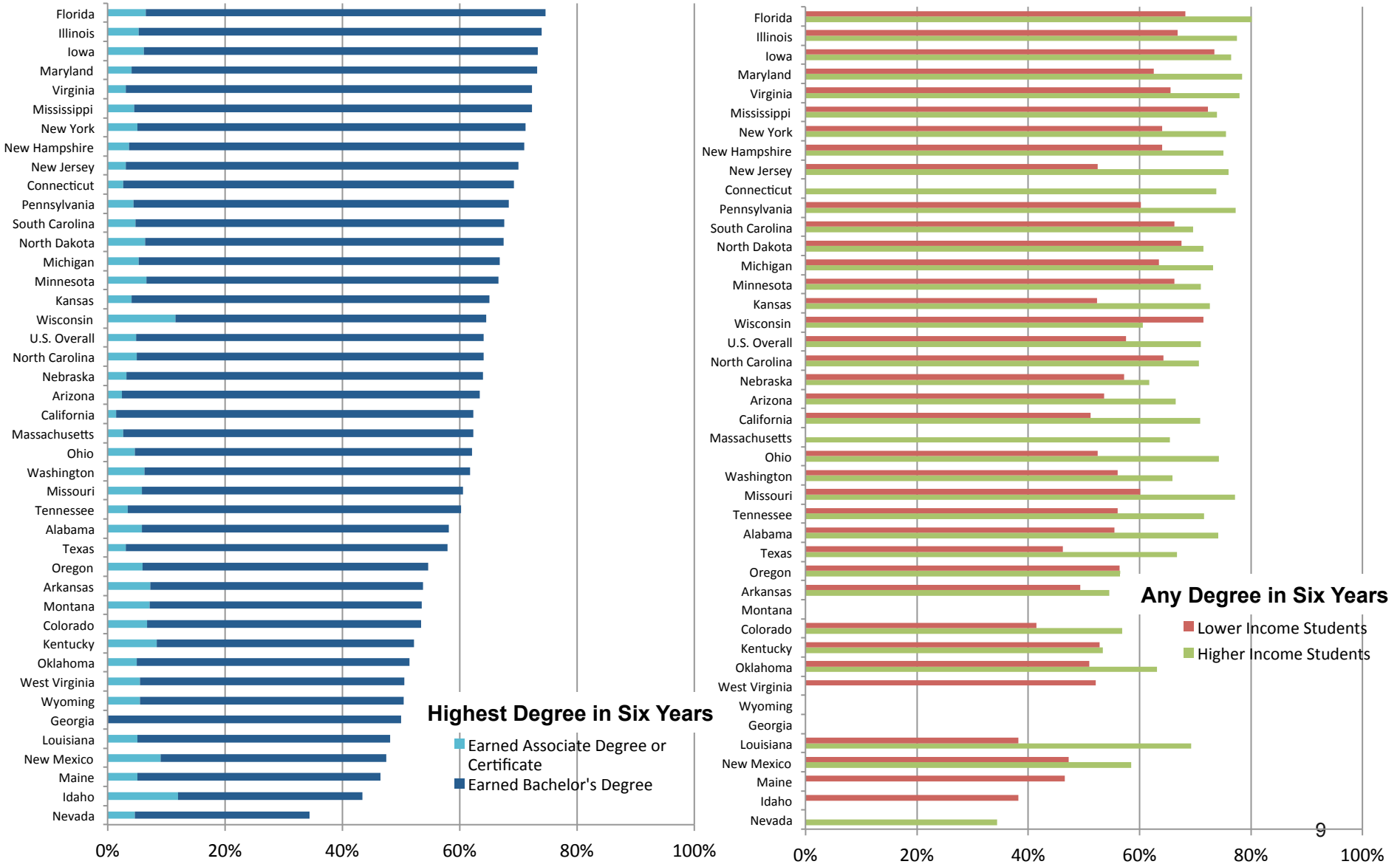


# Degree Completion Rates among Former Dual Enrolled 17 year-olds who first matriculated at a **four-year college** at ages 18-20, by state and income



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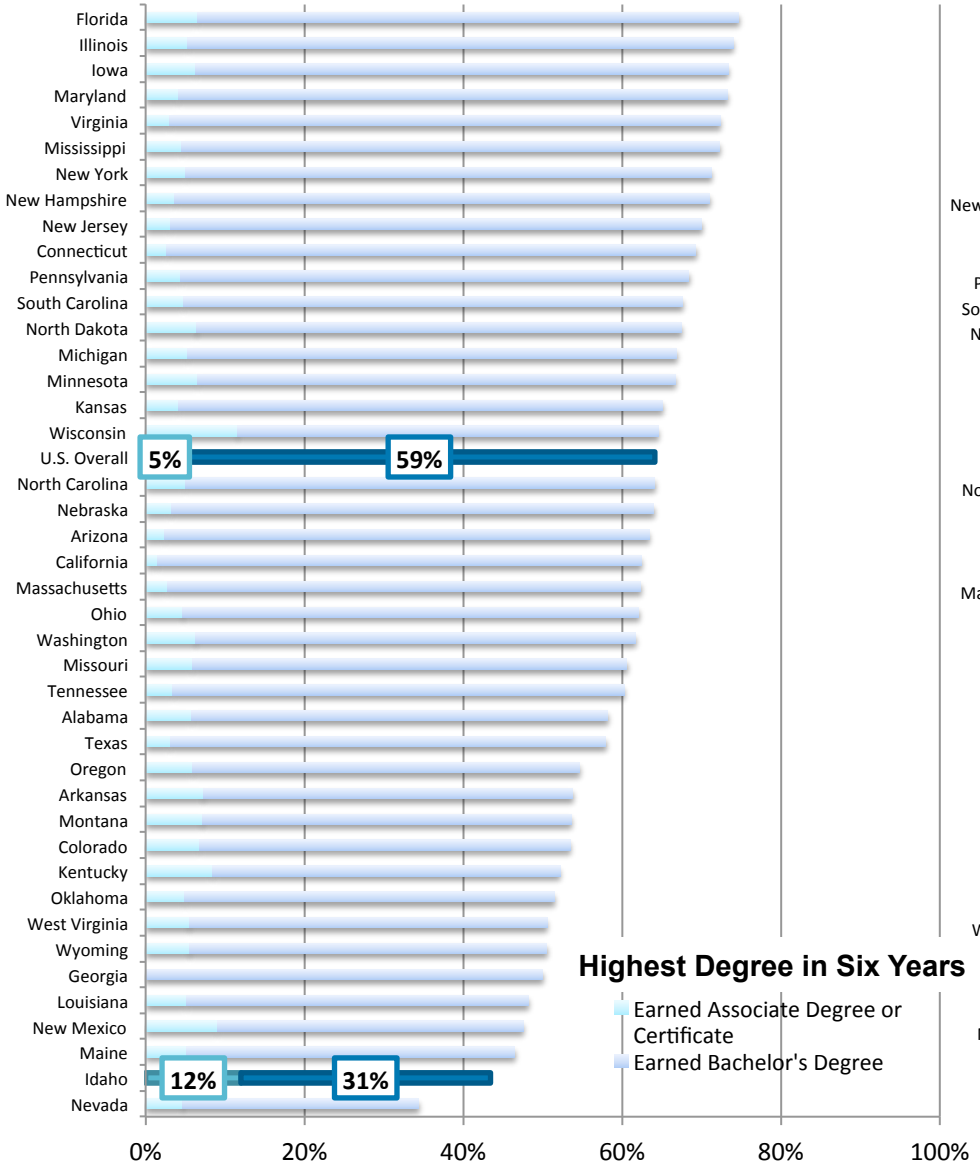
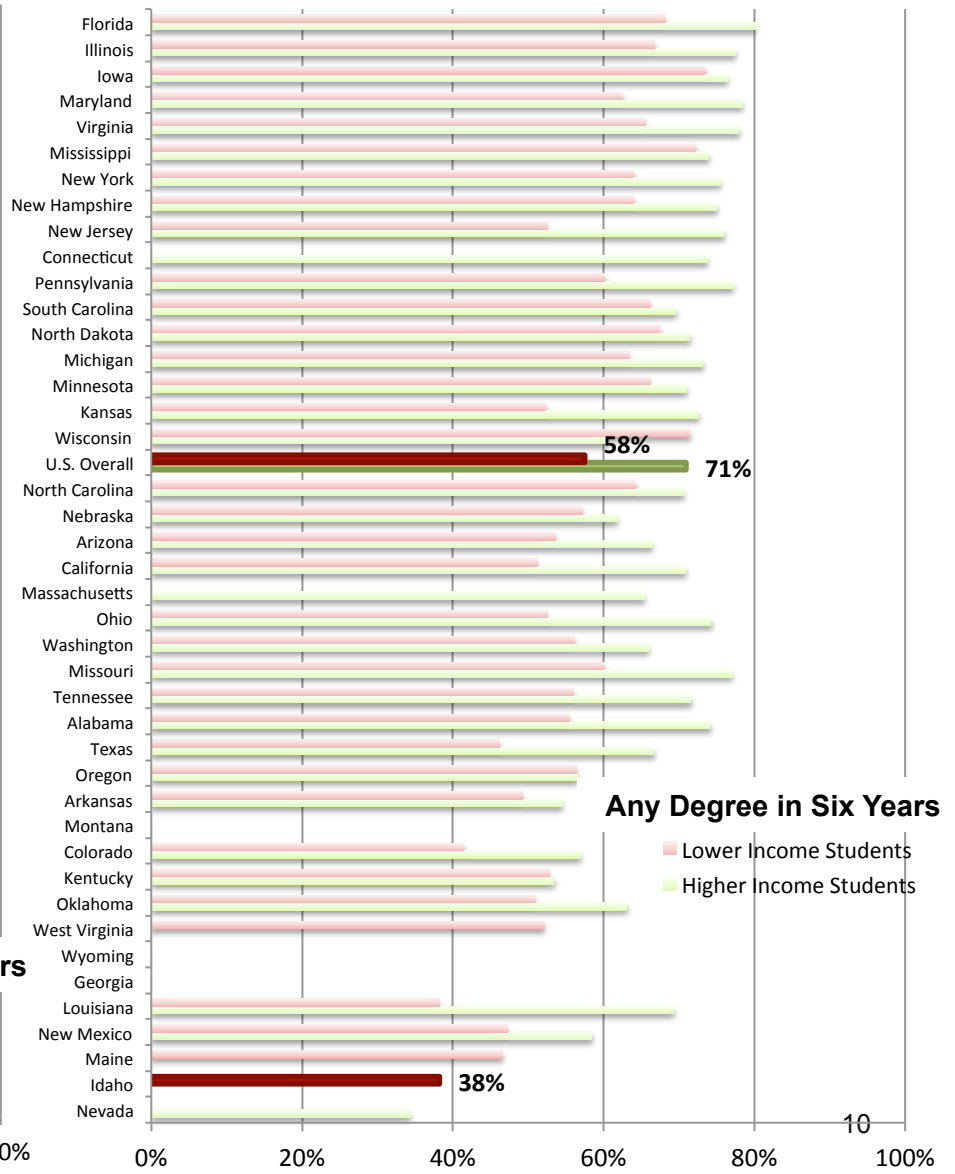
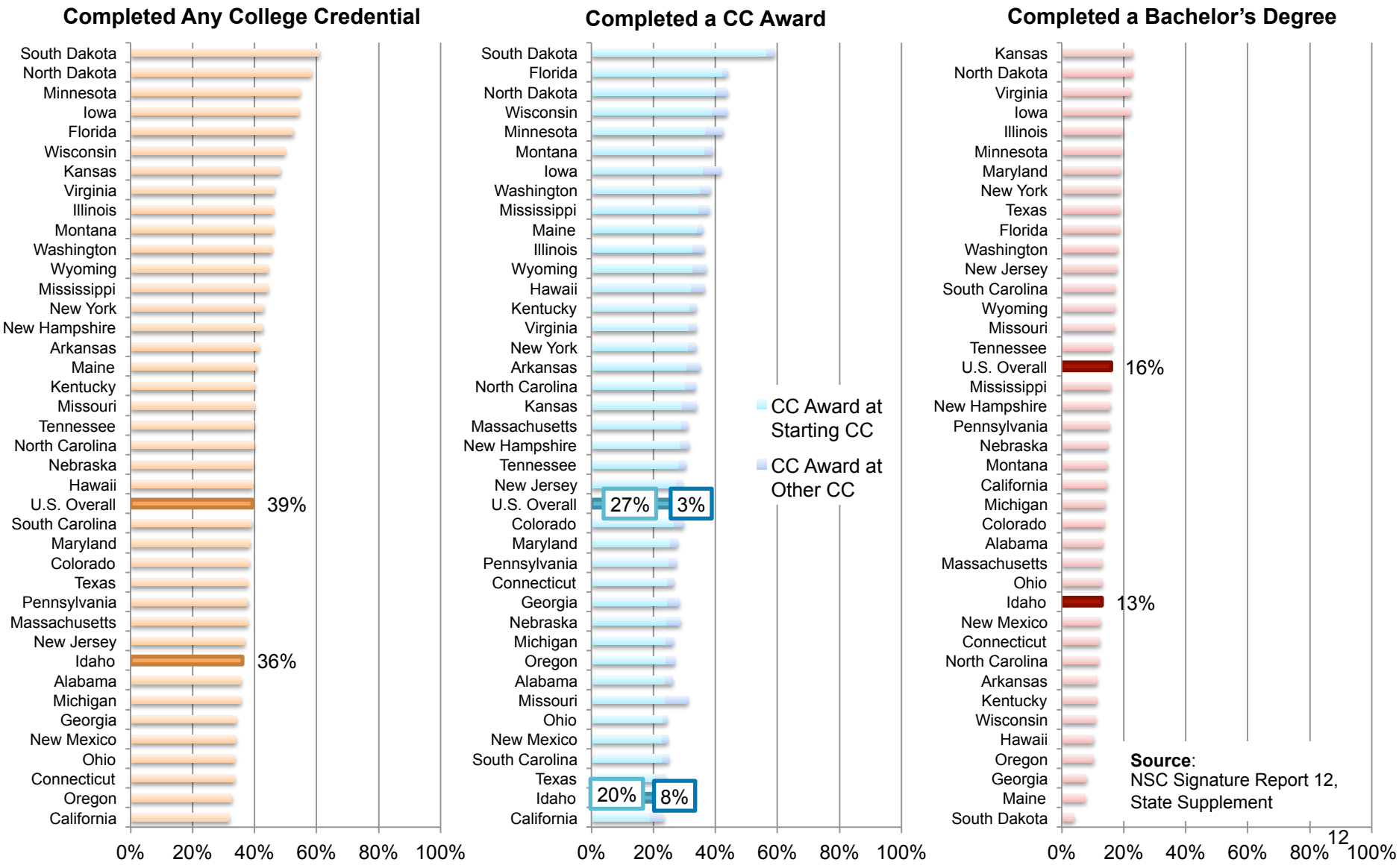


# Why dual enrollment for college completion?

# Six-Year Outcomes, Fall 2010 Community College Entrants



# Dual Enrollment Encourages College Readiness

- Dual enrollment participants learn study skills and other habits related to college success.
  - Foster & Nakkula, 2005; Karp, 2006; Nakkula, 2006
- Dual enrollment participants learn "how to play the part" of a college student.
  - Foster & Nakkula, 2005; Karp, 2006
- Dual enrollment is related to increased high school graduation.
  - Karp et al., 2007; Rodriguez, Hughes, & Belfield, 2012; Cowan & Goldhaber, 2013
- Dual enrollment participants are more likely to enroll in college than their non-participating peers—although which type of college is not clear.
  - Karp et al., 2007; Speroni, 2011; Rodriguez, Hughes, & Belfield, 2012; Cowan & Goldhaber, 2013; Struhl & Vargas, 2012

