

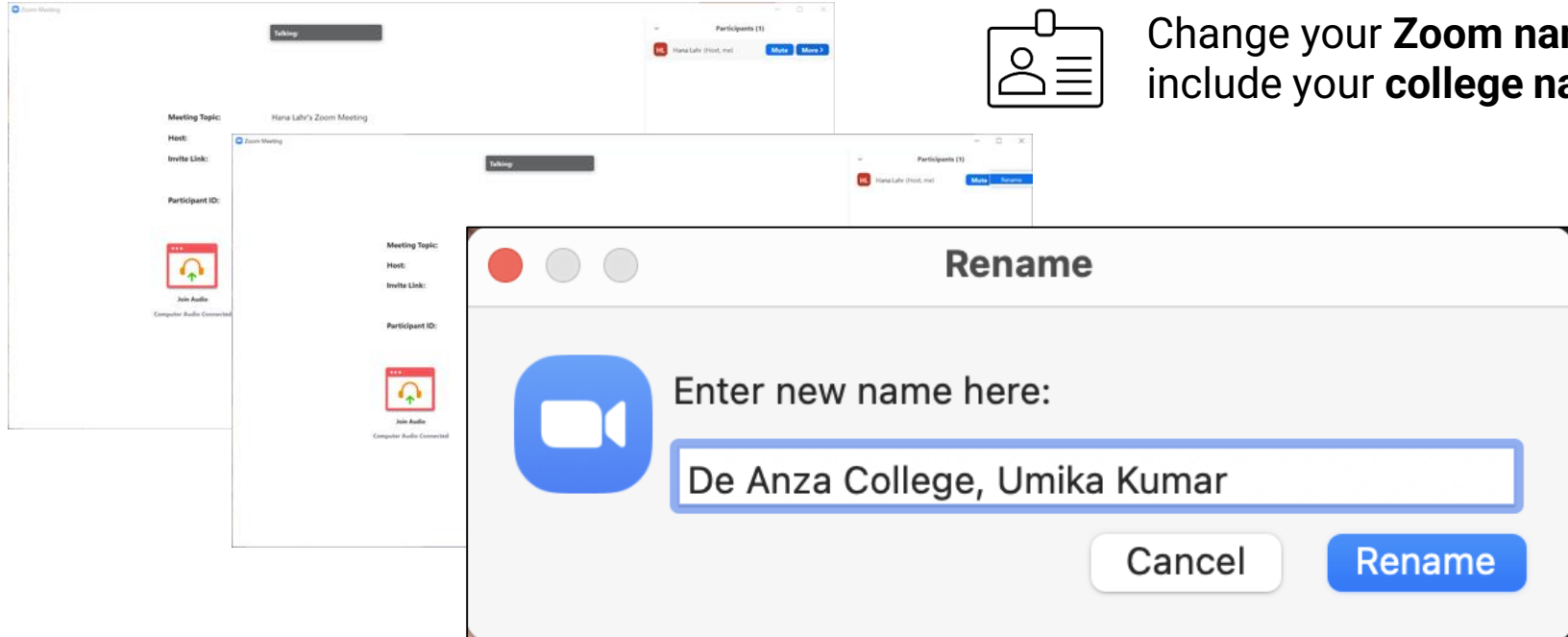
Reimagining Program Onboarding through the Ask-Connect-Inspire-Plan Framework

Hana Lahr & Davis Jenkins, CCRC
AACC Onboarding Workshop
October 15, 2021

Zoom names for breakout rooms



Change your **Zoom name** to include your **college name**



Based on 6 years of research, our thinking on guided pathways has evolved.

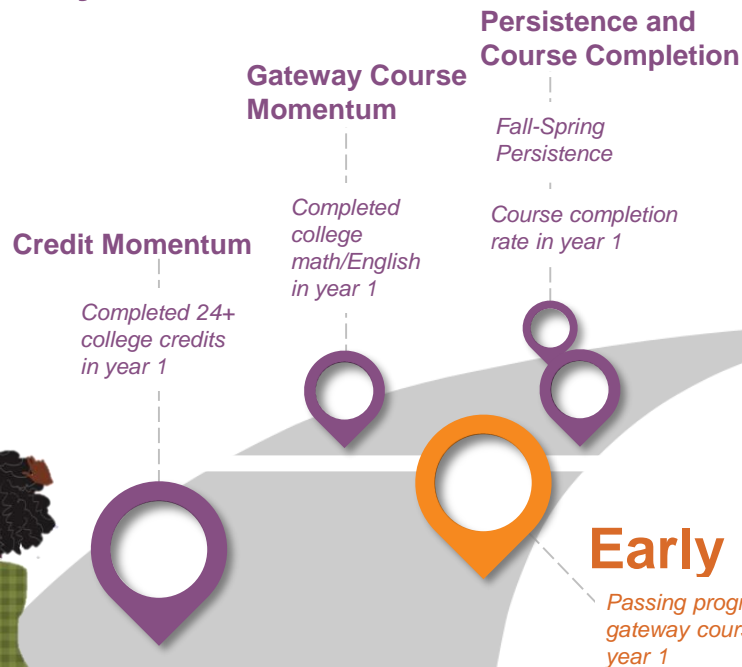


Source: <https://ccrc.tc.columbia.edu/publications/equitable-community-college-student-outcomes-guided-pathways.html>

Why focus on program onboarding?

Students who gain early momentum are more likely to complete.

Early Academic Momentum



Longer-Term Outcomes



CCRC RESEARCH BRIEF

COMMUNITY COLLEGE RESEARCH CENTER | JULY 2019

Early Momentum Metrics Leading Indicators for Community College Improvement

By Chloe R. Belfield, Davis Jenkins, and John Fink

As community colleges across the country implement large-scale reforms to improve student success, they need timely and actionable metrics to determine if the changes they are making in a given year or term will likely improve student outcomes in the long run. In this brief, we examine how well nine measures of students' progress in their first year predict student completion in subsequent years and thus how suitable these early momentum metrics, or EMMs, are as leading indicators of the effectiveness of institutional reforms.

Analysis of student data from all community colleges in three states found that EMMs do predict longer term success for students. We also find that a key factor in low completion rates, as well as in equity gaps in completion rates, is that many students do not gain early momentum in their first year. College outcomes would be substantially higher if more students met EMMs. Our findings indicate the need for comprehensive reforms to community college organization and practice to help more students gain early momentum on their way to earning a credential.

“Based on analysis in three states, we find that measures of student progress in the first year predict student completion in subsequent years.”

First-Year Indicators of Longer-Term Success

Throughout the nation, two-year and four-year colleges are recognizing that to “move the needle” on college-wide measures of success (e.g., completion rates) major redesign across the entire institution may be required to ensure that its programs, policies, and practices are well designed and aligned to promote student success. Hundreds of community colleges across the country are adopting whole-college reforms commonly referred to as “guided pathways” (Bailey, Jaggars, & Jenkins, 2013). As part of these reforms, colleges are mapping requirements and options for programs of study so that they are aligned with desired employment and transfer outcomes, redesigning the onboarding process to help new students explore options and interests and develop an academic completion plan, and revamping advising to better support students in making timely progress toward completion of a credential. Faculty are also working together across disciplines to ensure that curricula and teaching prepare students to succeed in employment and transfer in their field of study.

