

The background features a large, faint, circular seal of the State of Illinois. The seal contains the text "THE STATE OF ILLINOIS" around the top and "1818" at the bottom. In the center is a landscape with a rising sun, a river, and a Native American figure holding a bow and arrow.

Academic Maps with Career Alignment

2022 H. Kent Weldon Conference for Higher Education

Dhanfu Elston, Ph.D., Chief of Staff, Senior Vice President for Strategy, Complete College America
Ken Sauer, Ph.D., Senior Associate Commissioner and Chief Academic Officer

Tuesday, April 12, 2022

REACHING HIGHER IN A STATE OF CHANGE



Completion

Completion has remained a foundational goal for the Indiana Commission for Higher Education for the past decade.



Equity

Educational equity means that life circumstances or obstacles should not dictate opportunity to succeed.



Talent

Learners need the skills and competencies to be successful on the job today and tomorrow.

KEY METRICS

The Commission will track success for *Reaching Higher in a State of Change* key metrics:

- ▶ **Educational Attainment** – Progress toward at least 60% of Hoosiers having a quality credential beyond a high school diploma
- ▶ **Career Relevance & Preparation** – Progress toward 100% of postsecondary programs requiring an internship, work-based learning, research project or other student engagement experience that has career relevance ★
- ▶ **Economic Impact** – Progress toward Indiana becoming a leading Midwest state for median household income

CAREER RELEVANCE SURVEY

- ▶ Through a collaborative effort between the Commission and Indiana's public institutions, **an action team developed a definition for career relevance and conducted a survey** of all associate and baccalaureate programs
- ▶ “A student engagement experience with career relevance is one that:
 - ▶ is rooted in an authentic real-world context with reflection on that experience
 - ▶ occurs within traditional classroom environments, in beyond-the classroom settings either on or off campus, or in virtual/online modalities
 - ▶ places an emphasis on the development of multiple career readiness competencies defined by NACE”

CAREER RELEVANCE SURVEY RESULTS

| Career Relevance & Preparation | | | | | | | |
|---|--------------------|-------------------------------|-----------|------|---------------------------|-----------|-------|
| | Number of Programs | Career Relevance Incorporated | | | Career Relevance Required | | |
| Associate and Baccalaureate programs at public institutions | 1,123 | 89.9% | | | 77.9% | | |
| Meta Majors | | Yes | Partially | No | Yes | Partially | No |
| Education | 127 | 98.4% | 0.8% | 0.8% | 93.7% | 5.51% | 0.79% |
| Arts and Humanities | 237 | 81.0% | 10.1% | 8.9% | 58.6% | 22.4% | 19.0% |
| Social and Behavioral Sciences and Human Services | 119 | 93.3% | 5.0% | 1.7% | 73.9% | 16.8% | 9.2% |
| Science, Technology, Engineering, and Math (STEM) | 299 | 90.6% | 7.7% | 1.7% | 77.6% | 18.1% | 4.3% |
| Business and Communication | 125 | 88.8% | 7.2% | 4.0% | 81.6% | 9.6% | 8.8% |
| Health | 131 | 91.6% | 6.1% | 2.3% | 90.1% | 2.3% | 7.6% |
| Trades | 85 | 94.1% | 3.5% | 2.4% | 90.6% | 5.9% | 1.2% |

CHE CAREER RELEVANCE EFFORTS

- ▶ Employer/Educator Career Relevance Convening (November 2, 2021): over 160 educators and employers convened to discuss tactics to ensure every Hoosier graduate has some experience with embedded career relevance while in college
- ▶ Student Advocates Conference (December 15-16, 2021): emphasized the importance of integrated work experiences that help students apply their learning, connect with employers and develop marketable skills
- ▶ New Degree Programs Approvals: Added requirement for institutions to describe student engagement experiences with career relevance to the new degree proposal form