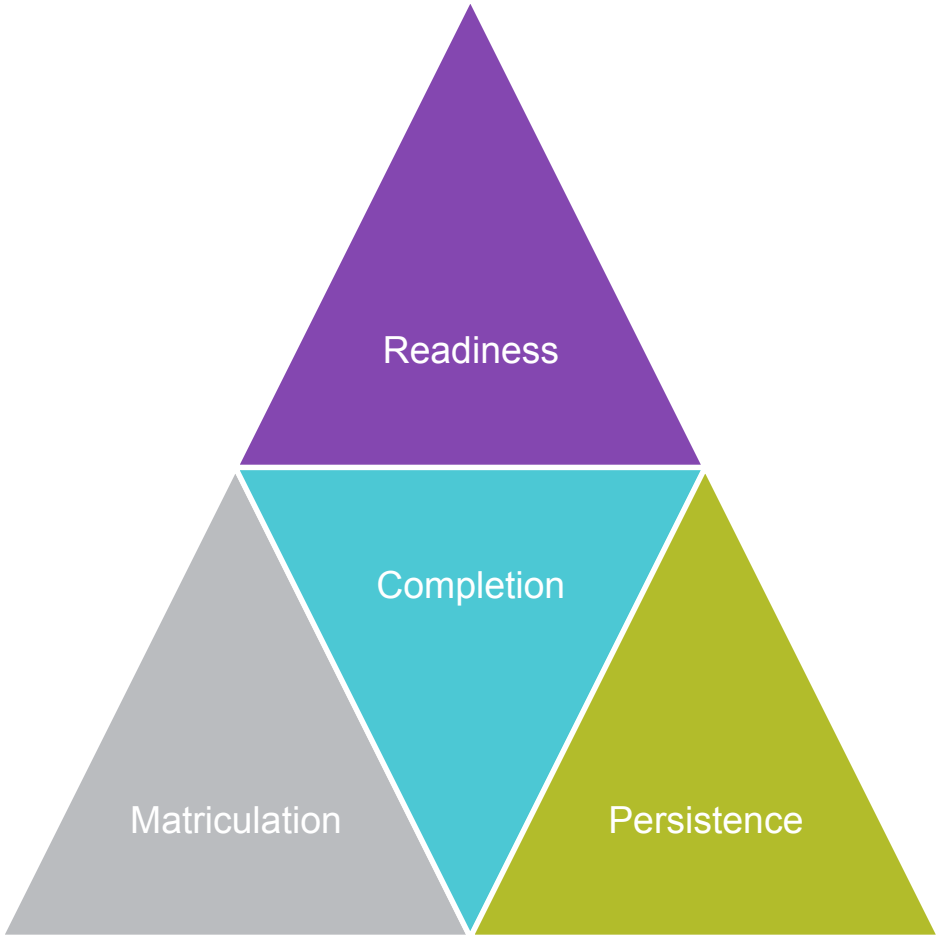
# Dual Enrollment Encourages College Completion

- Participation is related to improved college grade point averages.
  - Allen & Dadgar, 2012; Eimers, & Mullen, 2003; Kotamraju, 2005
- Participation is related to persistence to a second year of college.
  - Eimers & Mullen, 2003; Swanson, 2008 Struhl & Vargas, 2012
- Participation is positively related to credit accrual.
  - Karp et. al, 2007; Michalowski, 2007; Speroni, 2011, Rodriguez, Hughes, & Belfield, 2012; Cowan & Goldhaber, 2013
- Participation is positively related to improved likelihood of degree completion.
  - An, 2013, Struhl & Vargas, 2012; Taylor, 2015, Shapiro, 2016
- Program model, course rigor, and implementation quality matter.
  - Allen, 2010; Kim, 2008; Speroni, 2011

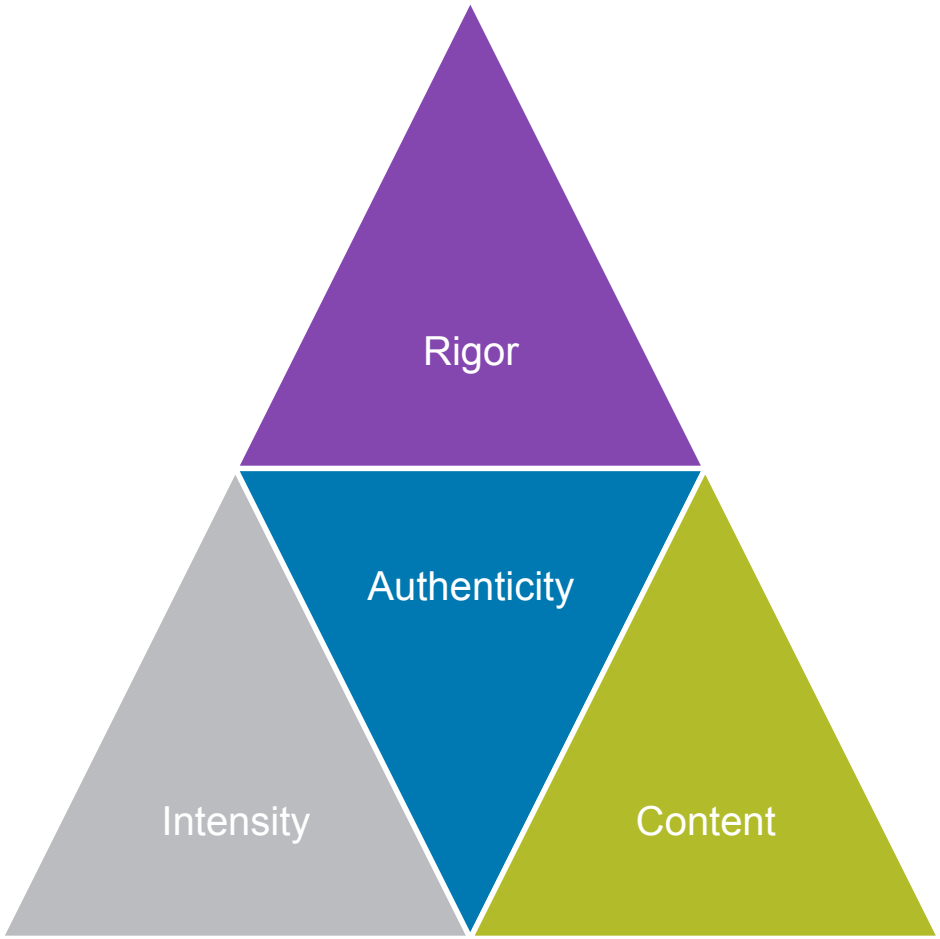
# All types of students benefit from dual enrollment.

- Students in CTE programs benefit from dual enrollment participation.
  - Karp, et al., 2007; Rodriguez, Hughes, & Belfield, 2012; Struhl & Vargas, 2012
- Male students benefit more from participation than other sub-groups.
  - Karp et al., 2007
- Low-income, first-generation, and otherwise disadvantaged students can benefit from participation; some studies find that they do so to a larger extent than other student groups.
  - Rodriguez, Hughes, & Belfield, 2012; An, 2013; Struhl & Vargas, 2012

# Research finds positive impact to dual enrollment participation for a range of outcomes.



# It also finds that design and implementation matter.

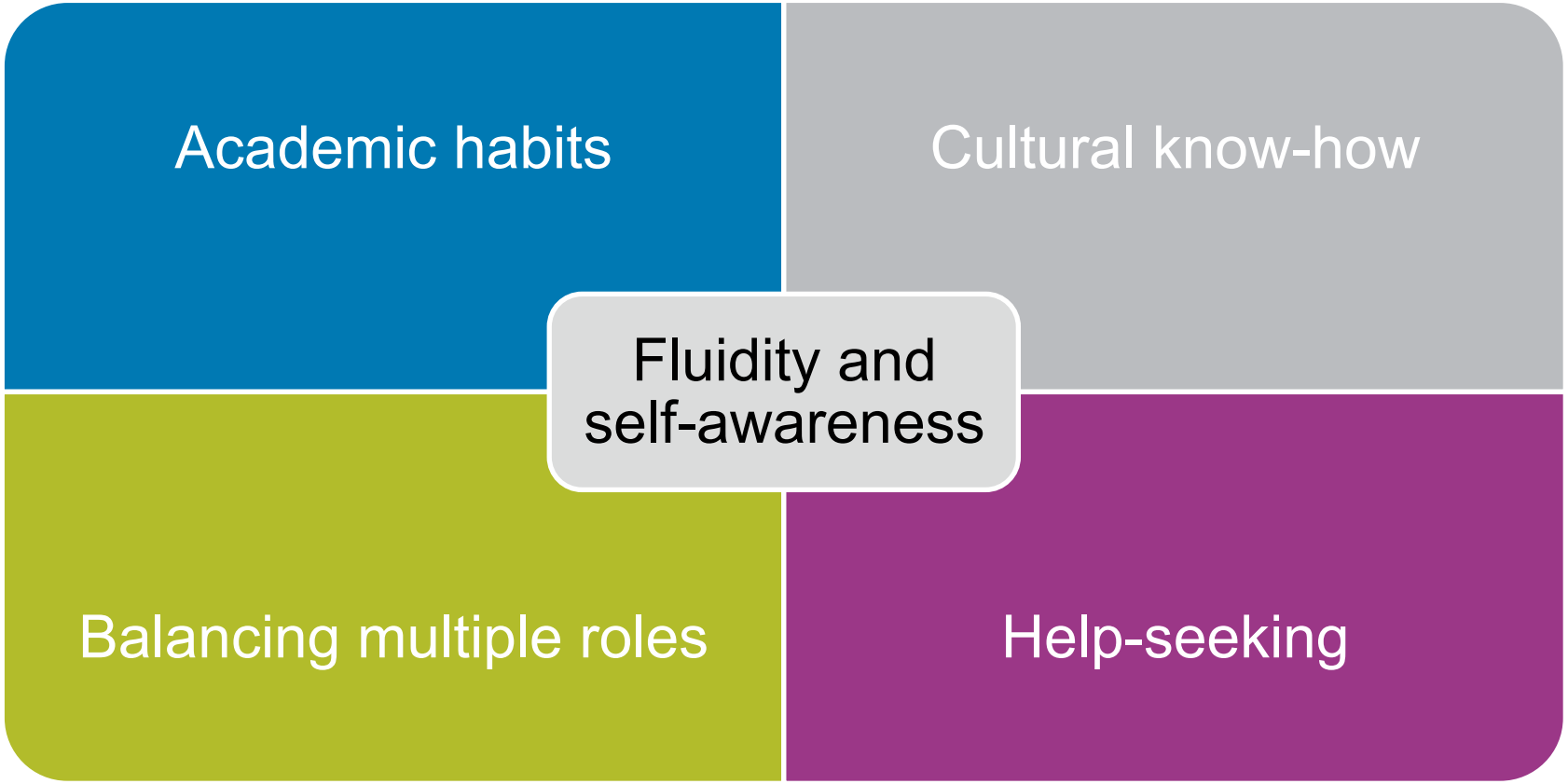


# Why "authenticity"?

- College-ready behaviors are subtly, yet importantly, different than high school success behaviors and go beyond academic skills or knowledge.
- College readiness is encouraged by *anticipatory socialization* and *role rehearsal.*
- Authenticity: Ensuring that students can "try on" the part of a college student so that they can become capable of doing college work
- Students in authentic courses learn more about college and themselves as college students than students in non-authentic courses.

When you're coming straight out of high school, you have somebody telling you what to do and how to do it and when to do it. And then you get to college. … When I went the first time, they never told me anything to expect so I didn't know what to do.

# What is the role of a college student?



# 1. Academic habits: New approaches to school-related learning

- College students are expected to develop *independent* academic habits.
  - Manage workflow
  - Organize and manage time
  - Engage in independent and reflective note-taking
  - A syllabus rather than daily assignments

> The freedom of time to just, you know, the freedom of assignments. Where it goes, you know, we need this three page paper by next Thursday. Boom! Done! Last time you heard about it was, you know, the Tuesday before…

# 2. Cultural know-how: Navigating the college culture

- Students need to understand and adhere to the unique institutional culture of higher education.
  - Academic discourse
  - Formal interaction with faculty
  - Demonstration of commitment
  - Acknowledgment that there are few exceptions to rules and expectations

> You need to take it seriously. … Make sure you get everything done because teachers are not going to give you all the extensions and benefits they would give you in high school.

# 3. Balancing multiple roles: College as only one obligation of many

- Students need to know how to make college a priority, even when there are other demands on their time.
  - Take advantage of the fluidity of the college role
  - Set schedules strategically
  - Plan in advance
  - Reflect on their own needs to act accordingly

> I need to have a plan because I'm very spontaneous and I just, I go with the flow type thing. That's a good mentality but also you always need a plan. And I have realized throughout this year-and-a-half I needed a plan from the get-go because if you don't have a plan, if you're just like doing it or whatever, then you might go out of those two years with not much of what you really wanted.

# 4. Help-seeking: Proactively asking for assistance

- Help is available for those who ask.
  - Identify what help is needed, before it is too late
  - Reflect on weaknesses
  - Understand resources available
  - Figure out what type of help will be useful
  - Take initiative to seek out assistance

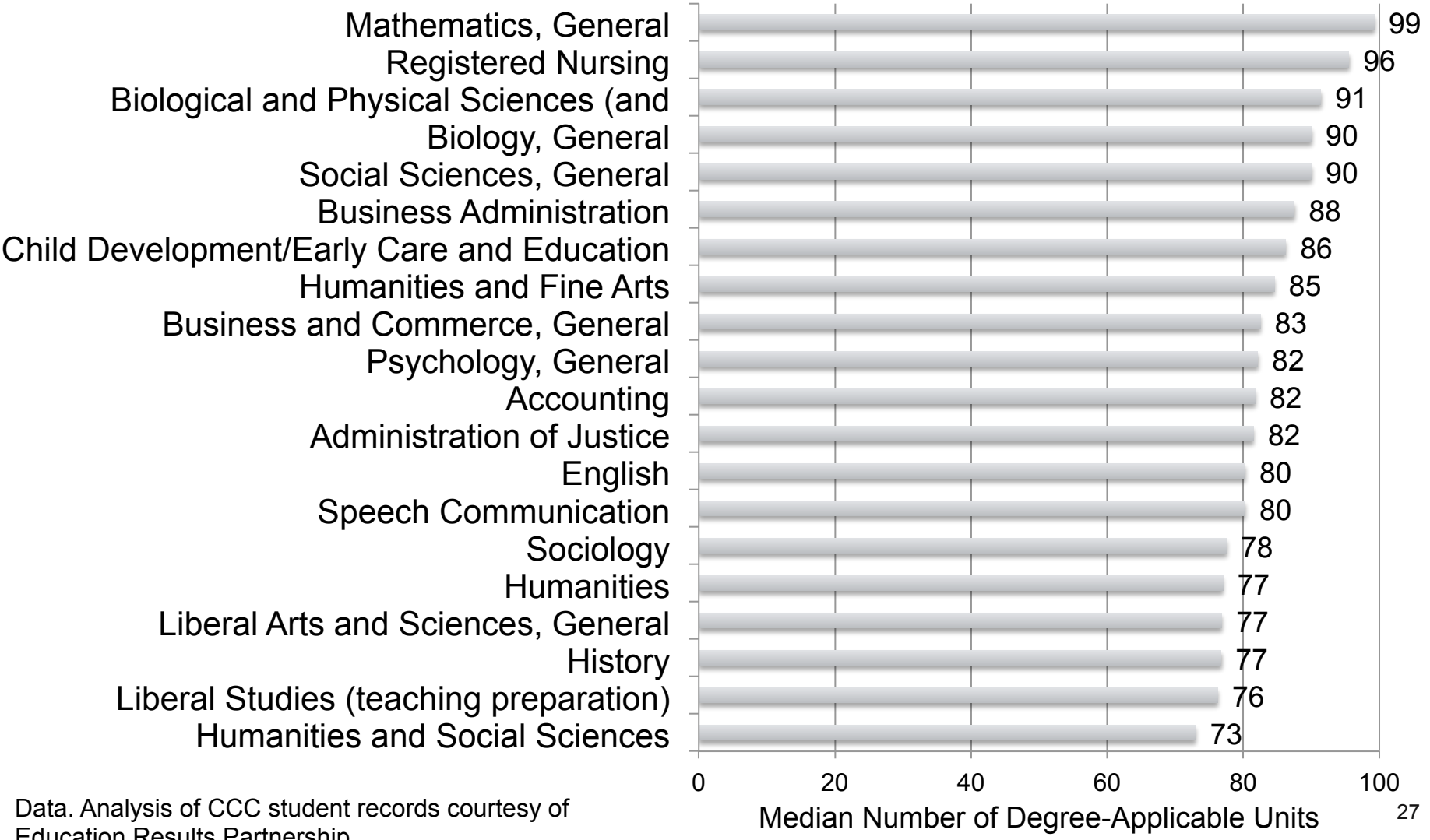
> It's college. They do everything; they have the Learning Center, the Tutoring Center, they've got the library, they've got all these computer labs. I mean they offer everything. … You have to figure it out on your own.