Because they involve a redesign of college practices at scale, guided pathways reforms take several years to implement (Jenkins, Labr, Fink, & Ganga, 2018, pp. 2–3). Given that whole-college

Early momentum has added benefits for students of color and low-income students...

Benefit of completing 12+ college-level credits on transferring and completing a bachelor's degree

Black students

2.4x

Hispanic students

4.2x

Other students

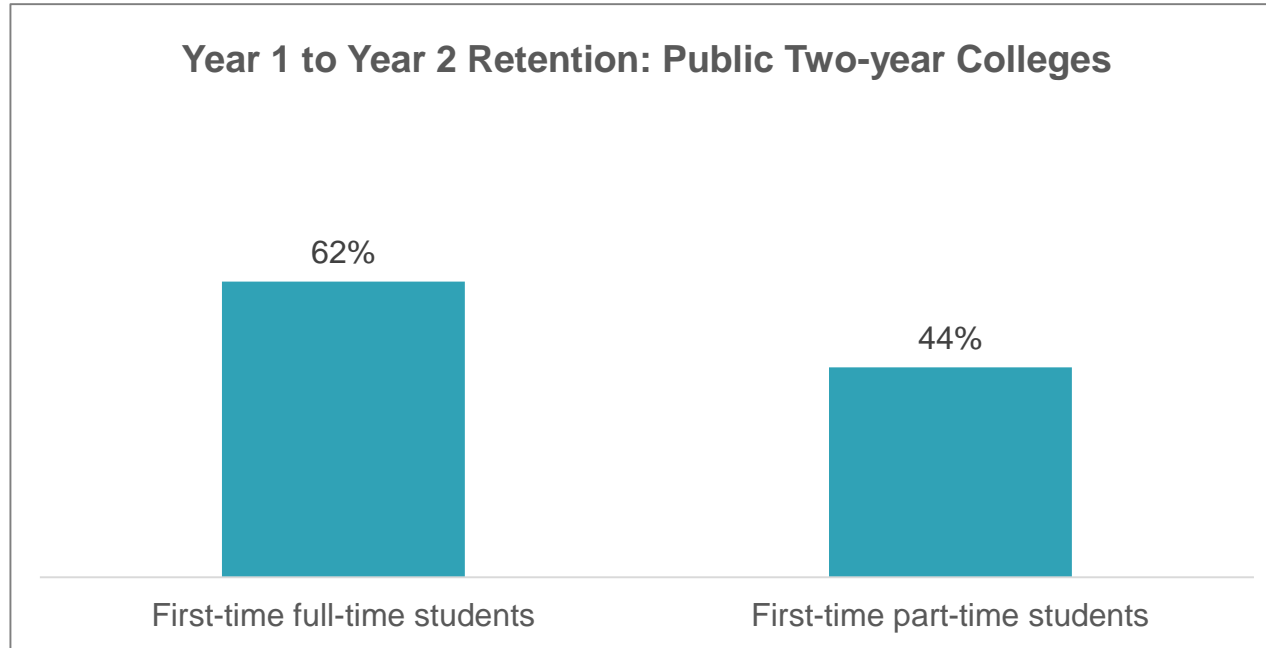
1.7x

Effects even larger for...

| Transfer to a four-year institution | Benefit of milestone (baseline group: White) | Black students | Hispanic students | Low-income students |
|---|--|----------------|-------------------|---------------------|
| Credit momentum (6+, 12+, or 24+ college credits) | 3–5x | 3–6x | 6–11x | 7–8x |
| Gateway English/math (college-level) | 3–4x | 3–4x | 6–8x | 4–6x |
| Completed transfer degree | 7–8x | 9–11x | 11–18x | 11–13x |
| Transfer and bachelor's completion | | | | |
| Credit momentum (6+, 12+, or 24+ college credits) | 1.7–2x | 2–3x | 4–5x | 7–9x |
| Gateway English/math (college-level) | 1.6–3x | 2–4x | 4–5x | 4–5x |
| Completed transfer degree | 3–4x | 5–6x | 5–9x | 6–7x |

Source: Yuxin Lin, Maggie Fay, & John Fink (2020). CCRC analysis using statewide administrative data on 573,806 community college entrants between 2009 and 2018, tracked up to 10 years. Estimated odds ratios from hazard models controlling for student characteristics, college fixed effects, and cohort fixed effects.

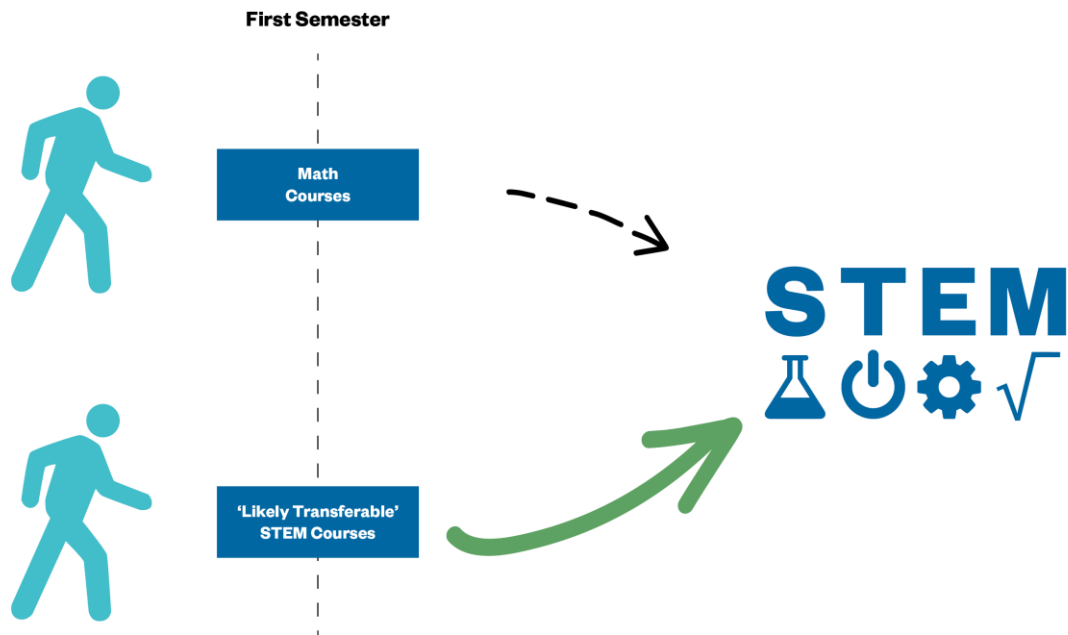
...but many students, particularly those from underserved groups, have dropped by year 2



Students benefit from taking program foundation courses in their field of interest early on

Students who successfully transferred in STEM more frequently took STEM transfer courses before transfer math courses.