OTHER CAREER RELEVANCE EFFORTS

- ▶ Graduation Pathways – Department of Education, State Board of Education
- ▶ Next Level Programs of Study – Governors Workforce Cabinet
- ▶ Youth Apprenticeships – Office of Work-Based Learning and Apprenticeships, EmployIndy, Ascend Indiana
- ▶ Employment Aid Readiness Network (EARN) – Indiana Chamber of Commerce, Institute for Workforce Excellence

ACADEMIC MAPS WITH CAREER ALIGNMENT

**COMPLETE
COLLEGE
AMERICA**

H. Kent Weldon Conference for Higher Education

Indianapolis, IN

April 12, 2022



COMPLETE COLLEGE AMERICA

CCA is a **bold** national advocate for dramatically **increasing college completion rates** and **closing institutional performance gaps** by working with states, systems, institutions, and partners to scale highly effective **structural reforms** and promote policies that improve student success.

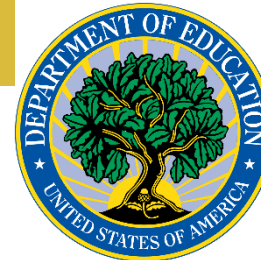
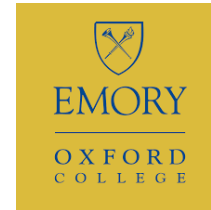
Mission