Identify hidden rules
Communicate differences up front
Shift practices to enact college rules
Collaborate with college partners
Rigor and authenticity are different

# Where do we lose students?

- Developmental education diverts students
- Thwarted transfer objectives
- Excess credits for degrees
- Excessive time to degree
- Student learning unclear—failure to meet academic progress
- Students express confusion and discouragement

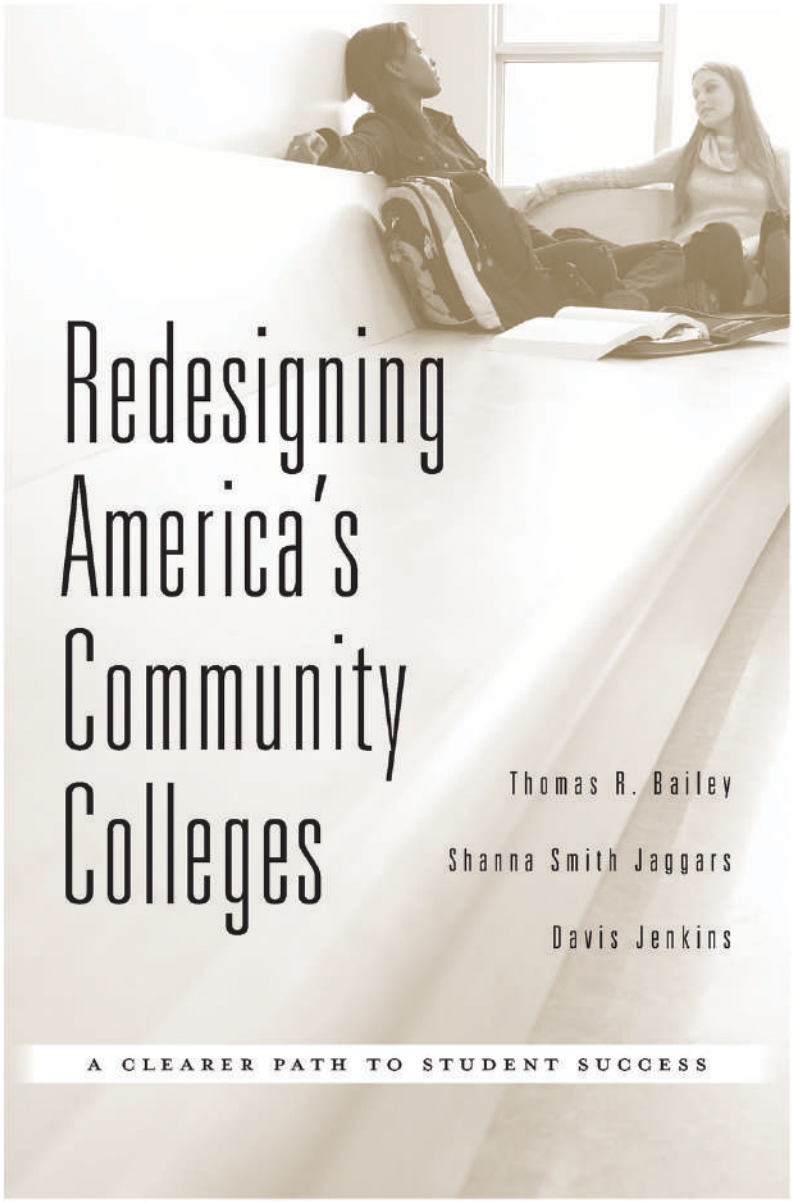
# Median credits earned by associate degree completers 20 CCC programs with the most completers in 2015-16




Data. Analysis of CCC student records courtesy of Education Results Partnership

# Widespread Reform – Little Progress

- A decade of the “Completion Agenda”
- Institutional and sector student outcomes have not improved
- WHY?


Redesigning America's Community Colleges
Thomas R. Bailey
Shanna Smith Jaggars
Davis Jenkins
A CLEARER PATH TO STUDENT SUCCESS

# Problem with the Structure of Community Colleges

- Reforms too small or narrowly focused
  - Reforms not scaled
  - Reforms limited to one segment of student experience
- Colleges built to promote enrollment—Self Service or Cafeteria Model

# New Students Want to Know

- What are my career options?
- What are the education paths to those careers?
- What will I need to take?
- How long will it take and how much will it cost?
- Will my credits transfer?
- Who can I talk with to get good information?

CHOOSE A PROGRAM

- Area of Interest
- Certificate & Degree Programs
- Class Offerings & Catalogs
- Course Descriptions
- Macomb University Center
- Notify Me About Upcoming Events
- Online Learning
- Professional Development
- Secondary School Outreach
- Study Abroad
- Transfer Programs
- Personal Interests
- Youth Programs

Home » Future Students » Choose a Program

# LIST OF PROGRAMS

We make it easy for you to explore the programs we offer! Each of our programs has been assigned to an Area of Interest, 10 total. You can compare those with similar characteristics and find the one that's right for you. Get started now!

Accounting
Administrative Assistant Professional Certificate#
Advanced Processes-CNC
Anthropology
Applied Technology and Apprenticeship
Arabic Language and Culture
Architectural Technology - Civil Construction
Architectural Technology - Commercial Design
Art
Astronomy
Automated Systems Technology - Mechatronics
Automotive Technology
Basic Computer Skills Certificate Program#
Behavioral Sciences
Biological Sciences
Business Communications
Business Management
Certified Medical Reimbursement Specialist#
Certified Nurse Assistant#
Certified Personal Fitness Trainer#
Certified Professional Coder#
Chemistry
Chinese Language and Culture
Civil Technology
Climate Control Technology
College Success Skills
Community Leadersip Certificate Program
Computer Aided Design
Construction: Builder's Pre-License (Segment 1&2) Certificate Program#
Construction Technology
Construction Technology - Renewable Energy Specialist
Court Reporting Certificate Program#
Culinary Arts
Diagnostic Medical Sonography Reciprocal
Drafting and Design
Economics

*Education*
- Education: Early Childhood Studies

Electronic Engineering Technology
Emergency Medical Services - Emergency Medical Technician-Paramedic
Emergency Medical Services - Paramedic/Firefighter
English*
English for Academic Purposes
Entrepreneurship Certificate Program#
Entrepreneurship Innovation
Entrepreneurship & Small Business
Entertainment Arts Program#
Environmental Horticulture Certificate Program#
Environmental Science
Finance
Fire Science
Fire Science with Fire Academy
Floral Design Certificate Program#
Fluid Power Technology
French Language
General Business
Geography
Geology
German Language
Global Supply Chain Management
Health Information Technology
History
Home Care Assistant Certificate Program#
Home Inspection Certificate Program#

*International & Global Studies*
- Europe
- International Studies

Italian Language
Jewelry Trades Certificate Program#
Journalism
Laboratory Assistant#
Landscape Design Certificate Program#
Land Surveying Technology Office Technician
Law Enforcement
Law Enforcement with Police Academy
Legal Assistant
Life Career Development
Maintenance Technology
Manufacturing Engineering
Manufacturing Engineering Technology
Marketing
Mathematics

*Media and Communication Arts*
- Collaborative Media
- Creative Imaging & Illustration
- Design & Layout
- Interactive Web Media
- Motion Design
- Photographic Technology
- Video Production
- 3D Animation

Medical Assistant
Molecular Biotechnology
Music Performance
Nursing
Occupational Therapy Assistant
Pastry Arts
Pharmacy Technician#
Phlebotomy#
Philosophy
Photographic Arts Certificate Program#
Physical Science
Physical Therapist Assistant
Physics
Plumbing and Pipe Fitting
Police Academy
Political Science
Pre-Engineering
Pre-Social Work
Product Development
Product Development - Digital Sculptor
Project Management Certificate Program#
Psychology
Radiologic Technology
Radiologic Technology - Reciprocal Programs
Reading
Renewable Energy Technology
Respiratory Therapy
Restaurant Management
Robotics
Social Media Certificate Program#
Social Science
Sign Language
Sociology
Spanish Language

*Speech Communications Arts*
- Intercultural/Interpersonal Communication

# GENERAL EDUCATION REQUIREMENTS
## (Select 12 courses from this list of more than 300)

***Basic Liberal Studies Requirements: [2 courses must include the Diversity (D) overlay]***

*English Communication*: 6 credits; 3 credits must be in a writing course

Writing (ECw): ELS 112, 122 (nonnative speakers); HPR 326; WRT 104, 105, 106, 201, 227, 235, 302, 303, 304(D), 305(D), 333.
General (EC): COM 100(D), 110(D); LIB 120; PHL 101.

*Fine Arts and Literature* (A): 6 credits; 3 credits in Fine Arts and 3 credits in Literature

Fine Arts: ARH 120(D), 251(D), 252(D); ART 101, 207; FLM 101(D), 203(D), 204(D), 205(D); HPR 105, 124, 201A, 202A, 324; LAR 201; MUS 101(D), 106(D), 111, 292(D), 293(D); PLS 233; SPA 320(D); THE 100, 181, 351(D), 352(D), 381, 382, 383.
Literature: AAF 247(D), 248(D); CLA 391(D), 395(D), 396(D), 397(D); CLS 160(D); ENG 110(D), 160(D), 241(D), 242(D), 243(D), 247(D), 248(D), 251(D), 252(D), 260(D), 262(D), 263(D), 264(D), 265(D), 280(D), 300(D), 302(D), 303(D), 304(D), 317(D), 355(D), 357(D), 358(D); FRN 309(D), 310(D), 320(D), 391(D), 392(D), 393(D); HPR 105, 125, 201A, 202A; RUS 391(D), 392(D); SPA 305(D), 306(D), 307(D), 308(D); WMS 317(D).

*Language/Culture* (FC): 6 credits

- Demonstration of competence through the intermediate level by examination or successfully completing through 104 (living language) or 302 (classical language)
- Two-course sequence (or one course at the 113 level) in a previously studied language through at the appropriate level (all D): ARB 103, 104; CHN 103, 104; FRN 103, 104; GER 103, 104; GRK 301, 302; HBW 103, 104; ITL 103, 104, 111; JPN 103, 104; LAN 193, 194; LAT 301, 302; POR 103, 104; RUS 103, 104; SPA 103, 104, 111, 113, 210.
- Two-course sequence (or one course at the 111 level) in a language not previously studied (or studied for less than two years in high school) through the beginning level: ARB 101, 102; CHN 101, 102; FRN 101, 102; GER 101, 102; GRK 101, 102; HBW 101, 102; ITL 101, 102; JPN 101, 102; LAN 191, 192; LAT 101, 102; POR 101, 102; RUS 101, 102; SPA 101, 102.
- Study abroad in an approved program for one semester
- Major in a foreign language
- Formerly registered international students, students with recognized immigrant status, or naturalized citizens (at Dean's discretion)
- Two courses in Cross-Cultural Competence: CPL 300(D); FRN 309(D), 310(D), 320(D), 391(D), 392(D), 393(D); HIS 132(D), 171(D), 172(D), 180(D), 311(D), 327(D), 374(D), 375(D); HPR 201F, 202F; LET 151L(D), 151Q(D), 151R; NRS 300; PHL 331(D); RLS 131(D); SPA 320(D), TMD 224(D); six credits of a full-semester approved Intercultural Internship in a foreign country through the Office of Internships and Experiential Education

*Letters*(L): 6 credits

AAF 150(D), 201(D), 355(D), 356(D); APG 327; BGS 392(D); CLS 160(D), 235; EGR 316(D); ENG 110(D), 160(D), 243(D), 251(D), 252(D), 280(D), 355(D), 356(D); FRN 391(D), 392(D), 393(D); HIS 111, 112, 113(D), 114(D), 116, 117, 118(D), 130(D), 132(D), 141(D), 142(D), 145(D), 146(D), 150(D), 160(D), 171(D), 172(D), 180(D), 304, 305, 310(D), 311(D), 314, 323(D), 327(D), 332(D), 333(D), 340(D), 341(D), 346(D), 351(D), 355(D), 356(D) , 374(D), 375(D); HPR 107, 201L, 202L, 307; JOR 110(D); LAR 202(D); LET 151L(D), 151Q(D), 151R(D); NUR 360(D); PHL 101, 103, 204, 210(D), 212(D), 215, 217(D), 235, 314, 316(D), 321, 322, 323(D), 325(D), 328(D), 331(D), 346, 355; PSC 341, 342; PSY 310; RLS 111(D), 125, 126, 131(D); WMS 220(D), 315(D), 320(D)

*Mathematics*(MQ): 3 credits satisfied by MTH 141

BUS 111, CSC 101, 201; HPR 108, 201M, 202M; MTH 106, 107, 108, 109, 111, 131, 141; PSC 109; STA 220.

*Natural Sciences*(N): 6 credits; satisfied by PHY

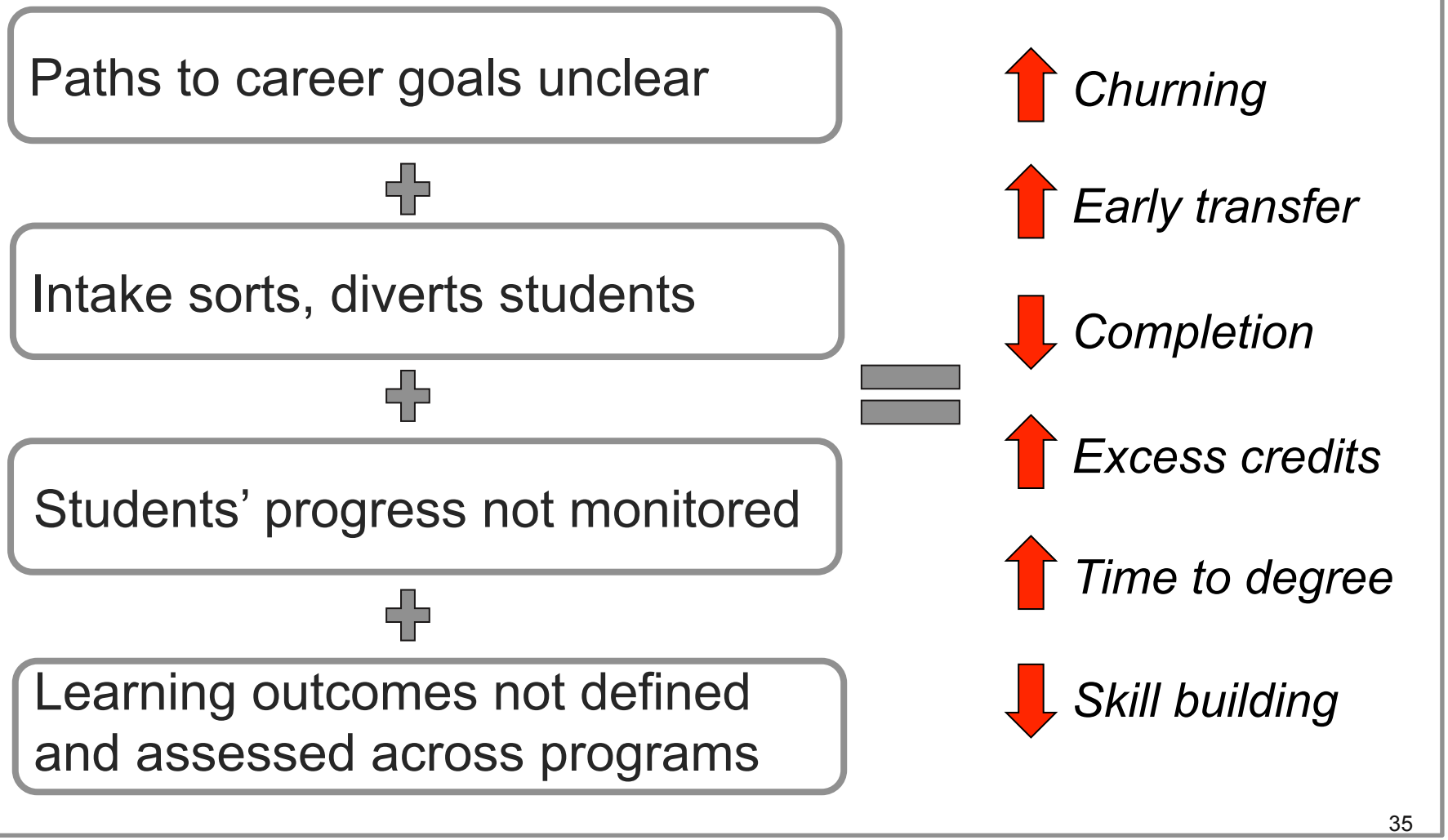
AFS 190, 210, 211; APG 201(D); AST 108, 118; AVS 101(D); BCH 190; BIO 101, 102, 105, 106, 286(D); BPS 201; CHM 100, 101, 103, 112; GEO 100, 102, 103, 110, 113, 120; HPR 109, 201N, 202N; MIC 190; NFS 207; NRS 190; OCG 110, 123, 131; PHY 109, 111, 112, 140, 185, 186, 203, 204, 205, 273, 274, 275; PLS 150, 190; TMD 113