Is it helpful for students to get a 'taste' of STEM to keep them interested as they work through the math courses?

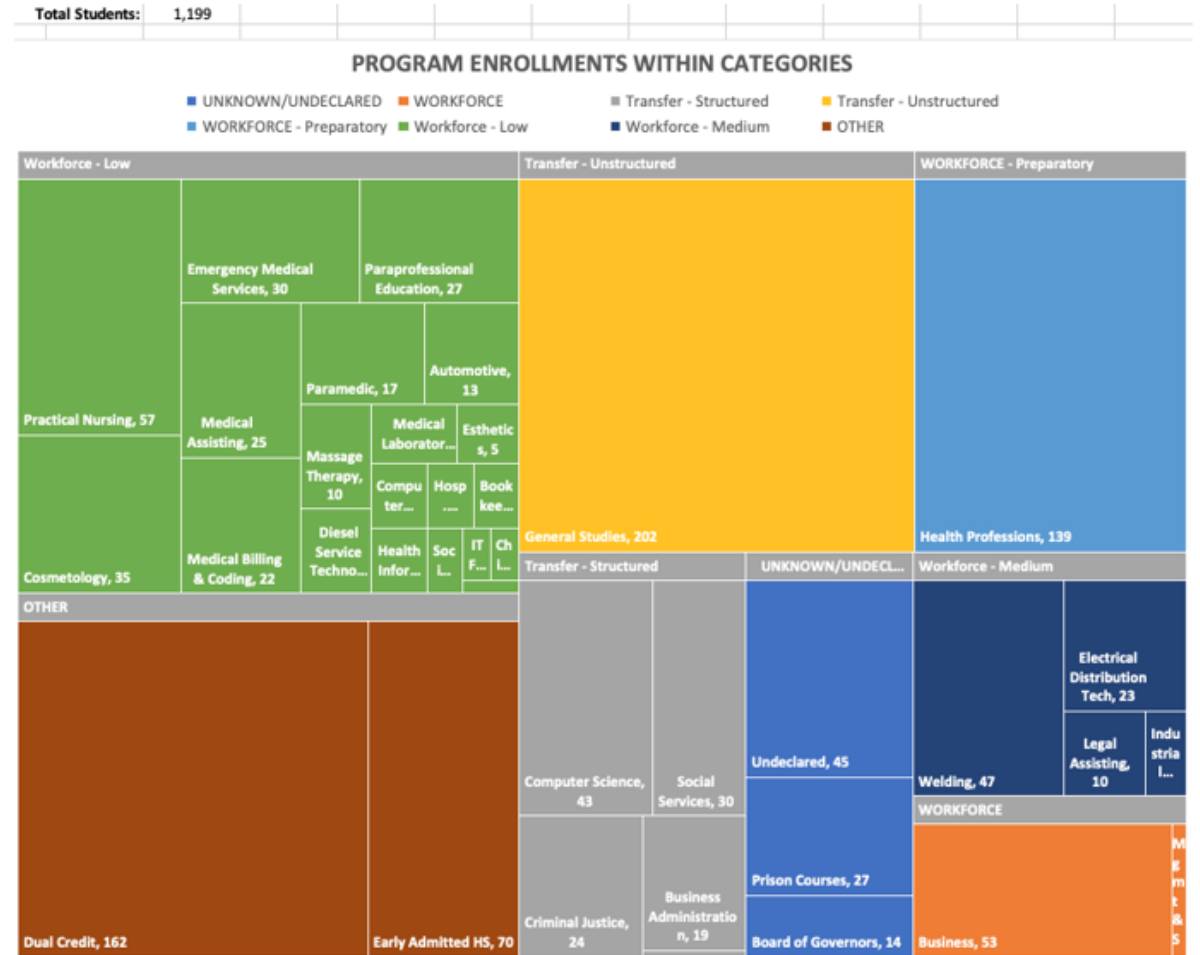


Is it clear to students where their programs lead?

| Category | Description | Examples |
|-------------------------------|--|--|
| Workforce: Low | Program places students into jobs with low average earnings (e.g., less than \$14/hour) | Criminal Justice, Automobile Technology, Early Childhood |
| Workforce: Medium | Program places students into relatively middle-paying job (e.g., between \$14-\$17.55/ hour) | Accounting, Welding, Business Management, Dental Assistant |
| Workforce: High | Program places students into a relatively high-paying job (e.g., more than \$17.55/ hour) | Nursing, Radiology Technology, Sonography, Dental Hygiene |
| Transfer: Structured | Program designed to prepare students for a particular baccalaureate major/meta-major and/or a specific four-year destination | AA-Business (DTA), AS-T (Engineering) |
| Transfer: Unstructured | Program designed for general transfer (no pre-major or university destination necessarily specified) | AA-General Studies, "General Transfer" |
| Undeclared or Unknown | Listed as undeclared or missing program information | Null, Missing Program, Undeclared |
| Uncategorized or Other | Non-degree seeking, ESL, ABE, dual enrollment | Basic Education, ESL, Running Start |

Too many community college students (including dual enrollment students) are not enrolled in a program that clearly leads to a good job or transfer in their major field of interest.

What motivation do these students have to complete their programs?



Most colleges do not actively help noncredit adult education and workforce students to bridge into credit programs.

[illegible]

Despite the rising cost of a community college education, many cc credentials do not have strong labor market returns.

Examine Completions by Level & Program

IPEDS Completions Data

Select a College

(All)

Select Multiple Colleges

(All)

Select State

(All)

Award Level

(All)

Select Year(s)

2018-19

Select Sector(s)

Community Colleges

CCRC COMMUNITY COLLEGE
RESEARCH CENTER
TEACHERS COLLEGE, COLUMBIA UNIVERSITY

1,481,690 Awards Conferred in 2018-19

State: All, Institution: All, Race/Ethnicity: All, Sex: All

Race/Ethnicity

(All)

Sex

(All)

Group Awards by:

