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.

Why focus on program onboarding?
Students who gain early momentum are more likely to complete.

**Early Academic Momentum**

- **Gateway Course Momentum**
  - Completed college math/English in year 1
- **Credit Momentum**
  - Completed 24+ college credits in year 1

**Persistence and Course Completion**

- **Fall-Spring Persistence**
- **Course completion rate in year 1**

**Longer-Term Outcomes**

**Early Program Momentum**

- Passing program gateway courses in year 1

**Early Momentum Metrics**

Leading Indicators for Community College Improvement

As community colleges across the country implement large-scale reforms to improve student success, they simultaneously and sustainably monitor to determine if these changes are making a difference. In this brief, we examine how well institutions of higher education are using early indicators of student success to inform their efforts to improve student outcomes. We review and present the evidence for seven key indicators of student success, including: (1) credit momentum; (2) program persistence; (3) program completion; (4) early program momentum; (5) program completion; (6) program completion; (7) program completion.

**First-Year Indicators of Longer-Term Success**

Throughout the nation, new and veteran colleges are leveraging data to “prove the need,” an essential source of revenue for many institutions. This funding provides an opportunity to improve outcomes and reduce costs, which is particularly important as many community colleges are facing budget constraints and increasing demands for accountability. In this section, we present evidence of the importance of early momentum to longer-term student success. We highlight the findings of a recent study that examined the relationship between early momentum and student success, and discuss the implications for policymakers and practitioners.

"Recent research indicates that students who gain early momentum are more likely to complete..."
Early momentum has added benefits for students of color and low-income students…

<table>
<thead>
<tr>
<th>Transfer to a four-year institution</th>
<th>Benefit of milestone (baseline group: White)</th>
<th>Black students</th>
<th>Hispanic students</th>
<th>Low-income students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit momentum (6+, 12+, or 24+ college credits)</td>
<td>3–5x</td>
<td>3–6x</td>
<td>6–11x</td>
<td>7–8x</td>
</tr>
<tr>
<td>Gateway English/math (college-level)</td>
<td>3–4x</td>
<td>3–4x</td>
<td>6–8x</td>
<td>4–6x</td>
</tr>
<tr>
<td>Completed transfer degree</td>
<td>7–8x</td>
<td>9–11x</td>
<td>11–18x</td>
<td>11–13x</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Transfer and bachelor’s completion</th>
<th>Benefit of milestone (baseline group: White)</th>
<th>Black students</th>
<th>Hispanic students</th>
<th>Low-income students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit momentum (6+, 12+, or 24+ college credits)</td>
<td>1.7–2x</td>
<td>2–3x</td>
<td>4–5x</td>
<td>7–9x</td>
</tr>
<tr>
<td>Gateway English/math (college-level)</td>
<td>1.6–3x</td>
<td>2–4x</td>
<td>4–5x</td>
<td>4–5x</td>
</tr>
<tr>
<td>Completed transfer degree</td>
<td>3–4x</td>
<td>5–6x</td>
<td>5–9x</td>
<td>6–7x</td>
</tr>
</tbody>
</table>

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?

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

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

Source: https://public.tableau.com/app/profile/john.fink/viz/IPEDSCollegeAwardsdev/CompletionsbyProgram

25% of cc awards are short-term certificates
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.

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

47% of associate degrees awarded byccs were in “liberal studies”; 18% of bachelor’s awarded by 4-year publics were in arts, humanities, communication.

Source: https://public.tableau.com/app/profile/john.fink/viz/IPEDSCollegeAwardsdev/CompletionsbyProgram
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: -13.2%
25+: -6.1%

Public 4-year: -2.0%
Private nonprofit 4-year: -2.8%
Private for-profit 4-year: -2.0%
Public 2-year: -13.2%
Overall: -5.0%

Source: National Student Clearinghouse Research Center • Get the data • Created with Datawrapper

*Chronicle of higher Education*, June 10, 2021, showing change in enrollment in spring 2021 compared with previous spring.
But community college enrollment has been declining since 2011. CCs have lost market share to public 4-years...

Source: https://public.tableau.com/profile/john.fink#!/vizhome/UndergraduateEnrollmentTrendsbySector/Summary
...especially among traditional college-age students even as older student enrollment has declined sharply.

Source: https://public.tableau.com/profile/john.fink#!/vizhome/UndergraduateEnrollmentTrendsbySector/Summary
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?
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
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
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 rapidly 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:
$42,140 annually (Electrical and Electronics Engineering Technicians)

BUREAU OF LABOR STATISTICS CLUSTER WEBSITE:
bis.gov/oesh/architecture-and-engineering/home.htm

M.A.P.
www.cccc.edu

DEGREE(S)
- Associate in Applied Science in Laser and Photonics Technology (A40280) Harrell 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, Harrell 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
+10%

150% IPEDS graduation
+19%

Program Changes
-10-16%
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.
Is This HomeBase Right for You?

The Language and People HomeBase pathway community supports students in the following programs. Explore the programs listed more.

A HomeBase pathway community is a dedicated, welcoming space where students in a particular major or area of interest have full support to help them complete their academic program while also engaging in a sense of community and belonging.

<table>
<thead>
<tr>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Sign Language (ASL)</td>
</tr>
<tr>
<td>English as Second Language (ESL)</td>
</tr>
<tr>
<td>Foreign Language: German</td>
</tr>
<tr>
<td>Foreign Language: Spanish</td>
</tr>
<tr>
<td>Health Information Technology</td>
</tr>
<tr>
<td>History</td>
</tr>
<tr>
<td>International Studies</td>
</tr>
<tr>
<td>Pre-Law</td>
</tr>
</tbody>
</table>

Contact:

Email: HomeBase@arc.edu
Phone: 916-472-5176

Explore HomeBases

Goals

Students First
Including ESL, older students, and exploratory.

Case Management @ Scale
Scale successes of traditional case management programs

RPT
Retention, Persistence, Time to Completion
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)

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

### Dual Enrollment
(N = 605 students)

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

https://ctl.sinclair.edu/teaching-and-learning/student-engagement/service-learning/
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

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

<table>
<thead>
<tr>
<th>Program onboarding design principle</th>
<th>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)</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
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</table>
Promote Equitable Program Momentum by Asking, Connecting, Inspiring, and Planning
Guided Pathways Summer Institute

Using Data to Launch Large-Scale Reform

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!

Hana Lahr, lahr@tc.columbia.edu
Davis Jenkins, davisjenkins@gmail.com