*Social Sciences*(S): 6 credits

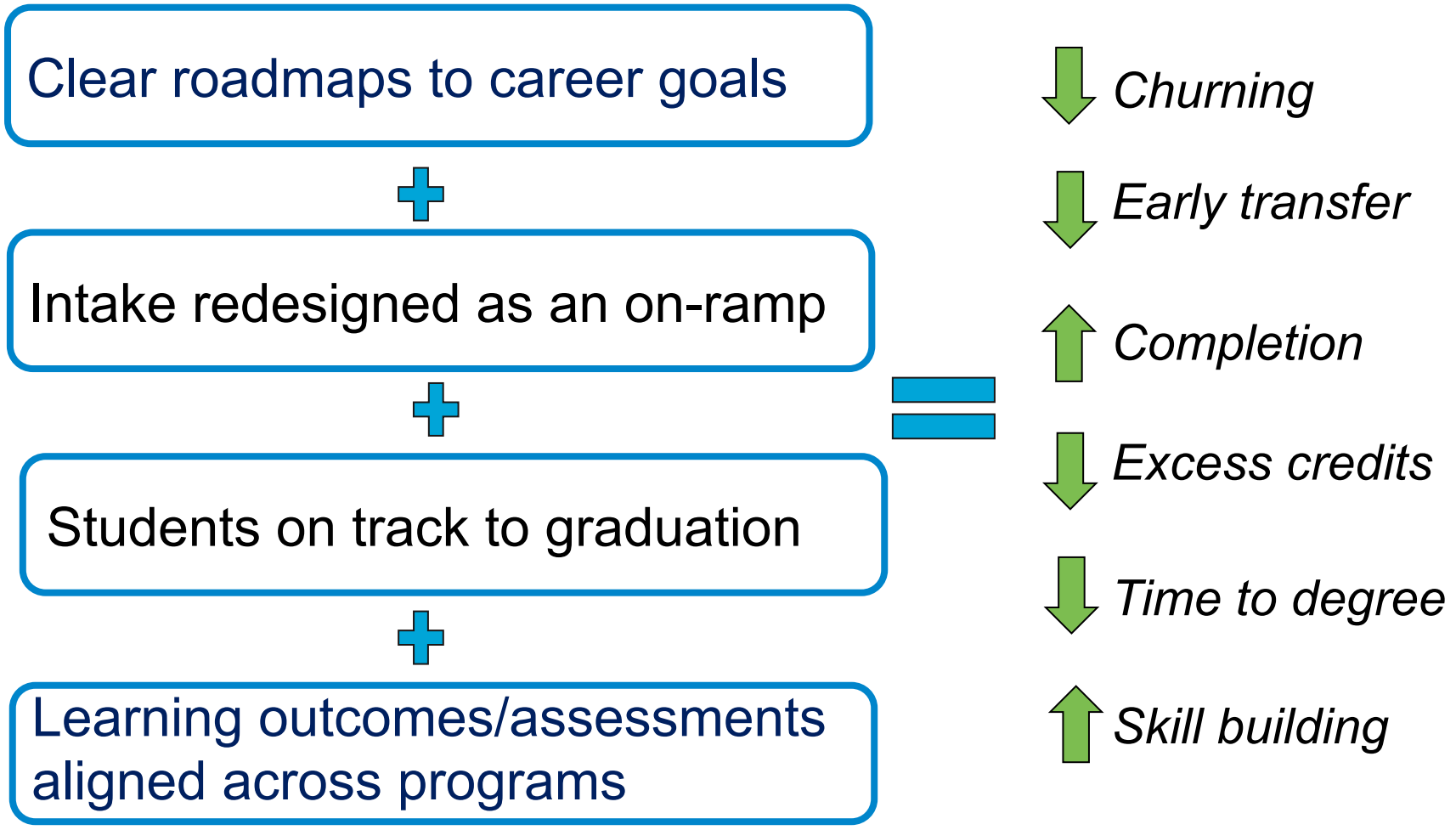
APG 200(D), 202, 203(D), 301(D); CPL 202(D); ECN 100(D), 201, 202, 306, 381(D); EDC 102(D); EEC 105, 310, 356; GEG 101(D), 104(D), 202(D); HDF 225; HPR 110(D), 201S, 202S; HSS 130; JOR 110(D); KIN 123(D); LIN 200(D); MAF 100; NUR 150(D); PSC 113(D), 116(D), 274(D), 288; PSY 103(D), 113(D), 232(D), 235(D), 254(D), 255(D); SOC 100(D), 212(D), 230(D), 240(D), 242(D), 274(D); TMD 224(D), WMS 150(D)


Career?
Degree?

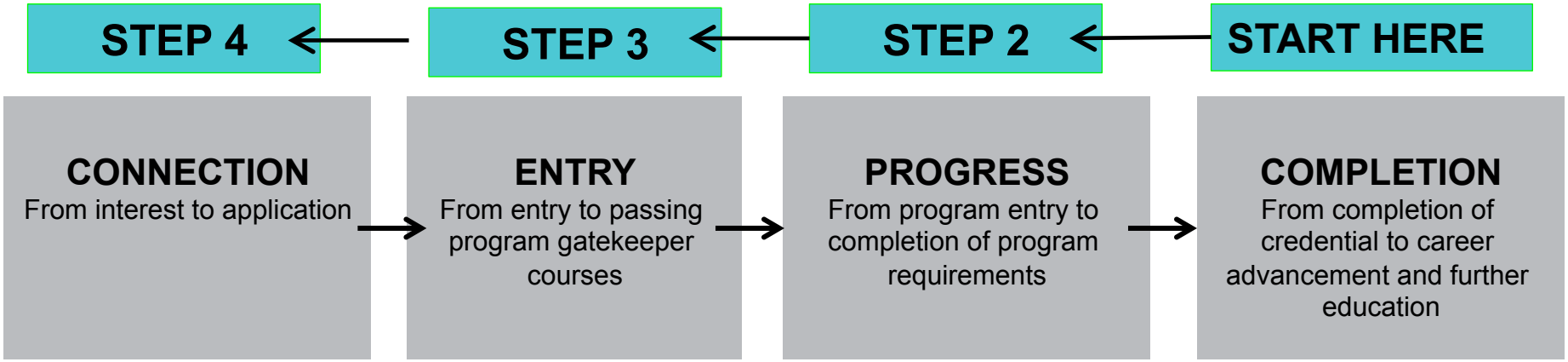
# Cafeteria College



# Guided Pathways College



# Start with the End in Mind



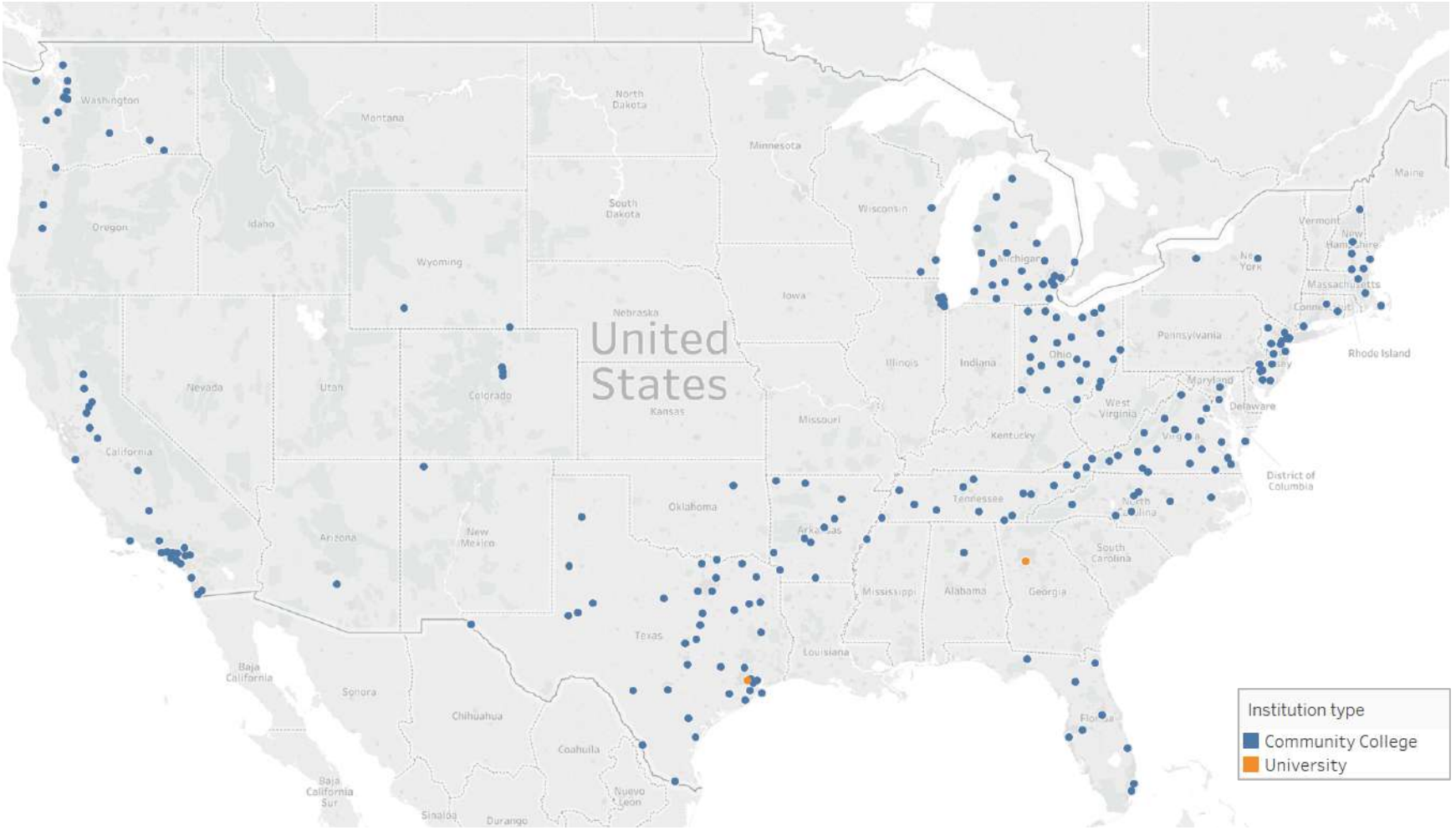

- Market program paths
- Build bridges from high school and adult ed. into program streams (e.g., strategic dual enrollment, I-BEST)

- Require exploratory or "meta-majors" for undecided students
- Integrate basic skills instruction into introductory college courses

- Clearly map out program paths
- Rethink advising around maps
- Use "eAdvising" to monitor student progress, provide feedback and support as needed

- Align program outcomes with requirements for success in further education and the labor market

# A National Movement




Updated August 2017

# Guided Pathways: Planning, Implementation, Evaluation

Creating guided pathways requires managing and sustaining large-scale transformational change. The work begins with thorough planning, continues through consistent implementation, and depends on ongoing evaluation. **The goals are to improve rates of college completion, transfer, and attainment of jobs with value in the labor market — and to achieve equity in those outcomes.**

## PLANNING

### ESSENTIAL CONDITIONS

Make sure the following conditions are in place – prepared, mobilized, and adequately resourced – to support the college's large-scale transformational change:

- Strong change leadership throughout the institution
- Faculty and staff engagement
- Commitment to using data
- Capacity to use data
- Technology infrastructure
- Professional development
- Favorable policy (state, system, and institutional levels) and board support
- Commitment to student success and equity

### PREPARATION/AWARENESS

Understand where you are, prepare for change, and build awareness by:

- Engaging stakeholders and making the case for change
- Establishing a baseline for key performance indicators
- Building partnerships with K–12, universities, and employers
- Developing flowcharts of how students choose, enter, and complete programs
- Developing an implementation plan with roles and deadlines

### SUSTAINABILITY

Commit to pathways for the long term and make sure they are implemented for all students by:

- Determining barriers to sustainability (state, system, and institutional levels)
- Redefining the roles of faculty, staff, and administrators as needed
- Identifying needs for professional development and technical assistance
- Revamping technology to support the redesigned student experience
- Reallocating resources as needed
- Continuing to engage key stakeholders, especially students
- Integrating pathways into hiring and evaluation practices

## IMPLEMENTATION

### CLARIFY THE PATHS

Map all programs to transfer and career and include these features:

- Detailed information on target career and transfer outcomes
- Course sequences, critical courses, embedded credentials, and progress milestones
- Math and other core coursework aligned to each program of study

### HELP STUDENTS GET ON A PATH

Require these supports to make sure students get the best start:

- Use of multiple measures to assess students' needs
- First-year experiences to help students explore the field and choose a major
- Full program plans based on required career/transfer exploration
- Contextualized, integrated academic support to help students pass program gateway courses
- K–12 partnerships focused on career/college program exploration

### HELP STUDENTS STAY ON THEIR PATH

Keep students on track with these supports:

- Ongoing, intrusive advising
- Systems for students to easily track their progress
- Systems/procedures to identify students at risk and provide needed supports
- A structure to redirect students who are not progressing in a program to a more viable path

### ENSURE STUDENTS ARE LEARNING

Use these practices to assess and enrich student learning:

- Program-specific learning outcomes
- Project-based, collaborative learning
- Applied learning experiences
- Inescapable student engagement
- Faculty-led improvement of teaching practices
- Systems/procedures for the college and students to track mastery of learning outcomes that lead to credentials, transfer, and/or employment

## EARLY OUTCOMES

Measure key performance indicators, including:

- Number of college credits earned in first term
- Number of college credits earned in first year
- Completion of gateway math and English courses in the student's first year
- Number of college credits earned in the program of study in first year
- Persistence from term 1 to term 2
- Rates of college-level course completion in students' first academic year
- Equity in outcomes

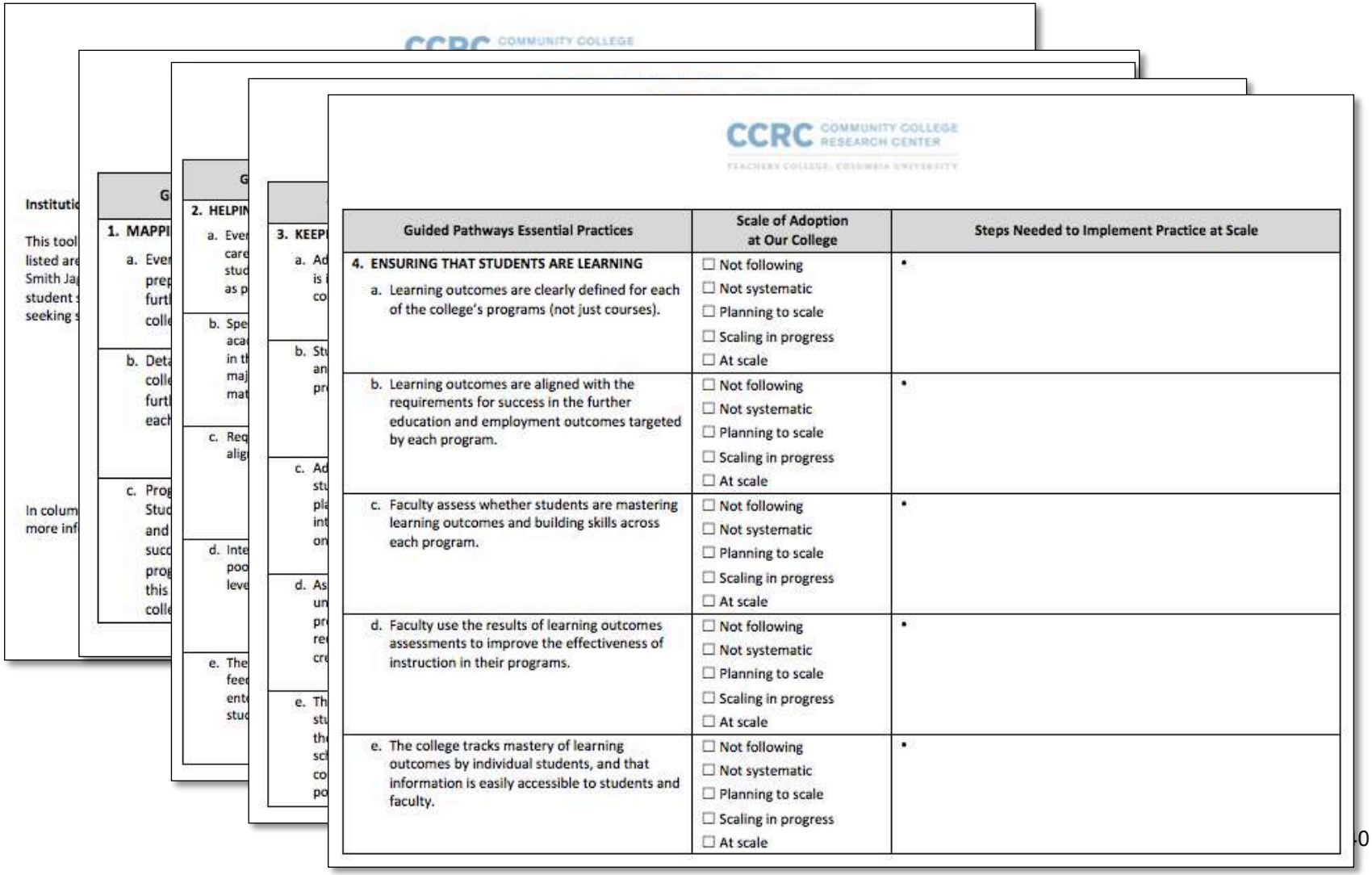
Revisit conditions, sustainability, and implementation. Continuously improve pathways by building on elements that work and adjusting or discarding elements that are not serving all students well.