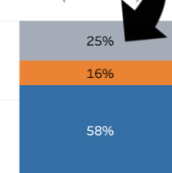
Award Level

Program Categories

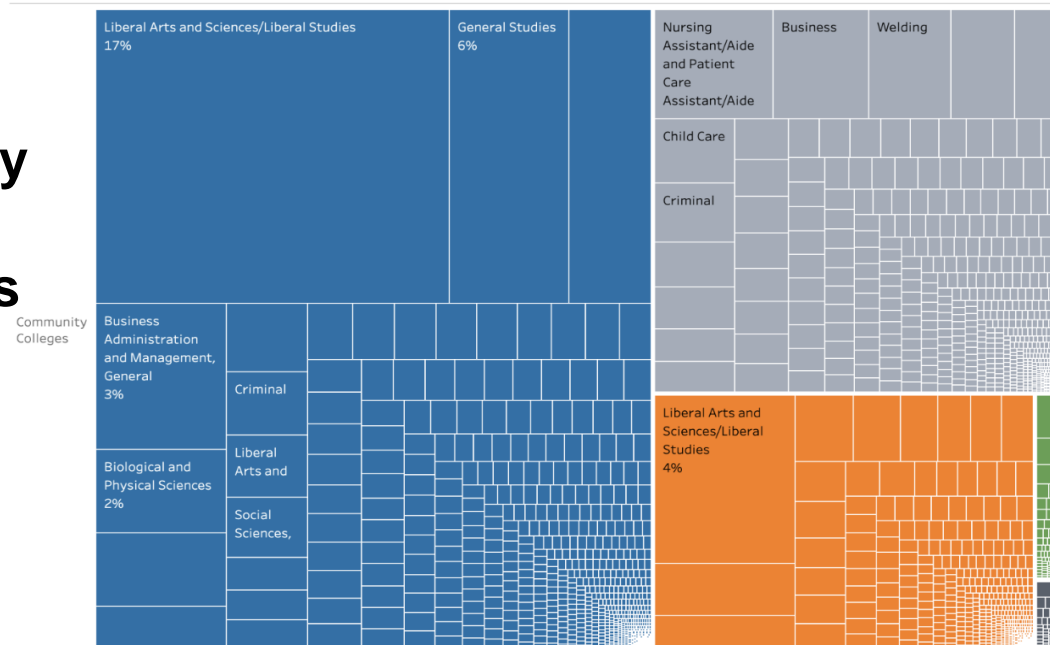
- Certificate, Short
- Certificate, Long
- Associate's degree
- Certificate, Post Associate
- Bachelor's degree
- Postbaccalaureate or post-m...
- Master's degree

25% of cc awards are short-term certificates

Pct. of Total Award
(All Students)



Community Colleges



Transfer AAs are valuable only if students apply credits toward a BA *in their major field of interest...*



Just **58%** of students successfully transferred 90% of their credits.



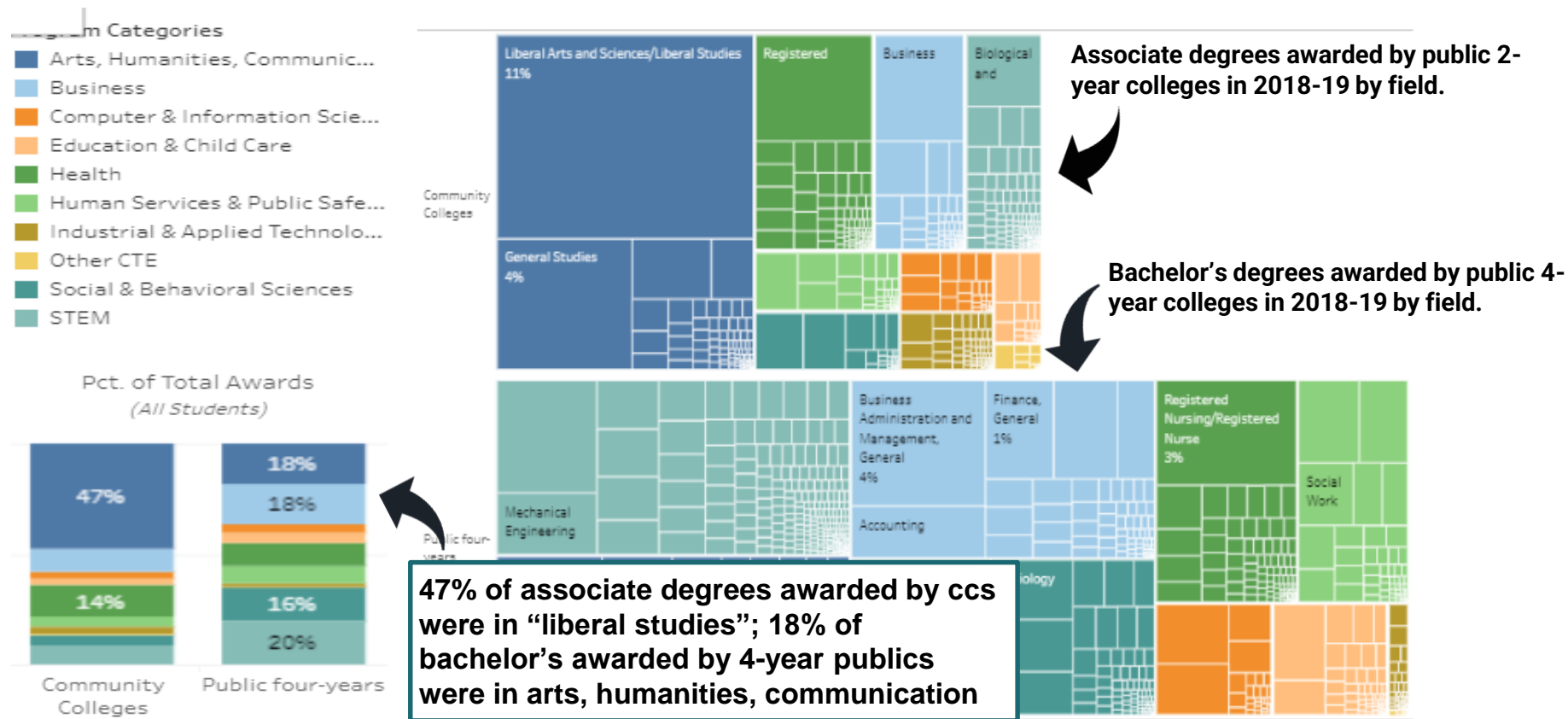
And **15%** can't transfer any credits at all.



Students who can transfer 90% of their credits were **2.5x** more likely to get their bachelor's degree, compared to those who transfer half or less.

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But about half of community college associate degrees are general AAs, which are not well-aligned with bachelor's major requirements.



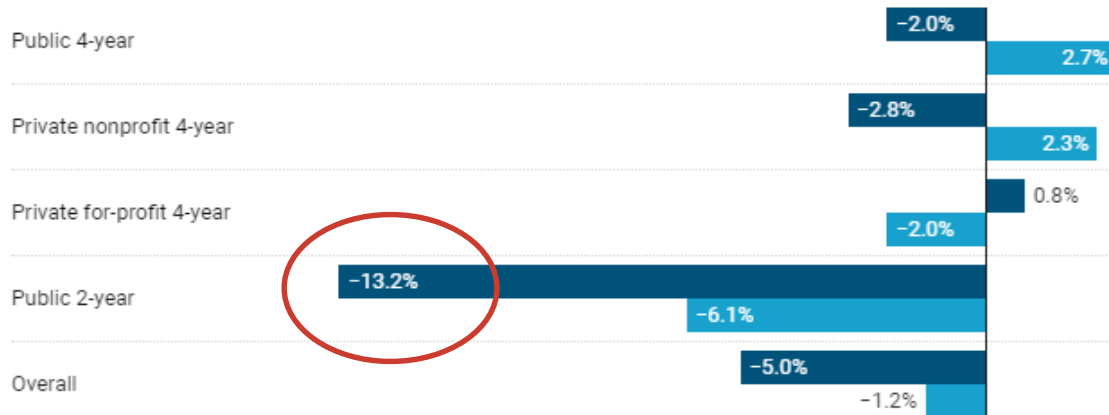
**COVID has hit
community
colleges and
their students
hard.**

The Decline in Traditional-College-Age Students Was Sharper Than Among Students 25 and Older

Attendance by students ages 18 to 24 fell by 5 percent this spring, with community-college enrollment taking the hardest hit within that age group.