Who We Are

Organizational
Lens

Staff
Experience

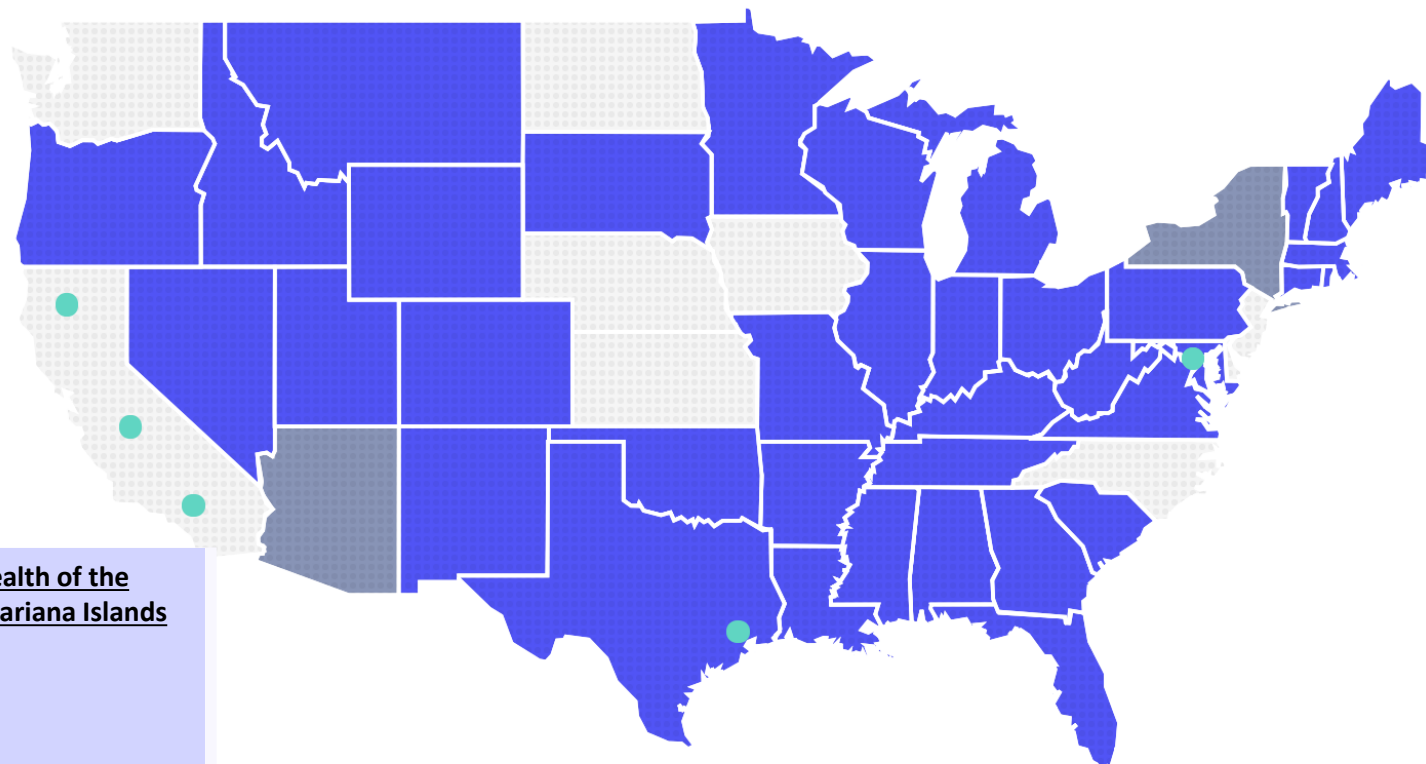
Bold
Advocates



The Alliance

48

states, systems, and consortia participating in the CCA Alliance



Commonwealth of the Northern Mariana Islands

Hawaii

Puerto Rico