## EVALUATION

Contributors to this model for Guided Pathways are: American Association of Community Colleges (AACC), Achieving the Dream (ATD), The Aspen Institute, Center for Community College Student Engagement (CCCSE), Community College Research Center (CCRC), Complete College America, The Charles A. Dana Center, Jobs for the Future (JFF), National Center for Inquiry and Improvement (NCII), and Public Agenda.

FEB. 17

# Guided Pathways Scale of Adoption



CCRC COMMUNITY COLLEGE RESEARCH CENTER

| Guided Pathways Essential Practices | Scale of Adoption at Our College | Steps Needed to Implement Practice at Scale |
|---|---|---|
| **4. ENSURING THAT STUDENTS ARE LEARNING**<br>a. Learning outcomes are clearly defined for each of the college's programs (not just courses). | ☐ Not following<br>☐ Not systematic<br>☐ Planning to scale<br>☐ Scaling in progress<br>☐ At scale | • |
| b. Learning outcomes are aligned with the requirements for success in the further education and employment outcomes targeted by each program. | ☐ Not following<br>☐ Not systematic<br>☐ Planning to scale<br>☐ Scaling in progress<br>☐ At scale | • |
| c. Faculty assess whether students are mastering learning outcomes and building skills across each program. | ☐ Not following<br>☐ Not systematic<br>☐ Planning to scale<br>☐ Scaling in progress<br>☐ At scale | • |
| d. Faculty use the results of learning outcomes assessments to improve the effectiveness of instruction in their programs. | ☐ Not following<br>☐ Not systematic<br>☐ Planning to scale<br>☐ Scaling in progress<br>☐ At scale | • |
| e. The college tracks mastery of learning outcomes by individual students, and that information is easily accessible to students and faculty. | ☐ Not following<br>☐ Not systematic<br>☐ Planning to scale<br>☐ Scaling in progress<br>☐ At scale | • |

# Implementing Guided Pathways

## Early Insights From the AACC Pathways Colleges


April 2017

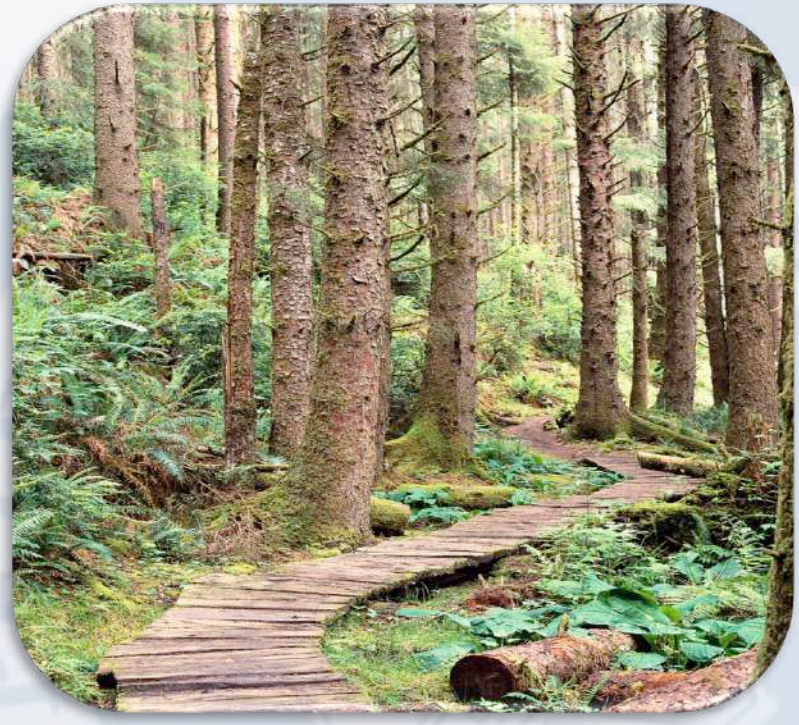
CCRC COMMUNITY COLLEGE RESEARCH CENTER
TEACHERS COLLEGE, COLUMBIA UNIVERSITY

Davis Jenkins
Hana Lahr
John Fink

# Mapping Paths to Student End Goals

# Evolution of Pathways at SPC

SPC St. Petersburg College
INSTRUCTION AND ACADEMIC PROGRAMS



"Before"

"After"

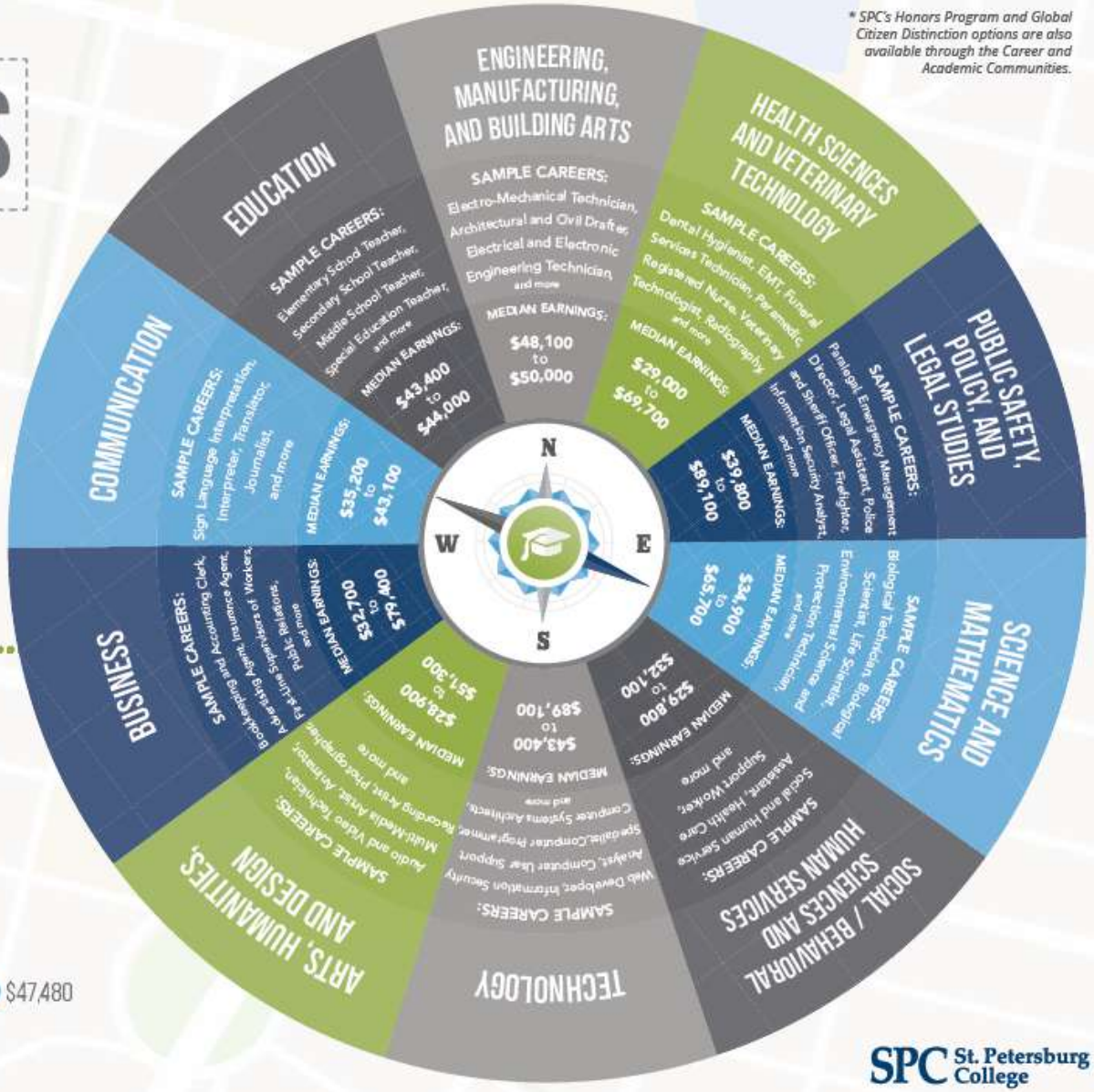
Since 2010, SPC has focused its strategic efforts on **student success** using an intentional data-driven way to help students **"Finish What They Start".**

# CAREER + ACADEMIC COMMUNITIES

## at St. Petersburg College

**Start your journey today!** Choose from one of the ten career and academic communities to see what opportunities await after you graduate. Take the first step now by going to **spcollege.edu**

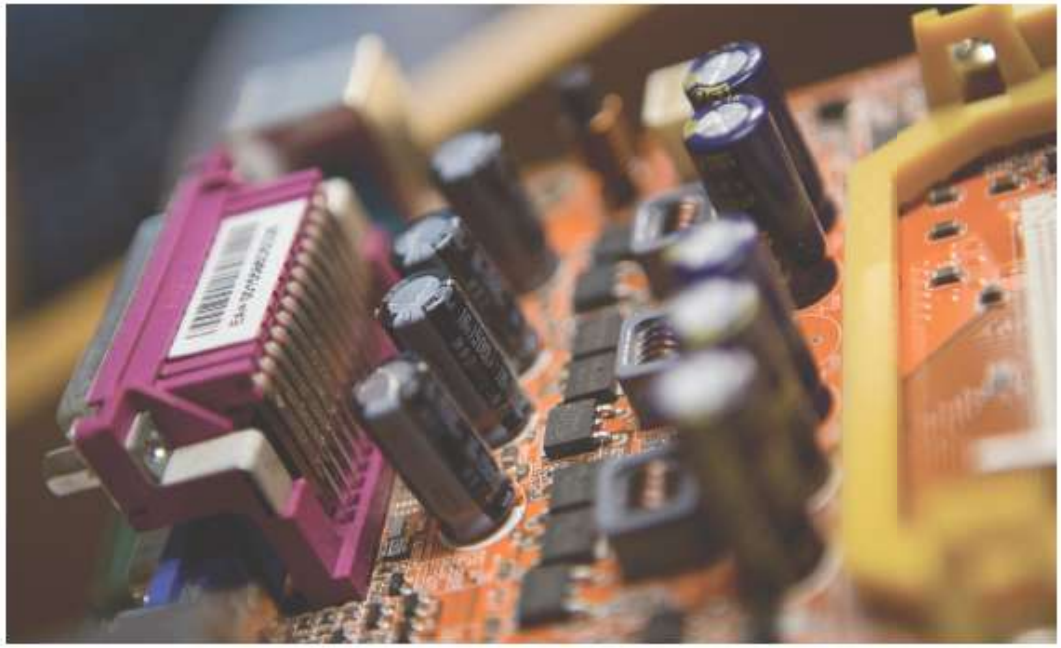
* SPC's Honors Program and Global Citizen Distinction options are also available through the Career and Academic Communities.




## CHART YOUR PATH
## BUILD YOUR FUTURE

### MEDIAN FIRST-YEAR EARNINGS
(AFTER GRADUATION)


SPC St. Petersburg College



# TECHNOLOGY
## DEGREES AND PROGRAMS

### BACHELOR'S DEGREES
Technology Development and Management

### ASSOCIATE IN ARTS TRANSFER PLAN
Information Systems Management

### ASSOCIATE IN SCIENCE
Computer Information Technology
Cybersecurity
Computer Networking
Computer Programming and Analysis
Web Development

### CERTIFICATES
Help Desk Support Specialist
Cybersecurity
Computer Support
Cisco Certified Network Associate
Linux System Administrator
Microsoft Certified Solutions Associate
Computer Programmer
Computer Programming Specialist
Web Development Specialist

# ACADEMIC PATHWAY

## Computer Networking Associate in Science Degree

| Seq # | Course | Course Title | Credit | Type | Term Offered | Pre-Req. | Options Avail. |
|---|---|---|---|---|---|---|---|
| 1 | CGS 1070 | Basic Computer and Information Literacy | 1 | Gen Ed | F, Sp, Su | | Y |
| 2 | PHI 1600 | Studies in Applied Ethics | 3 | Gen Ed | F, Sp, Su | | Y |
| 3 | COP 1000 | Introduction to Computer Programming | 3 | Core [1,2] | F, Sp, Su | | |
| 4 | MAT 1033 | Intermediate Algebra | 3 | PreReq | F, Sp, Su | | |
| 5 | CET 1171C | Computer Repair Essentials | 3 | Core [1,3,4] | F, Sp, Su | | |
| 6 | MAC 1105 | College Algebra | 3 | Gen Ed | F, Sp, Su | Y | |
| 7 | CNT 1000 | Local Area Network Concepts | 3 | Subplan [1,2,3] | F, Sp, Su | Y | |
| 8 | CET 1172C | Computer Support Technician | 3 | Core [1,4] | F, Sp, Su | | |
| | PREPARATION FOR COMPTIA A+ INDUSTRY CERTIFICATION COMPLETED | | | | | | |
| 9 | ENC 1101 | Composition I | 3 | Gen Ed | F, Sp, Su | | Y |
| 10 | SPC 1065 | Business and Professional Speaking | 3 | Gen Ed | F, Sp, Su | | Y |
| 11 | CTS 1327 | Configuring and Administering MS Windows Client | 3 | Subplan [1,2,3] | F, Sp, Su | | |
| 12 | CTS 1328 | Installing and Configuring Windows Server | 3 | Subplan [1,3] | F, Sp, Su | Y | |
| 13 | CTS 2106 | Fundamentals of the Linux/Unix Operating Environment | 3 | Subplan [1,2,3] | F, Sp, Su | Y | |
| | COMPUTER SUPPORT CERTIFICATE COMPLETED | | | | | | |
| 14 | POS 2041 | American National Government | 3 | Gen Ed | F, Sp, Su | | Y |
| 15 | CTS 2321 | Linux System Administration I | 3 | Subplan[2] | F, Sp | Y | |
| 16 | CTS 2322 | Linux System Administration II | 3 | Subplan[2] | F, Sp | Y | |
| | LINUX SYSTEM ADMINISTRATOR CERTIFICATE COMPLETED | | | | | | |
| 17 | HUM 2270 | Humanities (East-West Synthesis) | 3 | Gen Ed | F, Sp, Su | | Y |
| 18 | CTS 1334 | Administering Windows Servers | 3 | Subplan [3] | F, Sp | Y | |
| 19 | CTS 1303 | Configuring Advanced Windows Server Services | 3 | Subplan [3] | F, Sp | Y | |
| | MICROSOFT CERTIFIED IT PROFESSIONAL: SERVER ADMINISTRATOR CERTIFICATE COMPLETED | | | | | | |
| 20 | CIS 2321 | Systems Analysis and Design | 3 | Core | F, Sp, Su | Y | |
| 21 | CTS 1411 | Fundamentals of Information Storage and Management | 3 | Core | F, Sp | Y | |
| 22 | CTS 2370 | Configuring and Managing Virtualization | 3 | Core | F, Sp | Y | |
| 23 | CNT 2940 | Computer Networking Internship | 3 | Core | F, Sp, Su | | |

**Total program credits: 67**

(Includes MAT 1033 & Computer Competency)

[1] Part of Computer Support Certificate
[2] Part of Linux System Administrator Certificate
[3] Part of Microsoft Certified IT Professional: Server Administrator Certificate
[4] Preparation Course for CompTia A+ Industry Certification

*Term Offered:* **F** - Fall | **SP** - Spring | **SU** - Summer | *Type of Course:* **Core** - Required for the Program | **Elective** - Options based upon personal interest | **Gen Ed** - General Education | **PreReq** - Prerequisite | **Subplan** - Specific to a particular degree option

# Indian River State College

Guided Pathway Programs

Guided Pathway Programs

Associate in Arts Degree

**Search by Interest — Choose Your Meta Majo**

## Computer Information Technology

Are you ready for a well-paying career in a rapidly growing worldwide industry? You'll focus on the latest advances in network security and web development, IT support and related fields. You'll study computer programming and develop web programming skills to design and maintain websites using Dynamic HTML, XML and scripting languages.