% change from previous year

■ 18 to 24 ■ 25+



Source: [National Student Clearinghouse Research Center](#) • [Get the data](#) • Created with [Datawrapper](#)

But community college enrollment has been declining since 2011. CCs have lost market share to public 4-years...

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Select a State/Territory

(All)

Select an Institution

(All)

Undergraduate Enrollment Trends by Sector

IPEDS Data, 1996-2019

Sector (CCRC Definition)

Community colleges

Public four-years

Private not-for-profit four-years

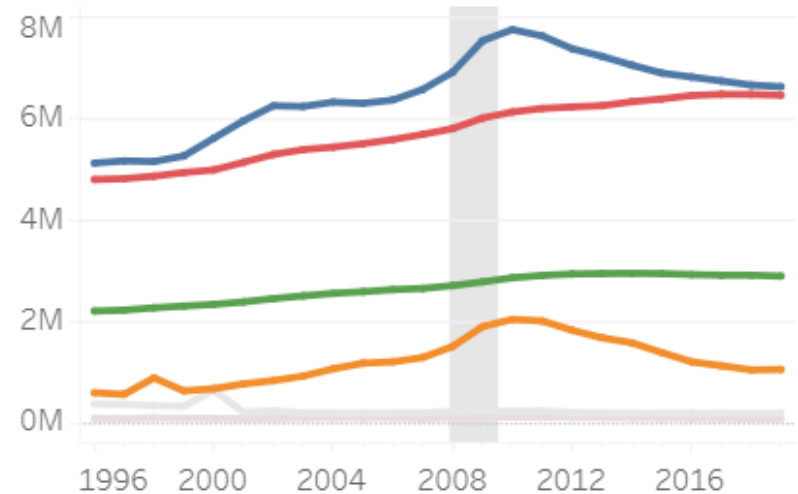
Private for-profits

Other public two-years, less-tha...

Other private not-for-profits

Fall Enrollments

All undergraduates



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...especially among traditional college-age students
even as older student enrollment has declined sharply.

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Select a State/Territory

(All)

Select an Institution

(All)

Undergraduate Enrollment Trends by Sector

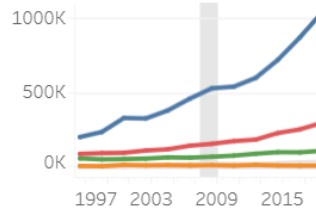
IPEDS Data, 1996-2019

Sector (CCRC Definition)

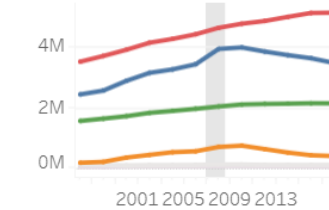


Fall Undergraduate Enrollments Summary for student age and race/ethnicity

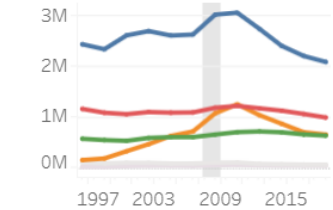
Age: Under 18



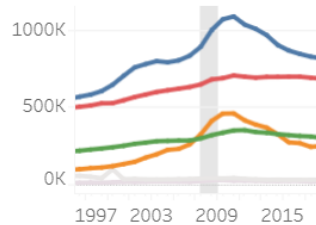
Age 18-24



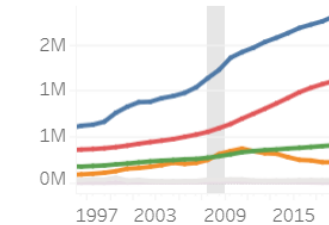
Age 25+



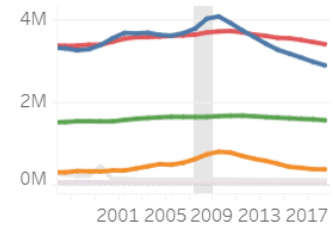
Race/Ethnicity: Black



Race/Ethnicity: Hispanic



Race/Ethnicity: White



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To achieve more equitable outcomes (and build back enrollment) community colleges need to reimagine the program onboarding experience using these research-based design principles:



Ask



Connect



Inspire



Plan

Discuss: *What experiences in college had the biggest impact on your choice of major?*

Ask-Connect-Inspire-Plan framework for redesigning onboarding

Program onboarding sets students up for success.

- **Onboarding** is the process of helping students select, enter, and gain experience in a program of study. This process starts as soon as students apply and is not complete until students have chosen a program, built an educational plan, and taken and passed program gateway courses, which can take up to a year.
- **A program of study** prepares students to secure or advance in a job and/or transfer with no excess credits in the student's field of interest.

When you consider your fall 2021 new students...

- What percentage of students are in liberal studies AA programs?
- What percentage of students aren't in any program? (including dual enrollment, non-credit, continuing education, adult basic education, undecided)
- How much do you know about your students' interest and goals and how can the college set them up for their next steps?

Ask

Every student is engaged in an ongoing conversation about their interests, strengths, and aspirations and is guided to programs and people at the college with similar interests.

***Asking* students about their interests and aspirations**

- Intake surveys and career assessments
- Additional advising and support for undecided students
- Introducing middle and high school students to career options

Central Carolina Community College Embark: RIASEC-based assessment of career interests



















RIASEC-based assessment of career interests

Matching career interests to our programs

Career Decision Inventory

Questions to determine confidence in career choice

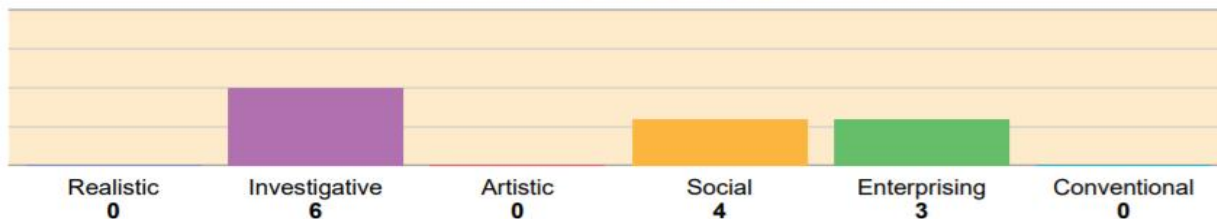
Please indicate your interest in ALL activities.

| Like | Unsure | Dislike | |
|---|---|---|---|
|  |  |  | Study the population growth of a city |
|  |  |  | Investigate crimes |
|  |  |  | Give a presentation about a product you are selling |
|  |  |  | Draw pictures |
|  |  |  | Keep accounts payable/receivable for an office |
|  |  |  | Proofread records or forms |