Thurgood Marshall College Fund

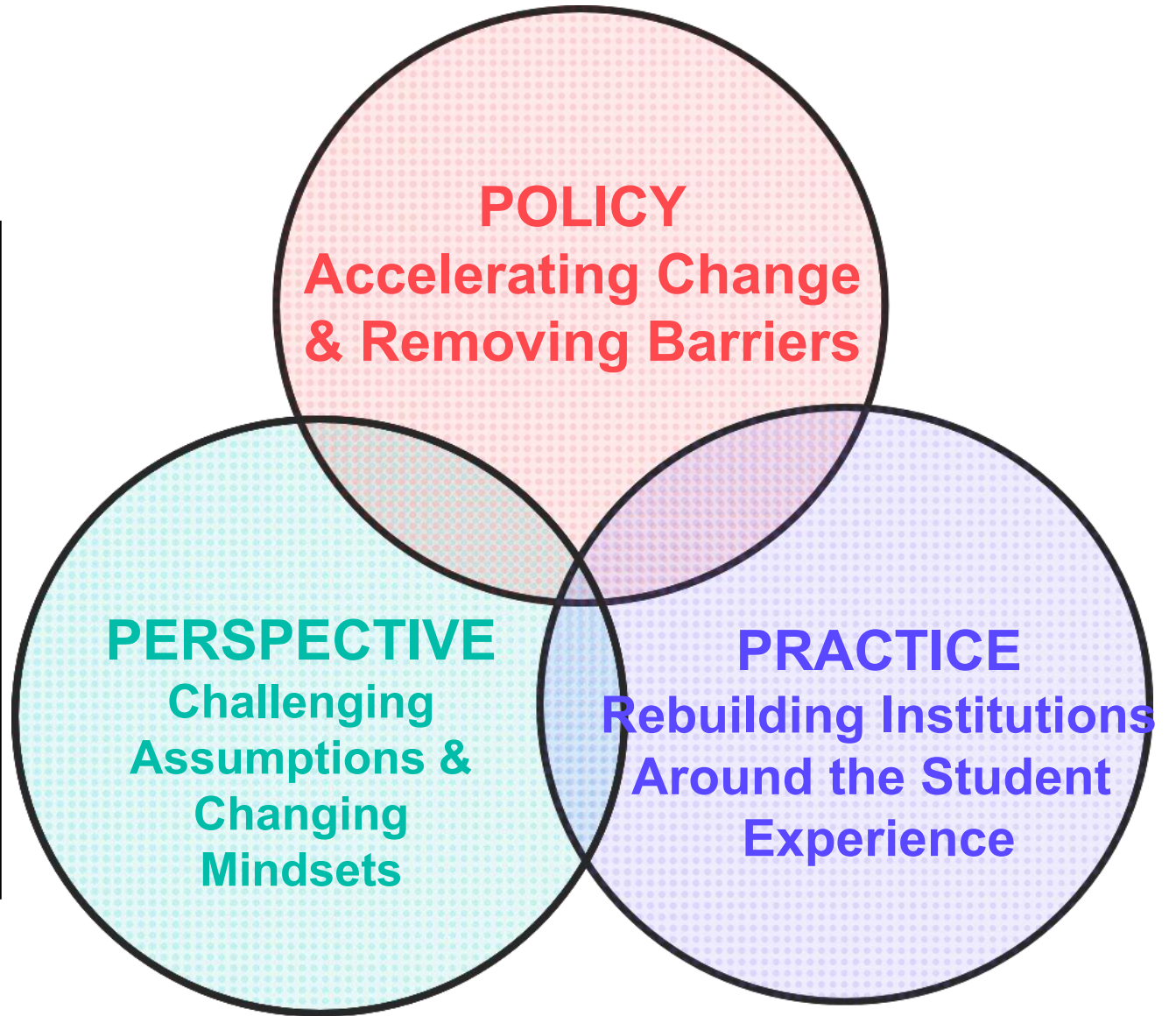
■ STATE ● REGION/CITY

Our Approach

Systems Change

Reshaping the forces
shaping college outcomes

We align policy, perspective &
practice - so they work
together to create more
effective and equitable
systems.