Continue with a Bachelor's Degree in IT Management and Cyber Security to gain advanced skills in building, operating and maintaining computer networks and ensuring the safety and security of the data moving through these networks. You will be ready to manage the technology and people associated with IT operations.

- **A.A. Degree** — Complete your first two years of college at IRSC, and you're guaranteed the right to transfer as a junior to a Bachelor's program at a Florida state university — or continue to a Bachelor's degree at IRSC.
- **A.S. Degree** — Gain management and technical skills in many high-demand career fields, with the option to continue toward a Bachelor's degree at IRSC.
- **Technical Certificates** — Earn valuable Technical Certificates at the same time you're completing an A.S. Degree — get double the value and additional credentials by completing these blocks of courses.
- **Bachelor's Degree** — Increase your earning power and build on your Associate Degree with more than twenty 2+2 Bachelor's Degree options at IRSC.

**GUIDED PATHWAYS (Full-Time Students):**

- Computer and Information Sciences — AA
- Computer Engineering — AA
- Information Technology Management and Cyber Security — AA
- Computer Information Technology — AS
- Technical Certificates (Earn while completing your AS Degree):
  - Cisco Certified Network Associate
  - Computer Programming Specialist
  - Information Technology Support Specialist
  - Office Specialist
  - Web Production
- Information Technology Management and Cyber Security — BS

**GUIDED PATHWAYS (Part-Time Students):**

- Computer and Information Sciences — AA
- Computer Engineering — AA
- Information Technology Management and Cyber Security — AA
- Computer Information Technology — AS
- Technical Certificates (Earn while completing your AS Degree)
- Information Technology Management and Cyber Security — BS

For course descriptions, view the college catalog.

## Science, Technology, Engineering and Mathematics

This meta major is known as STEM and represents some of the fastest-growing high-tech fields. This is the meta major you should choose to pursue a career as an engineer,

**INDIAN RIVER STATE COLLEGE**

**PROGRAM** AA - Information Technology Management & Cybersecurity Track

**Meta Major:** Science, Technology, Engineering, and Mathematics

**2016-2017 Guided Pathway**

11510 Credit Hours 74

**First Semester**

| Check when complete | Course Number | Title | Credit Hours | Prerequisite |
|---|---|---|---|---|
| ☐ | | | | |
| ☐ | | | | |
| ☐ | | | | |
| ☐ | | | | |
| ☐ | | | | |
| ☐ | | | | |

**INDIAN RIVER STATE COLLEGE**

**PROGRAM** AA - Information Technology Management & Cybersecurity Track

**Meta Major:** Science, Technology, Engineering, and Mathematics

**2016-2017 Guided Pathway**

11510 Credit Hours 74

**Third Semester**

| Check when complete | Course Number | Title | Credit Hours | Prerequisite |
|---|---|---|---|---|
| ☐ | PHI2100 | Introduction to Logic | 3 | |
| ☐ | Foreign Language I* | Foreign Language - Level I | 4 | |
| ☐ | STA2023 | Elementary Statistics I | 3 | MAT1033 ("C" or higher) or higher |
| ☐ | CTS1334 | Windows Server | 3 | |
| ☐ | AST1002 | General Astronomy | 3 | |
| ☐ | | | | |
| | | **Total Semester Credit Hours** | **16** | |

**Fourth Semester**

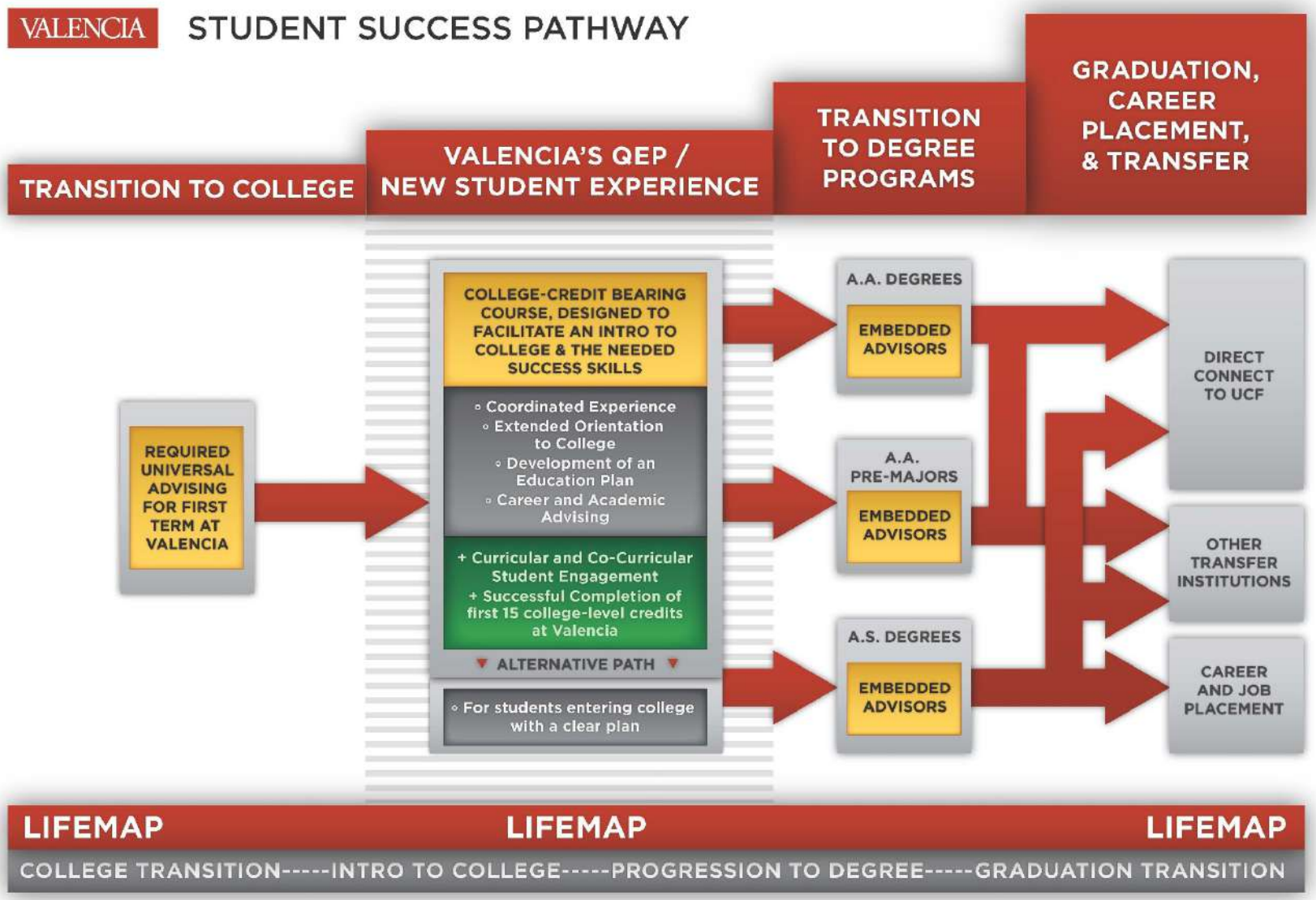
| Check when complete | Course Number | Title | Credit Hours | Prerequisite |
|---|---|---|---|---|
| ☐ | PSC1121 | Survey of Physical Science | 3 | |
| ☐ | PHI1010 | Introduction to Philosophy | 3 | |
| ☐ | ECO2023 | Principles of Economics Micro | 3 | |
| ☐ | AMH2020 | American History: Reconstruction to the Present | 3 | |
| ☐ | Foreign Language II* | Foreign Language - Level II | 4 | |
| ☐ | | | | |
| | | **Total Semester Credit Hours** | **16** | |

*If student took 2 years of Foreign Language in High School, not required to take foreign language in college

# Getting Students on a Path:

## Student Choice and Skills

# The New Student Experience



# The New Student Experience

MY Education Plan

ADVISING
career & academic advising

Extended Orientation to College

CURRICULAR
new student experience course

Starting a habit that will continue

CO-CURRICULAR
college success skills certificate

Start Right

COMPLETION
of first 18 hours of college-level courses

INTEGRATED STUDENT SUCCESS SKILLS

## Management, BSB at Wright State University

| Shawnee High School -> | | Clark State -> | | Wright State |
|---|---|---|---|---|
| Diploma | | Management AS | | Management BSB |
| High School Courses | | Clark State Courses | Credits | Wright State Courses |
| 9TH | Eng 1 | ENG 1111 | 3 | ENG 1100 |
| | | | | ENG 2100 |
| 10TH | | ENG 1112 | 3 | ENG 2100 |
| 11TH | | HST 1110 | 3 | HST 1100 |
| | | ENG 2300 | 3 | ENG 2040 |
| | | SOC 1110 | 3 | SOC 2000 |
| 12TH | | PSY 1111 | 3 | PSY 1010 |
| | | MTH 2100 | 5 | MTH 2280 |
| | | HST 1120 | 3 | HST 1200 |

**GUARANTEED ADMISSION TO CLARK STATE!**

Clover Park Personalized Pathway - Computer

**GUARANTEED ADMISSION TO CLARK STATE!**

| | | | | |
|---|---|---|---|---|
| Classes at Clark State | ACC 1100 | 4 | ACC 2010 | 4 |
| | STT 2640 | 3 | MS 2040 | 3 |
| | FYE 1100 | 1 | Elective | 1 |
| | ACC 1200 * | 4 | ACC 2020 | 4 |
| | STT 2650 | 2 | MS 2050 | 3 |
| | ENG 2211 * | 3 | ENG 3000 | 3 |
| | COM 1120 | 3 | COM 1010 | 3 |
| | ECO 2210 | 3 | EC 2050 | 3 |
| | MGT 1120 | 3 | MGT 3100 | 3 |
| | MKT 2000 | 3 | KKT 2500 | 3 |
| | BIO 1510 or PHY 1501 | 5 | Natural Science Core | 4 |
| | BIO 1520 or PHY 1502 | 5 | Natural Science Core | 4 |
| | ECO 2220 | 3 | EC 2040 | 3 |
| | MGT 2600 | 3 | LAW 3000 | 3 |
| Clark State Graduate! Go to work of continue to WSU | | | | |
| $$$$$$$$$$ | | | MGT 1900 | 3 |
| | | | MGT 3100 | 3 |
| | | | MGT 4720 | 3 |
| | | | MGT 4850 | 3 |
| | | | MGT 4900 | 3 |
| | | | MGT 4200 | 3 |
| | | | MGT 4300 | 3 |
| | | | MGT 4770 | 3 |
| | | | Additional Courses | 23 |
| | Total | 71 | Total | 120 |

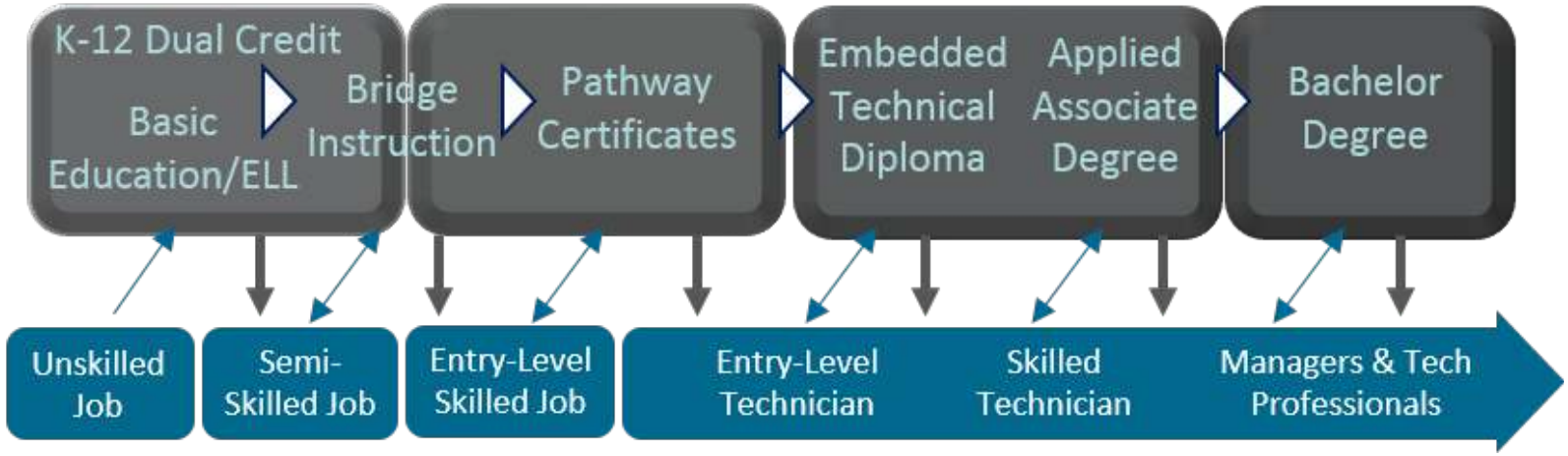
| | | Cost (Credits) |
|---|---|---|
| Total Credits earned in HS | 26 | FREE! |
| Total Credits earned at Clark State | 45 | $6,480.00 |
| Total Credits Needed at Wright State | 120 | $41,880.00 |
| Credits available throught CS | 71 | |
| Credits still needed at WSU | 49 | |
| Total BSB Cost throught Clark State | | $23,581.00 |
| SAVINGS | | $18,299.00 |