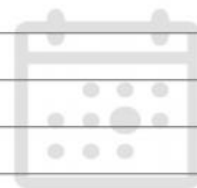
Emily

Your Overall Results



Programs That Match Your Interests

- Associate Degree Nursing
- Dental Hygiene
- Practical Nursing
- University Transfer: Associate in Arts
- University Transfer: Associate in Science



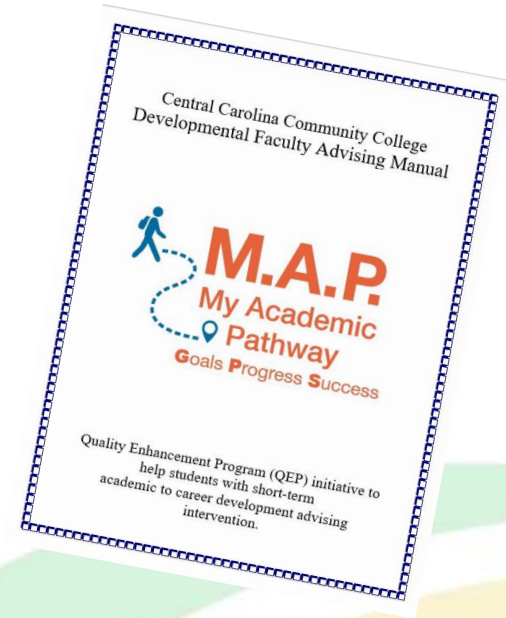
Your Advisor

Advisor's Name

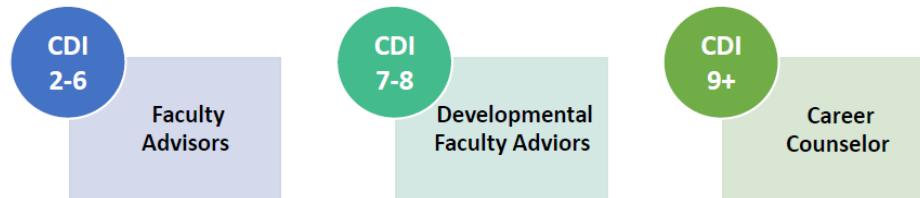
Advisor's Phone

Asking students about their interests, strengths, goals

- Developmental Faculty advisors - Students with an intermediate career decision (CDI) readiness
 - Short-term intervention
 - Training developed by career counselors
 - Career advising, online inventories, hands-on career activities
 - Students then referred to academic advisor or career center counselor
- Career counselors see students with the highest career decision concerns



Embark Referral Process:



Program Information sheets

Confirming knowledge of programs

LASER AND PHOTONICS TECHNOLOGY

ABOUT THIS PROGRAM

The Laser & Photonics Technology (LPT) two-year associate degree program teaches students how to control light and electrical energy to prepare them for careers in photonics and electronics engineering technology. These high-tech, high-paying, career tracks include the research, design, manufacture, sale, and field service of products, like in the rapid-growing field of lasers. Jobs include working on engineering teams to build, test and troubleshoot designs in areas like laser weapon systems, medical instruments, detection equipment, laser fusion energy sources, fiber telecommunications, and industrial laser systems. Acquired LPT technical knowledge and problem solving skills create valuable graduates for these fields.



POSSIBLE JOB TITLES:

- Optical Technician
- Optical/Laser Optics Research Technician
- Electronics Technician
- Laser and Optics Repair Technician
- Field Service Technician

MEDIAN SALARY:

\$62,190 annually (Electrical and Electronics Engineering Technician);

BUREAU OF LABOR STATISTICS CLUSTER WEBSITE:

bls.gov/ooh/architecture-and-engineering/home.htm

JOB PLACEMENT OF RECENT GRADUATES OF THIS PROGRAM:

- Lawrence Livermore National Laboratory
- Cree
- Phononic

SKILLS/APTITUDES NEEDED FOR PROGRAM:

- Basic Algebra Skills
- Attention to Detail
- Critical and Independent Thinking Skills



www.cccc.edu

DEGREE(S)

Associate in Applied Science in Laser and Photonics Technology (A40280; Harnett Main Campus - day; Lee Main Campus - First Semester Only) – five semesters (summer included)

DIPLOMA(S)

None

CERTIFICATE(S)

Certificate in Electronics Engineering Technology (C40200; Lee Main Campus - Day, Harnett Main Campus - Day) - three semesters (Summer included)

TRANSFER OPTIONS

Yes – East Carolina University and University of North Carolina – Charlotte (Contact the program lead below to discuss transfer options further.)

ADDITIONAL COSTS OF PROGRAM

Electronics Toolkit (\$25 – \$50)

STATE LICENSURE/EXAMS/INDUSTRY CERTIFICATIONS

None

ADDITIONAL ADMISSIONS PROCESS

None

CONTACTS

Gary Beasley, Lead Instructor, Laser and Photonics Technology:
(910) 814-8828 or gbeasley@cccc.edu



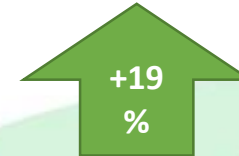
Is it working?

- Most students (75-80%) have selected a program that corresponds to their top two RIASEC categories
- About 90% of the students who have selected a program outside of their RIASEC categories switch to one which does
- About 24% of students need additional career conversations based on CDI
- 95% of the students recommended that entering students should take the RIASEC; 98% found it easy to do