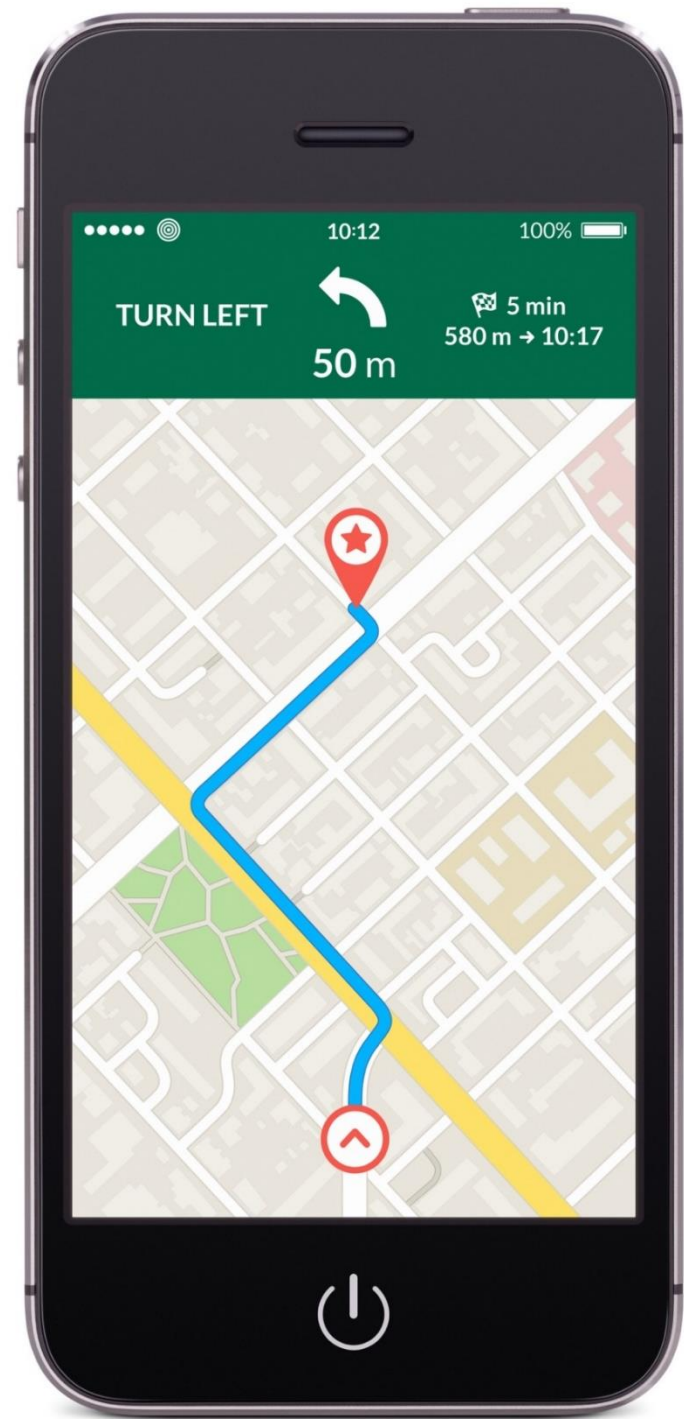
STRATEGIES

Designing the college experience around students

| PURPOSE | STRUCTURE | MOMENTUM | SUPPORT |
|--|---|--|---|
| <p>Aligning the college experience to each students' goals for the future</p> <ul style="list-style-type: none">○ First-Year Experience○ Career Exploration○ Academic & Career Alignment○ Adult Learner Engagement | <p>Building course road maps that make the path to a degree or valuable workplace credential clear</p> <ul style="list-style-type: none">○ Math Pathways○ Meta Majors○ Academic Maps & Milestones○ Smart Schedules○ Stackable Certificates & Credentials | <p>Designing multiple avenues for students to get started, earn credits faster, and stay on track to graduate</p> <ul style="list-style-type: none">○ Credit for Competency○ Multiple Measures○ Corequisite Support○ Dual Enrollment○ 15 to Finish/Stay on Track | <p>Addressing student needs and removing barriers to academic success</p> <ul style="list-style-type: none">○ Active Academic Support○ Proactive Advising○ 360° Coaching○ Student Basic Needs Support |

Academic Maps are not Enough

Having a direct route is important, but you first must know where you are and where you want to go.





PURPOSE FIRST

36%
would choose a
different major

HOW ARE STUDENTS CHOOSING MAJORS?

#PurposeFirst





PURPOSE

Aligning the college experience to each student's goals for the future

First-Year Experience

Develop structures to connect students with resources that foster their academic and career goals.

Academic & Career Alignment

Create a clear connection between learning taking place in the classroom and the competencies associated with careers.

Career Exploration

Make information on careers readily available to all students, empowering them to make informed decisions about programs of study that meets their skills, aptitudes, and aspirations.

Adult Learner Engagement

Proactively communicate the value of a higher education degree to address the unique needs and goals of adults.

PURPOSE MATTERS

Uninformed decisions about purpose...

- Too many major options
- Little alignment with interests and values
- Little understanding of career implications

...lead to significant negative impact on student outcomes

- Major-switching
- Excess credits
- Longer time-to-degree
- Extra costs
- “Some college, no degree”
- Unsuccessful career launch
- Persistent equity gaps

PURPOSE MATTERS

More than 31 million

Americans have enrolled in college and left without receiving a degree or other credential over the last 20 years.

(NSC Research Center, 2014)

63%

More likely to value their education if they understand the relevance of their courses and degree to their career

(National Association of Student Financial Aid Administrators, 2018)

58%

of students say getting a good job is their primary motivation for pursuing an education.

(Gallup-Strada, 2018)

African Americans & Latinx are underrepresented

in the fastest-growing, highest-paying occupations: STEM, health, and business.

(Carnevale, Fasules, Porter, Landis-Santos, 2016 & Carnevale, Porter, Landis-Santos, 2015)



Supporting students in developing a sense of career purpose prior to making a significant decision about their major.



STAKEHOLDERS

Successfully supporting students in developing a sense of career purpose requires commitment and collaboration from numerous stakeholders.

- ✓ Registrars
- ✓ Admissions Officers
- ✓ Academic Advisors
- ✓ Student Affairs Professionals
- ✓ Career Services Professionals
- ✓ Faculty Members
- ✓ Employers



SHARED BELIEFS

Higher education **should be a launching pad toward a meaningful career**, empowering students with the knowledge to make informed choices, the structures to explore available opportunities, and the tools needed for success.

Career exploration and planning must be **intentional and start early** in the educational experience.

States, systems and institutions must build a culture of purpose across all tiers in higher education.