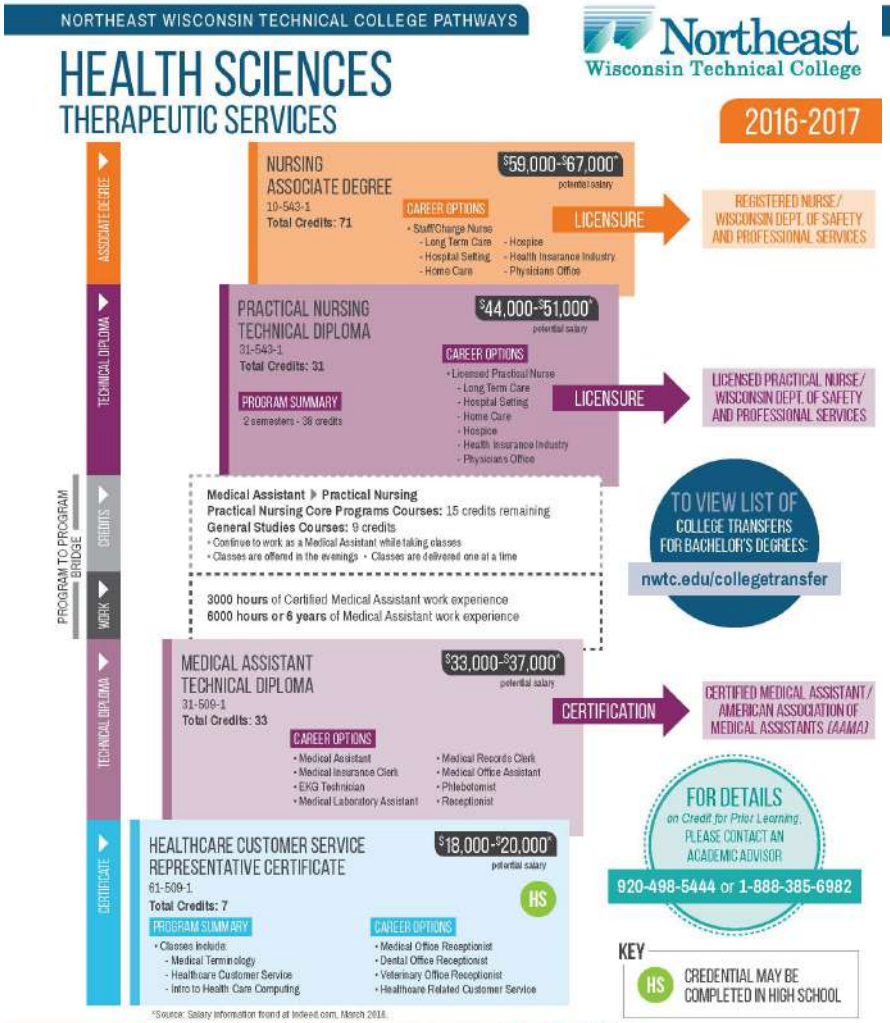

Agriculture, Food & Natural Resources
Education & Training
Hospitality & Tourism
Manufacturing
Architecture & Construction
Finance
Human Services
Marketing
Arts, A/V Technology & Communications
Government & Public Administration
Information Technology
Science, Technology, Engineering & Mathematics
Business Management & Administration
Health Science
Law, Public Safety, Corrections & Security
Transportation, Distribution & Logistics
Liberal Arts & Sciences

# Wisconsin Career Pathway Credential Structure

pathWAYS | Northeast Wisconsin Technical College

Career pathways allow students to go from college to job to more college to better job!

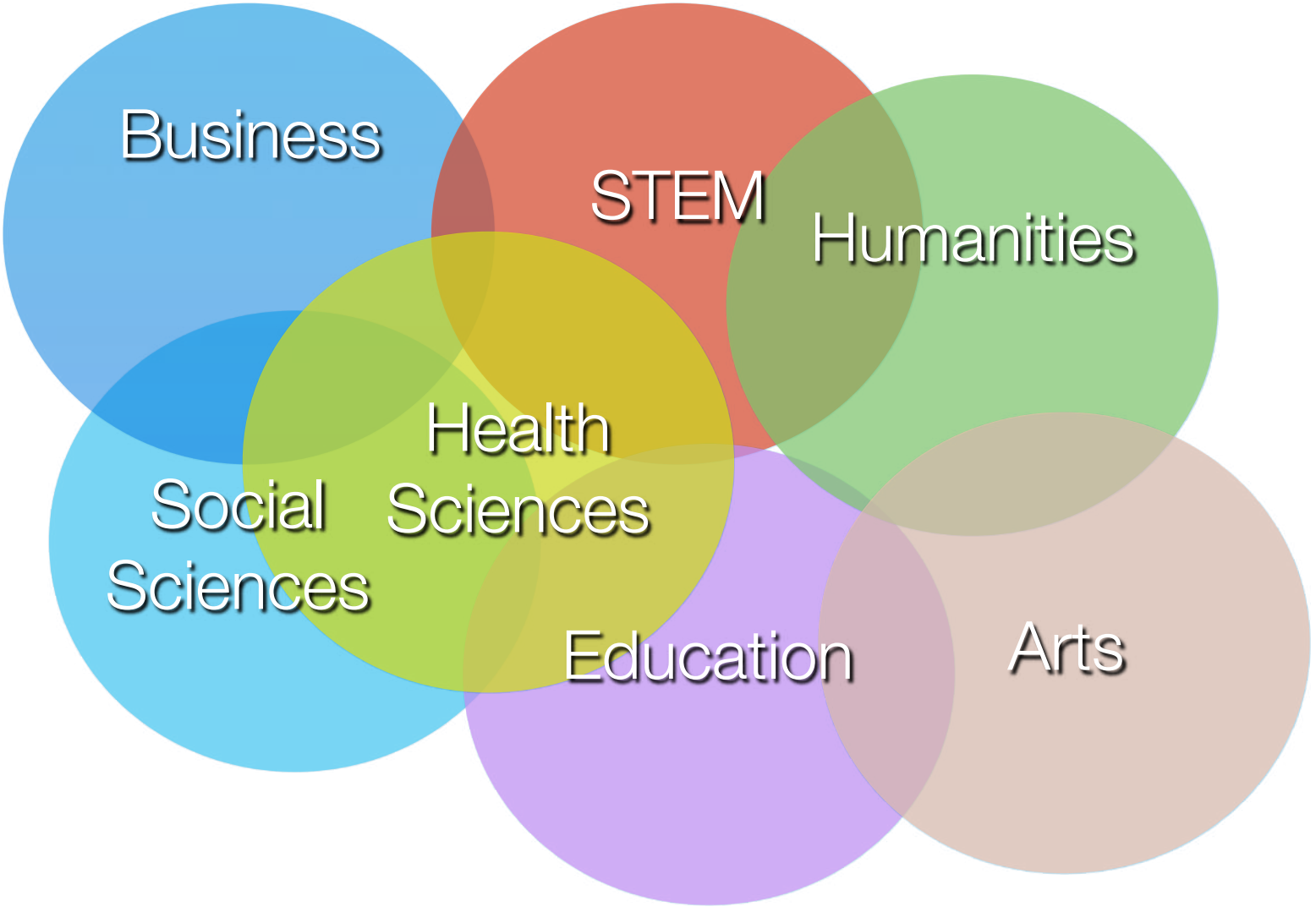



NORTHEAST WISCONSIN TECHNICAL COLLEGE PATHWAYS
Northeast Wisconsin Technical College
HEALTH SCIENCES
THERAPEUTIC SERVICES
2016-2017
ASSOCIATE DEGREE
NURSING ASSOCIATE DEGREE
10-543-1
Total Credits: 71
$59,000-$67,000* potential salary
CAREER OPTIONS
• Staff/Charge Nurse
- Long Term Care
- Hospital Setting
- Home Care
- Hospice
- Health Insurance Industry
- Physicians Office
LICENSURE
REGISTERED NURSE/ WISCONSIN DEPT. OF SAFETY AND PROFESSIONAL SERVICES
TECHNICAL DIPLOMA
PRACTICAL NURSING TECHNICAL DIPLOMA
31-543-1
Total Credits: 31
$44,000-$51,000* potential salary
CAREER OPTIONS
• Licensed Practical Nurse
- Long Term Care
- Hospital Setting
- Home Care
- Hospice
- Health Insurance Industry
- Physicians Office
PROGRAM SUMMARY
2 semesters - 38 credits
LICENSURE
LICENSED PRACTICAL NURSE/ WISCONSIN DEPT. OF SAFETY AND PROFESSIONAL SERVICES
PROGRAM TO PROGRAM BRIDGE
CREDITS
Medical Assistant ▶ Practical Nursing
Practical Nursing Core Programs Courses: 15 credits remaining
General Studies Courses: 9 credits
• Continue to work as a Medical Assistant while taking classes
• Classes are offered in the evenings • Classes are delivered one at a time
WORK
3000 hours of Certified Medical Assistant work experience
6000 hours or 6 years of Medical Assistant work experience
TO VIEW LIST OF COLLEGE TRANSFERS FOR BACHELOR'S DEGREES:
nwtc.edu/collegetransfer
TECHNICAL DIPLOMA
MEDICAL ASSISTANT TECHNICAL DIPLOMA
31-509-1
Total Credits: 33
$33,000-$37,000* potential salary
CAREER OPTIONS
• Medical Assistant
• Medical Insurance Clerk
• EKG Technician
• Medical Laboratory Assistant
• Medical Records Clerk
• Medical Office Assistant
• Phlebotomist
• Receptionist
CERTIFICATION
CERTIFIED MEDICAL ASSISTANT/ AMERICAN ASSOCIATION OF MEDICAL ASSISTANTS (AAMA)
FOR DETAILS on Credit for Prior Learning, PLEASE CONTACT AN ACADEMIC ADVISOR
920-498-5444 or 1-888-385-6982
CERTIFICATE
HEALTHCARE CUSTOMER SERVICE REPRESENTATIVE CERTIFICATE
61-509-1
Total Credits: 7
$18,000-$20,000* potential salary
HS
PROGRAM SUMMARY
• Classes include:
- Medical Terminology
- Healthcare Customer Service
- Intro to Health Care Computing
CAREER OPTIONS
• Medical Office Receptionist
• Dental Office Receptionist
• Veterinary Office Receptionist
• Healthcare Related Customer Service
*Source: Salary information found at Indeed.com, March 2016.
KEY
HS CREDENTIAL MAY BE COMPLETED IN HIGH SCHOOL
GET STARTED ON YOUR NEW PATH TO SUCCESS!
View our programs at nwtc.edu/pathways
Start here. GO ANYWHERE.
NWTC does not discriminate on the basis of age, race, color, disability, sex, gender, sexual orientation, gender identity, national origin or other protected classes. 9947LSS je 4_2016


NORTHEAST WISCONSIN TECHNICAL COLLEGE PATHWAYS
Northeast Wisconsin Technical College
MANUFACTURING
PRODUCTION
2016-2017
TECHNICAL DIPLOMA
MACHINE TOOL - CNC TECHNICIAN TECHNICAL DIPLOMA
32-444-1
Total Credits: 69
$37,000-$43,000* potential salary
TECHNICAL DIPLOMA
MACHINE TOOL OPERATION TECHNICAL DIPLOMA
31-420-1
Total Credits: 35
$33,000-$37,000*
FOR DETAILS on Credit for Prior Learning, PLEASE CONTACT AN ACADEMIC ADVISOR
920-498-5444 or 1-888-385-6982
CERTIFICATE
CNC HELPER CERTIFICATE
61-444-3
Total Credits: 4
$24,000-$25,000* potential salary
HS
K12
K12 COURSES
TOTAL CREDITS: 14
Not all K12 credits will apply to all credentials.
Your high school may offer these transcribed credits that may apply towards a higher credential.
Catalog Number | Course Title | Credit Value
10-804-102 | Math 2 Trades | 2
31-420-336 | Intro to CNC Milling Operation | 1
31-420-337 | Intro to G Code & CAM 1 | 2
31-421-352 | Blueprint Reading/Sketching-Mach 1 | 2
31-420-339 | Intro to CNC Turning Operation | 1
31-420-347 | Cutting Tool Technology | 1
31-801-386 | Communicating Effectively | 1
31-420-342 | Intro to Machine Tools | 2
31-420-344 | Intro to Machine Tool Apps | 2
*Source: Salary information found at Indeed.com, March 2016.
KEY
HS CREDENTIAL MAY BE COMPLETED IN HIGH SCHOOL
GET STARTED ON YOUR NEW PATH TO SUCCESS!
View our programs at nwtc.edu/pathways
Start here. GO ANYWHERE.
NWTC does not discriminate on the basis of age, race, color, disability, sex, gender, sexual orientation, gender identity, national origin or other protected classes. 9947LSS je 4_2016