100% IPEDS graduation



150% IPEDS graduation



Program Changes



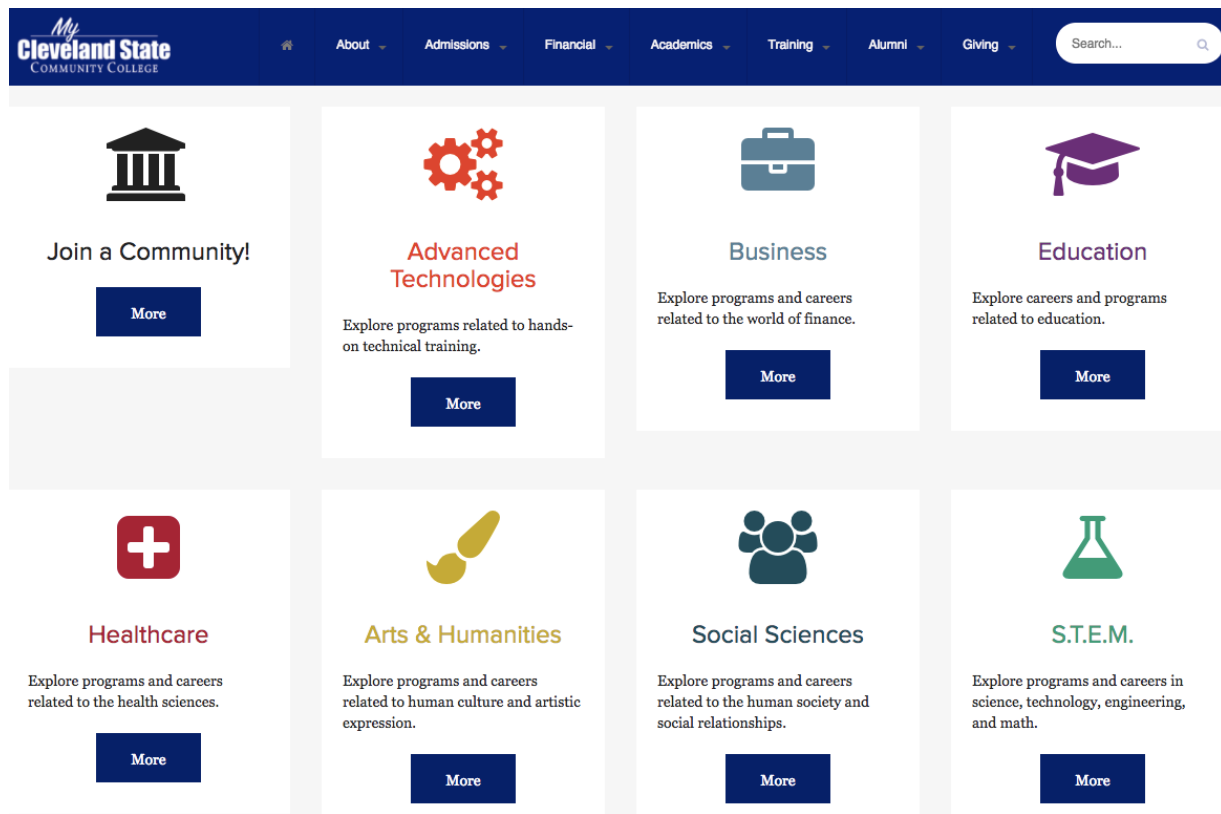
Connect

From the start, colleges organize opportunities for all students to meet with faculty, students, alumni, and employers in fields of interest to them.

***Connecting* students to academic and career communities**

- Orientation and advising based on meta-majors
- Program and field showcase events
- Faculty liaisons

Colleges are using **meta-majors** to **organize new student onboarding** and career/program exploration



The screenshot displays the homepage of My Cleveland State Community College. The header is dark blue with the college's logo on the left and navigation links (About, Admissions, Financial, Academics, Training, Alumni, Giving) in the center. A search bar is on the right. The main content area is a grid of eight white boxes, each representing a meta-major category. Each box contains an icon, a title, a brief description, and a 'More' button.

| Meta-Major | Icon | Description |
|-----------------------|--------------------------------|---|
| Join a Community! | Classical building icon | Join a Community! |
| Advanced Technologies | Red gears icon | Explore programs related to hands-on technical training. |
| Business | Blue briefcase icon | Explore programs and careers related to the world of finance. |
| Education | Purple graduation cap icon | Explore careers and programs related to education. |
| Healthcare | Red cross icon | Explore programs and careers related to the health sciences. |
| Arts & Humanities | Yellow paint palette icon | Explore programs and careers related to human culture and artistic expression. |
| Social Sciences | Dark blue group of people icon | Explore programs and careers related to the human society and social relationships. |
| S.T.E.M. | Green Erlenmeyer flask icon | Explore programs and careers in science, technology, engineering, and math. |

Goals

Why HomeBase Pathway Communities?

- ## Students First
- Including ESL, older students, and exploratory.
- ## Case Management @ Scale
- Scale successes of traditional case management programs
- ## RPT
- Retention, Persistence, Time to Completion

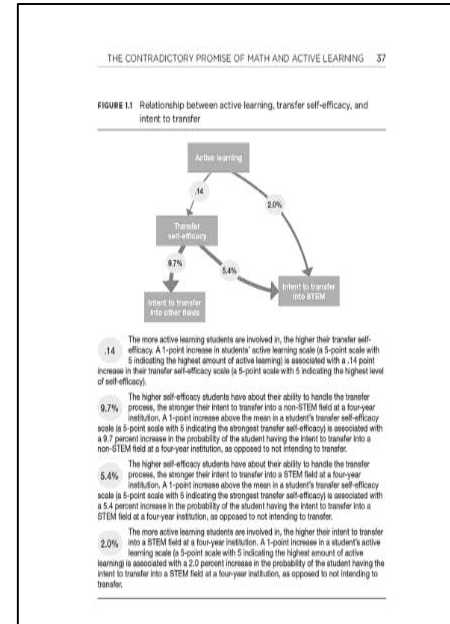
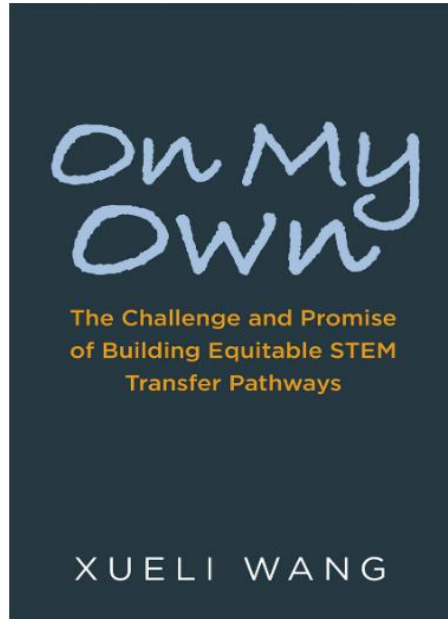
Inspire

Every student takes at least one course in term 1 on topics of interest that "lights their fire" for learning

***Inspiring* students to learn**

- Program-relevant courses for all students in the first term
- Service learning and project-based learning
- Active and co-curricular learning techniques with dual enrollment students
- Professional development for faculty

Active learning is key motivator for underserved STEM-transfer intending students to persist in STEM



INSPIRE: Building confidence as college learners

The courses students take during initial terms of enrollment:

- define the college experience
- facilitate exploration of interests
- can create confidence as learners which research suggests is key factor in completion



Many students do not take inspiring first-term courses. Why?

- Students self-advise
- Advisors recommend “safe” general education courses
- Students are unable to access program-level courses because of developmental education (including corequisite courses)

Are students taking courses in their first terms that “light the fire” for learning?