College, On Purpose

COLLEGE, ON PURPOSE

A guide to implementing the Purpose First strategy—
the missing link between career choice,
guided pathways, and first-year momentum

COMPLETE
COLLEGE
AMERICA



- **Implementation guide** for Purpose First, a strategy that creates a “missing link” between career choice, guided pathways, and first-year momentum.
- **Components of a Purpose First** experience focused on helping students explore interests and careers, make informed choices and hit early benchmarks toward on-time graduation.
- Findings from a **three-year demonstration project** supported by Strada Education Network.

<https://completecollege.org/purposefirst/>

OUTCOMES

- ✓ Better understanding of career connection to major
- ✓ Earlier enrollment in program of study
- ✓ Greater credit completion in program of study
- ✓ Increased major stability
- ✓ Reduced opportunity gaps

Houston Community College saw a 542% increase in the number of career coach assessments and a resulting **82.8% decrease in undeclared majors.**

(from Spring 2016 to Spring 2017)

By incorporating career assessment tools prior to registration,

25% of incoming first-year students changed majors

(EAB)

By incorporating labor-market data and matching interests and ability, Baker College **dropped program changes by enrollment from 26.1% to 13.9%**

(MyMajors)

DEEPENING PRACTICE

Because equity is in the details

How might culture affect a student's beliefs about possible career opportunities?

What barriers will students of color face in the job market?