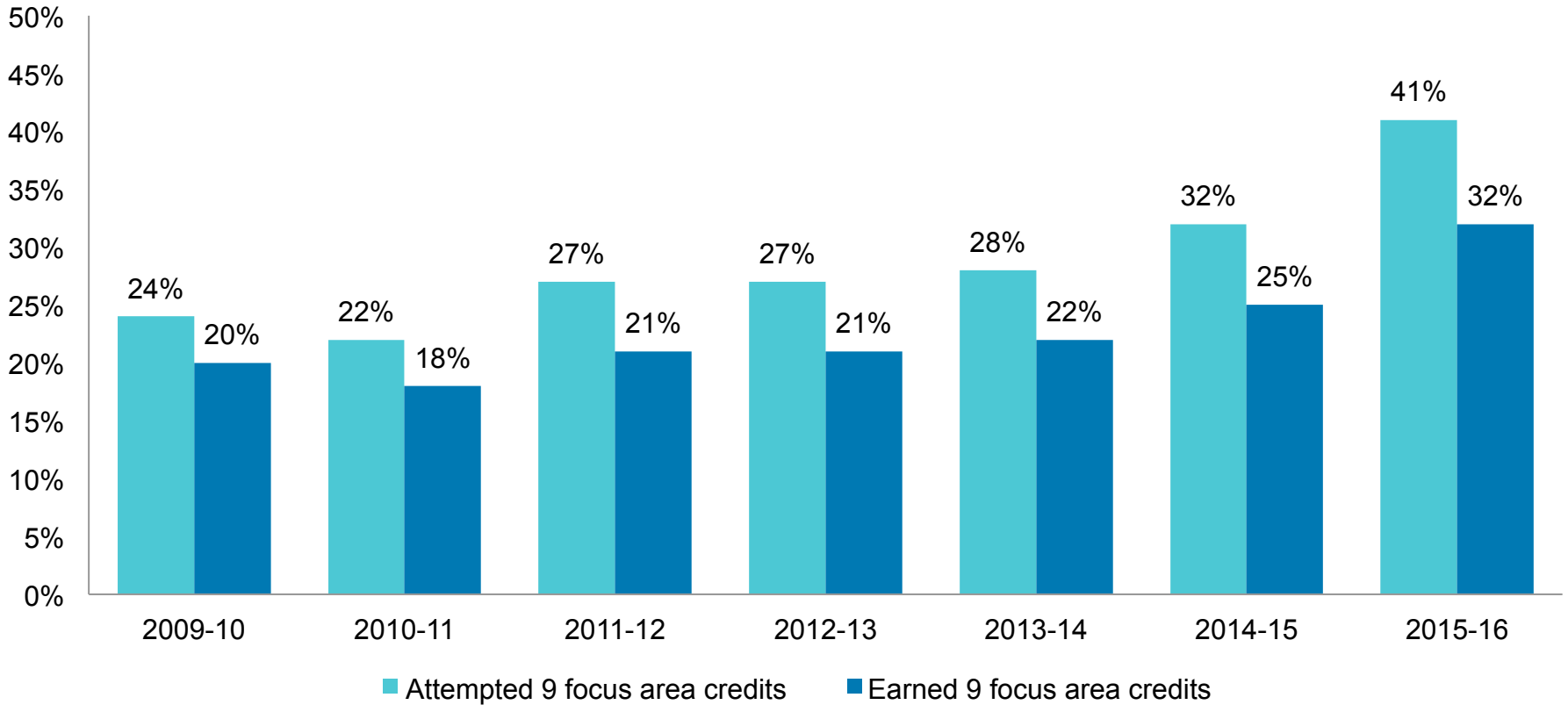
# Evidence

# Tennessee Academic Focus Areas



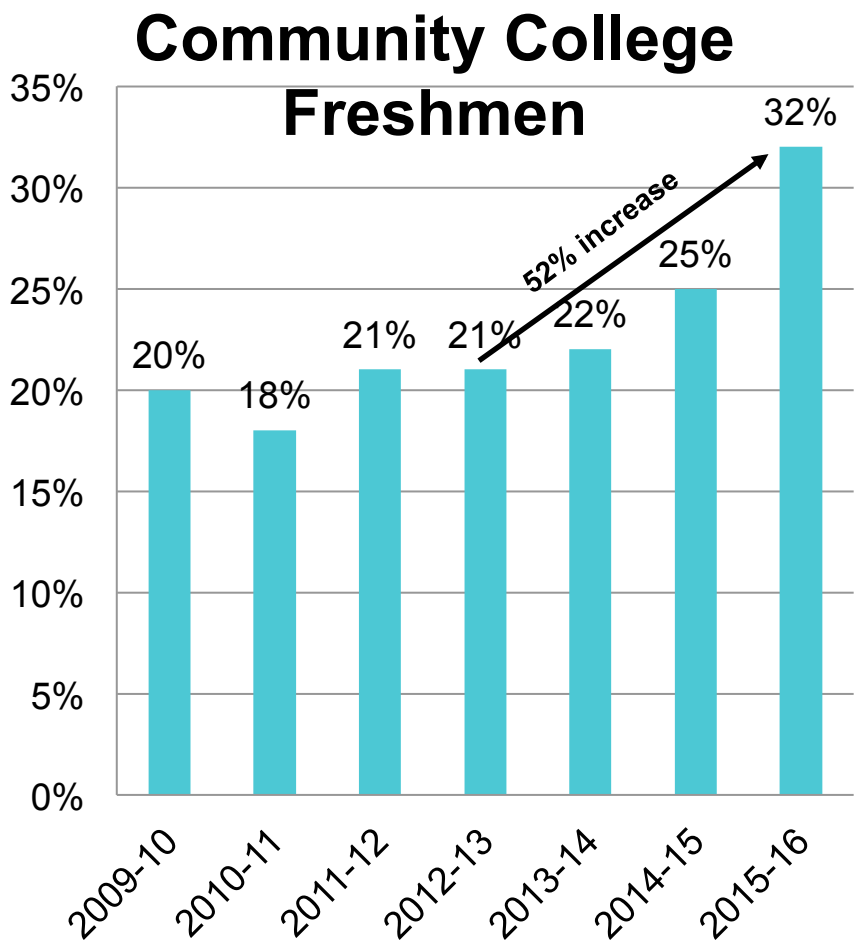
# Accelerating Program Entry

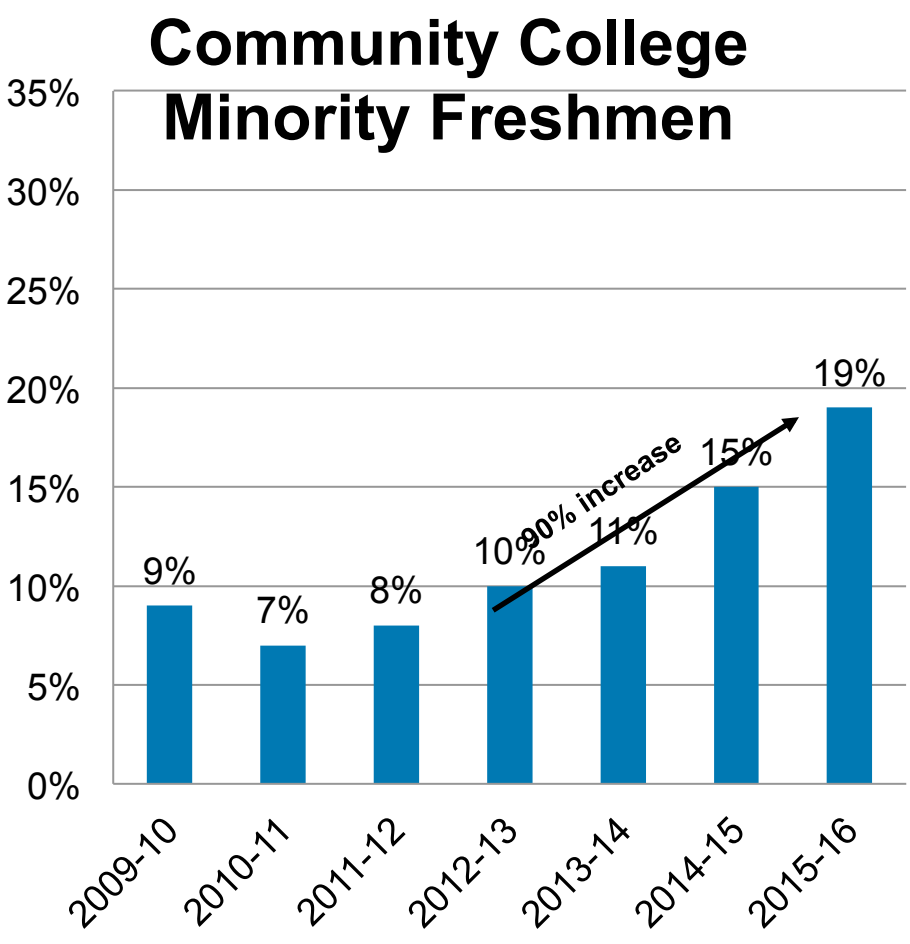
## Focus Area Course First-Year Attempt and Completion Rates: FTEIC TN Community College Students




Source: Tristan Denley, TN Board of Regents.

# Incoming Freshmen Who Successfully Completed at Least 9 hours in Their Focus Area During Their 1st Academic Year

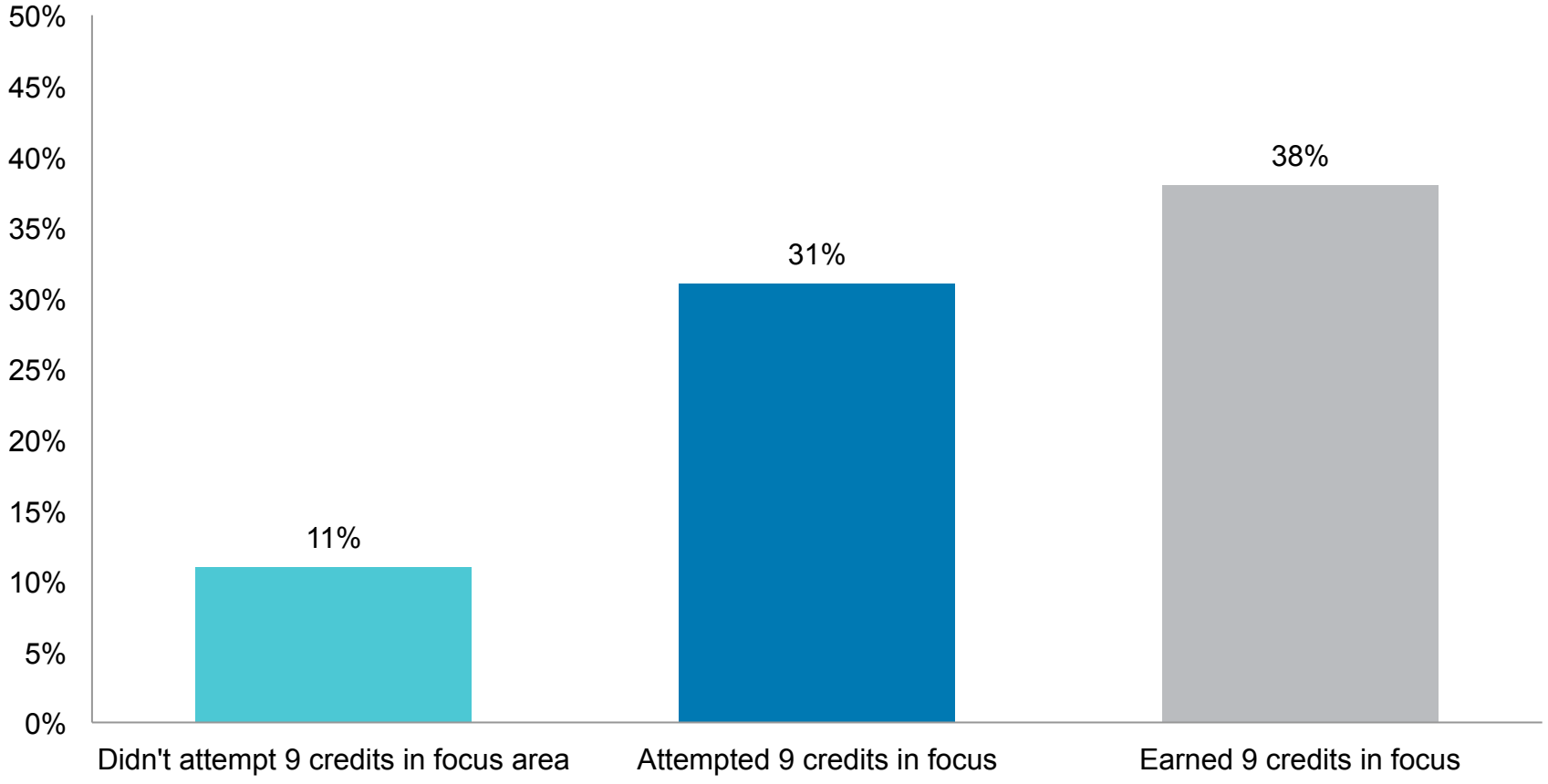



Source: Denley, TBR, 2016

# Accelerating Program Entry

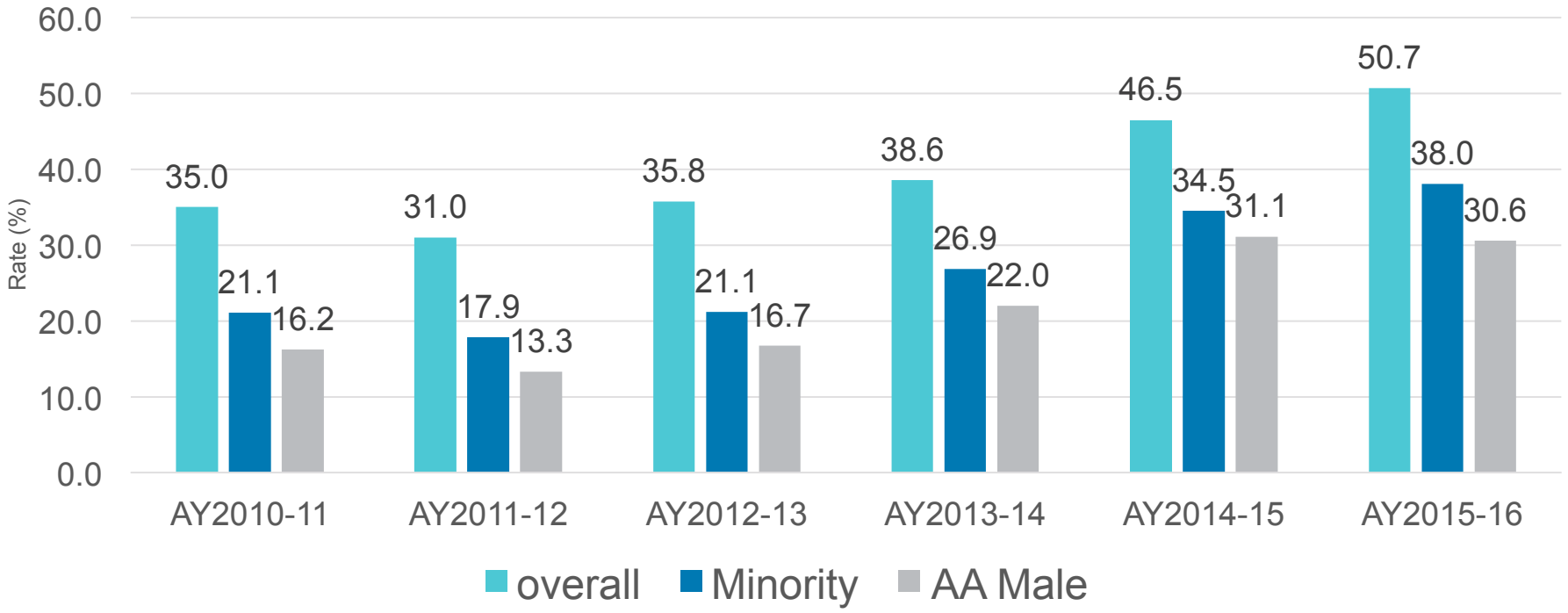
## Six-Year Graduation Rates: FTIEC Tennessee Community College Students By Focus Area Courses Attempted/Completed in First Year




Source: Tristan Denley, TN Board of Regents.

# Promising Evidence from Ohio

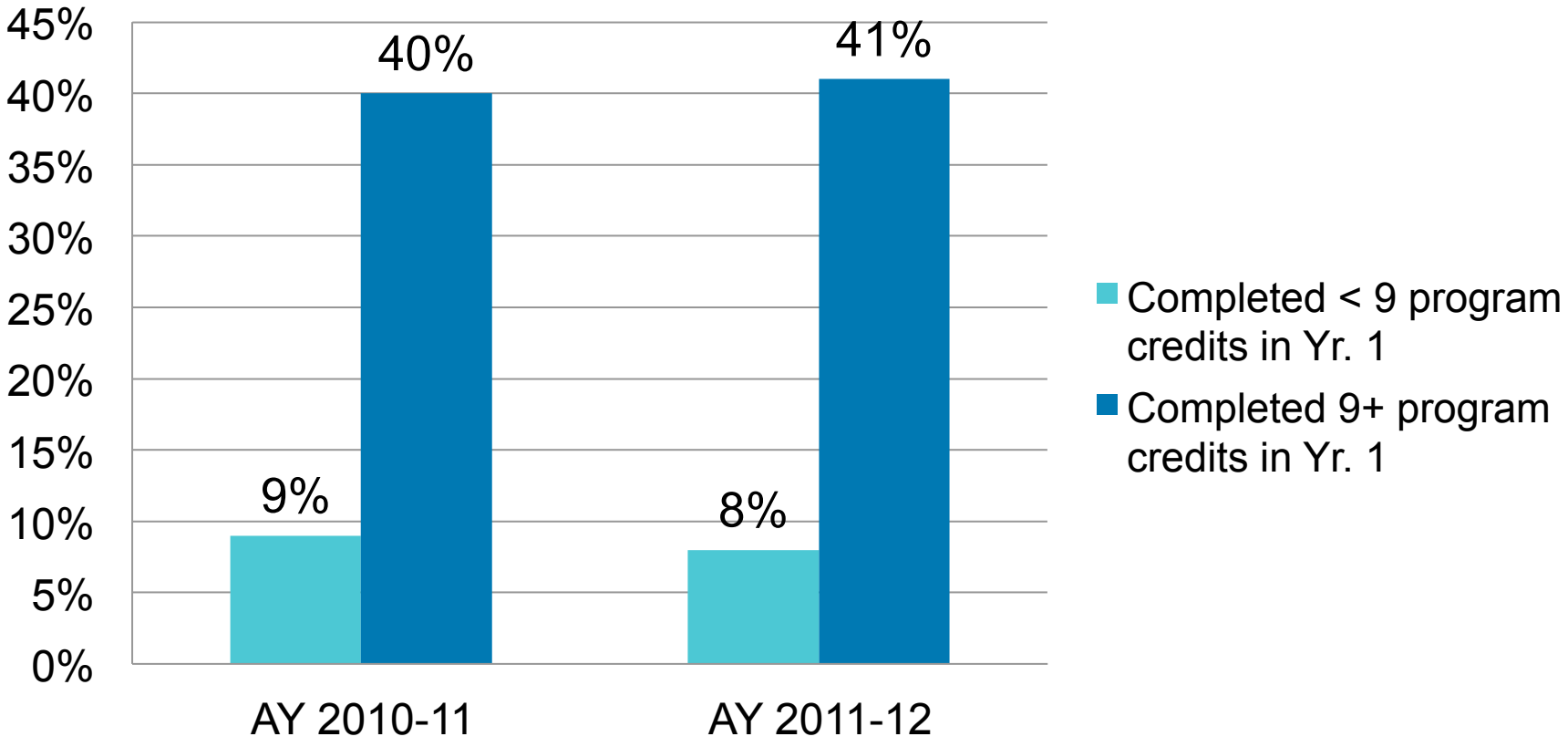
## Percentage of students who completed at least nine credit hours in a program declared in their first year – Sinclair Community College




Source: Sinclair Community College.

# Promising Evidence from Ohio

## Sinclair CC 6-year Completion Rate: Fall Term New Students




Source: Sinclair Community College.

# Pathway/Dual Enrollment Discussion Starters

- Are our high school dual enrollment courses college level courses? Are they “authentic?”
- How well aligned are our dual enrollment programs with career and transfer programs in colleges in our region?
- How do we help students in high school explore options and develop career, academic & financial plans linked to post secondary opportunities?
- Are our post secondary programs easy to understand and well integrated into subsequent education and employment in the region?

# For more information

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