#1 Program

Liberal Arts and Sciences – Associate in Arts (N = 1300 students)

| Rank | Course Title | Course ID | # of program students who took the course | % of program students who took the course |
|------|---|-----------|---|---|
| 1 | INTRODUCTION TO PSYCHOLOGY | 2012 | 254 | 19% |
| 2 | FRESHMAN ENGLISH I | 1101 | 250 | 19% |
| 3 | HUMAN ANATOMY/PHYSIOLOGY I | 1085C | 248 | 19% |
| 4 | FIRST-YEAR EXPERIENCE SEMINAR | 1106 | 241 | 18% |
| 5 | INTRO TO MICROCOMP/WINDOWS | 1100C | 180 | 14% |
| 6 | FUND OF SPEECH COMMUNICATION | 2608 | 164 | 13% |
| 7 | INTERMEDIATE ALGEBRA | 1033 | 146 | 11% |
| 8 | AMERICAN GOVERNMENT | 1041 | 128 | 10% |
| 9 | COLLEGE ALGEBRA | 1105 | 126 | 10% |
| 10 | GENERAL SOCIOLOGY | 2000 | 90 | 7% |
| >10 | 2 other different courses attempted by at least 1 student from this program | | | |

Dual Enrollment

(N = 605 students)

| Rank | Course Title | Course ID | # of program students who took the course | % of program students who took the course |
|------|---|-----------|---|---|
| 1 | FRESHMAN ENGLISH I | 1101 | 223 | 37% |
| 2 | COLLEGE ALGEBRA | 1105 | 186 | 31% |
| 3 | INTRO TO MICROCOMP/WINDOWS | 1100C | 117 | 19% |
| 4 | FUND OF SPEECH COMMUNICATION | 2608 | 111 | 18% |
| 5 | INTRODUCTION TO PSYCHOLOGY | 2012 | 87 | 14% |
| 6 | AMERICAN GOVERNMENT | 1041 | 68 | 11% |
| 7 | SURVEY OF ECONOMICS | 1000 | 60 | 10% |
| 8 | FRESHMAN ENGLISH II | 1102 | 42 | 7% |
| 9 | INTRODUCTORY SURVEY TO 1877 | 1010 | 40 | 7% |
| 10 | PRECALCULUS ALGEBRA | 1140 | 38 | 6% |
| >10 | 2 other different courses attempted by at least 1 student from this program | | | |

Service Learning at Sinclair Community College

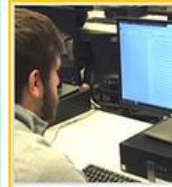
#Profiles in Service Learning



JESSY JONES
Dayton Sports Complex



JESSY JONES
Gem City Market,
League of Women Voters



DEBBIE STREHLE
Peer-2-Peer



TAMMY LOWE
Disaster Simulation



MARY ROSPERT
Summer Bridge



VICKI LUSTER
Choices in Community



JESSICA MCKINLEY
PSA Presentations



PATRICK ERNST
Field Reconnaissance



DENISE ASELAGÉ
ESL Children's Book



HEIDI ARNOLO
Guatemala:
Transformational Journeys



CONNIE REAL
Life Enrichment Center



JESSICA MCKINLEY
Swab for a Cause



JESSY JONES
Wagtown



KYLE FISK
Design Portfolio Show '17



PATRICK ERNST
Homefull Capstone



CHARLIE SETTERFIELD
Cobblestone Community Church



JAKE FULLARD
Synergy Family Therapy



Plan

Help every student to develop a full-program educational plan that shows them a path to their goals.

Planning a path to help students achieve their goals

- **To ensure every student has a path, plans should be:**
 - required as part of advising and first-year experience courses
 - built to cover the entire program through completion or transfer
 - based on a standard program map, but customized for each student
 - easily accessible
 - regularly monitored and updated
 - tied to scheduling and registration

What students say they want during onboarding

- Assistance exploring academic and career interests
- Information on program options in fields of interest and their connection to career and baccalaureate transfer opportunities
- Opportunities to interact with other new and current students, faculty, and others who share similar academic and career interests
- The chance to take a course on topics of interest in term 1
- Assistance developing a full-program academic and financial plan
- Note: Students who have clear career goals need different kinds of support than those who don't

Placing equity at the center of program onboarding

In order to achieve equity in outcomes for marginalized and underserved students, it is critical to tailor onboarding support to meet the needs of different student groups, for example:

- Students from races/ ethnic groups historically excluded from higher education, English learners
- Military students
- International students
- Students with disabilities
- Undecided students
- Adult students
- Recent high school graduates
- Dual enrollment students
- Students enrolled in basic skills programs
- Additional target populations at our college

Activity A: Reimagining the program onboarding experience

How can we enrich the onboarding experience for all students while tailoring it for specific underserved groups?

Reimagining the program onboarding experience

| Program onboarding design principle | What do students currently experience related to this design principle? | What experience (related to the given principle) should we provide for all students? |
|---|---|--|
| ASK every student about their interests, strengths, aspirations | | |
| CONNECT them with faculty, students, alumni, others with similar interests | | |
| INSPIRE learning in term 1 through “light the fire” college-level courses on issues of interest | | |
| Help every student development individualized education PLAN aligned to jobs/transfer in field of interest by end of term 1 | | |

Discuss: What are your boldest ideas for reimagining program onboarding?

How could we personalize ACIP practices to underserved student groups?

Personalizing the program onboarding experience

| Program onboarding design principle | How can we personalize the experience to particular groups of students who are currently not well served—e.g., undecided students, older students, non-credit students, dual enrollment students, etc.? (Identify the student groups in each case) |
|---|--|
| ASK every student about their interests, strengths, aspirations | |
| CONNECT them with faculty, students, alumni, others with similar interests | |
| INSPIRE learning in term 1 through “light the fire” college-level courses on issues of interest | |
| Help every student development individualized education PLAN aligned to jobs/transfer in field of interest by end of term 1 | |

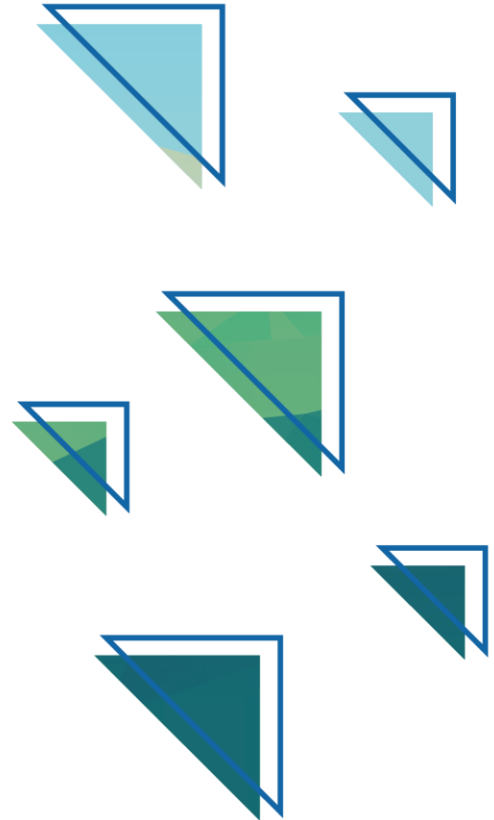
Oh, The Places They'll Go

**Goal-Oriented Program
Onboarding Redesign**

Promote Equitable Program Momentum by
Asking, Connecting, Inspiring, and Planning

**Coming in
October 2021!**

CCRCWORKSHOPS



Guided Pathways Summer Institute

**Using Data to Launch
Large-Scale Reform**

CCRC COMMUNITY COLLEGE
RESEARCH CENTER

TEACHERS COLLEGE, COLUMBIA UNIVERSITY

Summer 2022
Two sessions in June and July

Details on dates and the application process will be announced in November 2021 – stay tuned!

Thank you!

Questions? Please reach out!

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