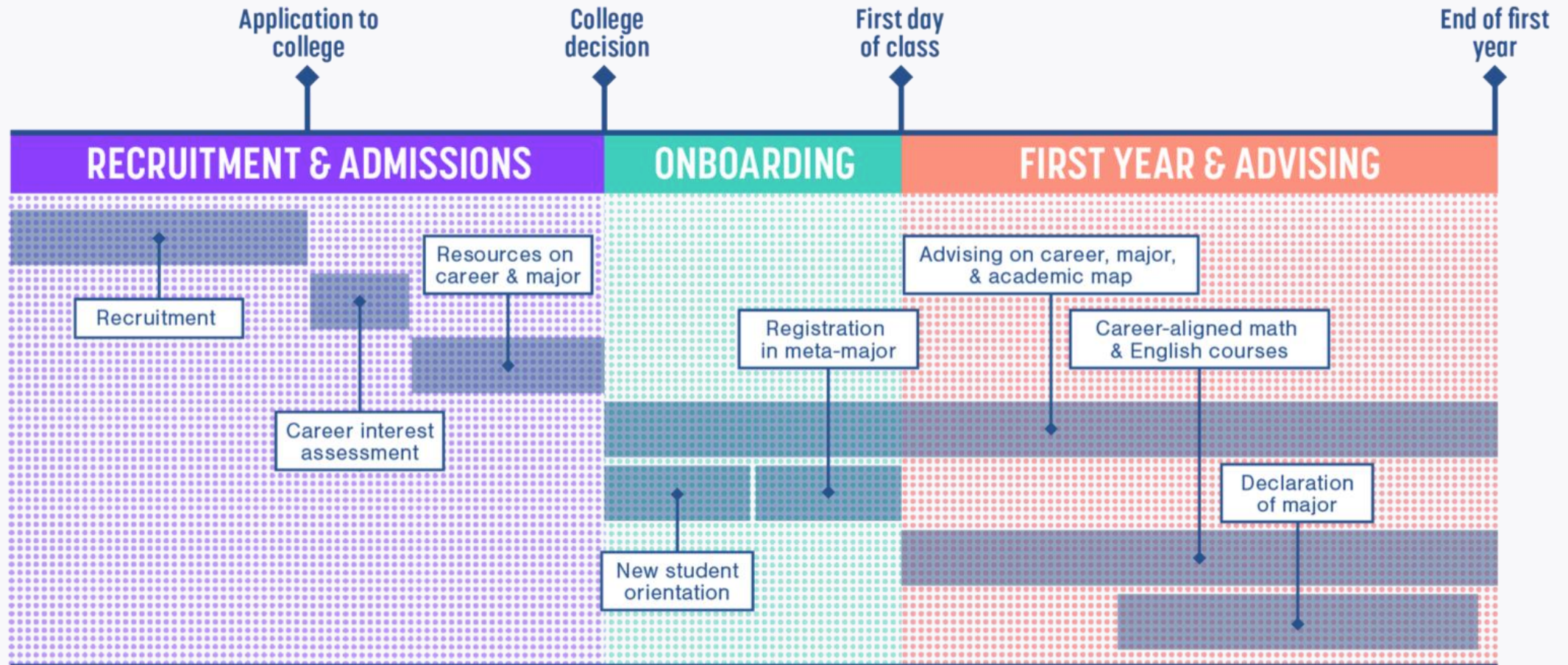


CAREER
EXPLORATION

What unique challenges do 1st generation students face when thinking about their career?

How does college affordability affect ROI for low-income students? How do we address economic mobility?

THE PURPOSE FIRST EXPERIENCE



BEST PRACTICES

- Include **potential careers and jobs on academic maps for every major and concentrations** (make sure these maps are easily accessible to students and widely distributed)
- Actively **engage** incoming first-year students in their **major decisions from admissions** until the end of their first year (assessments, Handshake, first-year experience, major fairs, panels of employers, etc)
- **Connect with regional employers** across disciplines and ask them to highlight desired competencies for their fields (share these findings with faculty and students)
- Integrate experiential learning in every major (preferably paid!)
- Include career competencies on syllabus



DEEP DIVE: META-MAJORS & ACADEMIC MAPS

WHAT:

- Meta-Majors: Collection of academic majors with related courses and career opportunities
- Academic Maps: Highly structured semester-by-semester plan for on-time completion

WHY:

- Maintain momentum toward completion while narrowing down choice in major
- Align majors with potential careers



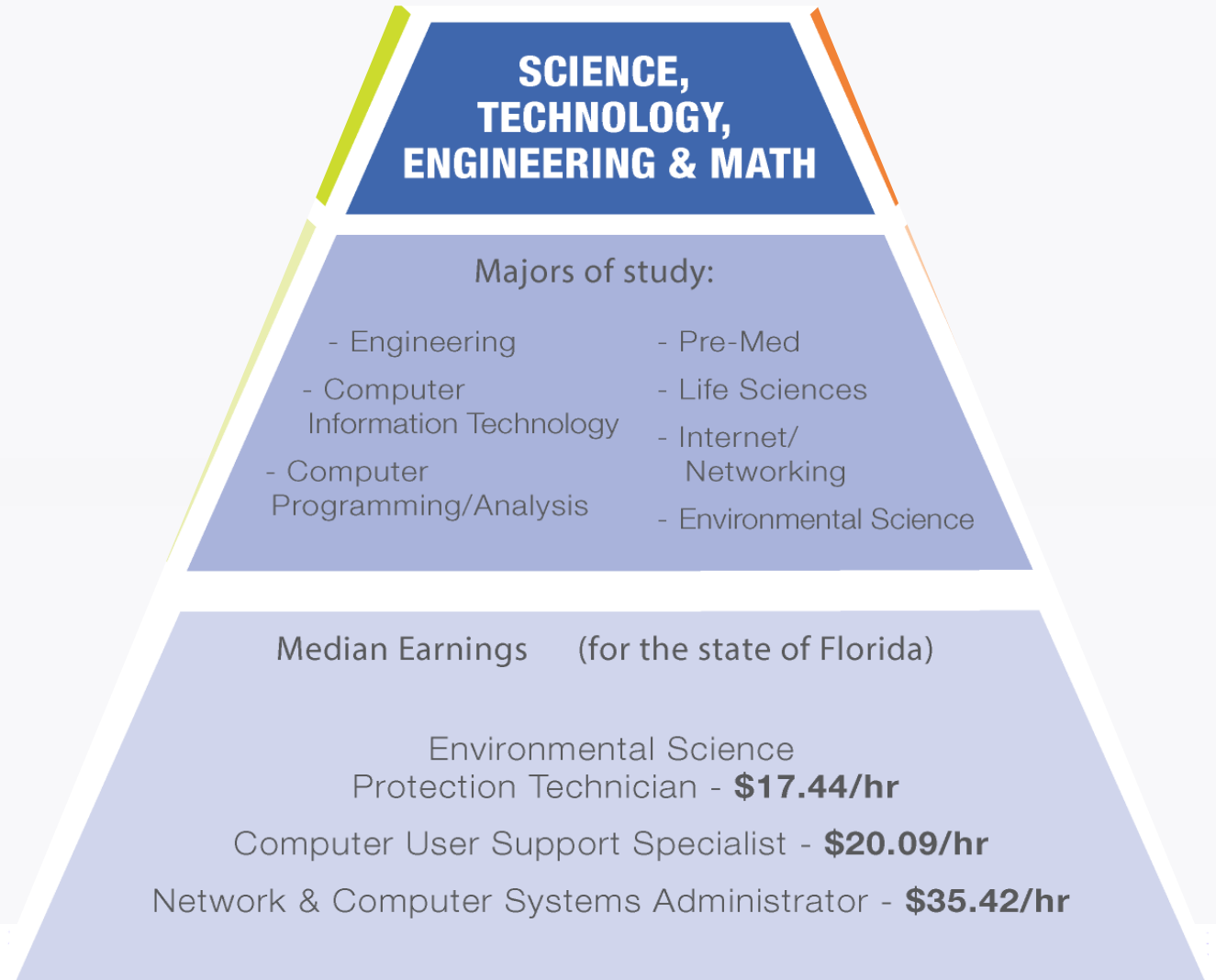
DEEP DIVE: META-MAJORS & ACADEMIC MAPS

WHAT:

- Meta-Majors: Collection of academic majors with related courses and career opportunities
- Academic Maps: Highly structured semester-by-semester plan for on-time completion

WHY:

- Maintain momentum toward completion while narrowing down choice in major
- Align majors with potential careers



BEST PRACTICES

K12 TO COLLEGE

- Institute Individual Career Academic Plan (ICAP) requirement for all students to engage in academic and career development activities <https://www.okedge.com/educators/implementing-the-icap/>
- Make FAFSA completion a high school graduation requirement
- Have regional colleges share **dual enrollment/AP/IB** course equivalencies and where these courses fit within programs of study
- Communicate with all regional high schools about **meta-majors and math pathways**
- Make interest and career assessments available to high school students
- Hold regular meetings between college and high school representatives to ensure constant communication about policy and practice changes



BEST PRACTICES

HIGHER ED

- Include **career outcomes on academic maps + labor/market data** on website
- Provide opportunities for regional employers to be involved: panels, apprenticeships, guest lectures, hosting classes on sites, instructors' externships, field trips
- Connect with **alumni to share early career experiences**/Mentoring opportunities
- Communicate clearly with employees around tuition assistance/reimbursement programs
- Showcase **value proposition of equitable hiring and racial employment representation** in statewide higher education agenda



UNIVERSITY OF DELAWARE

2019 Bachelor's All Colleges Psychology BA

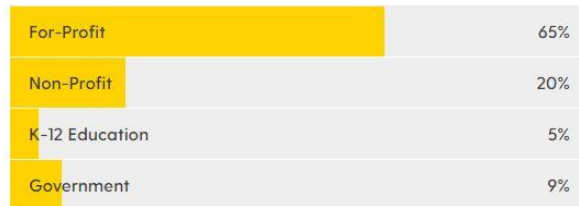


of psychology graduates are employed or pursuing further education.

[See our data gathering method.](#)

Percentages may not add to the total due to rounding.

EMPLOYMENT

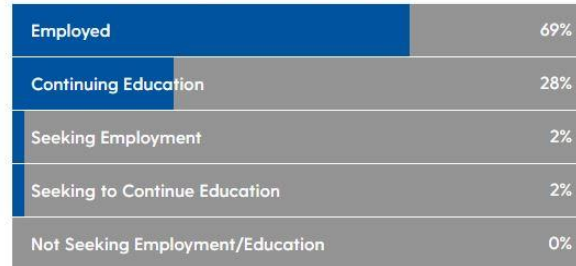


SALARY

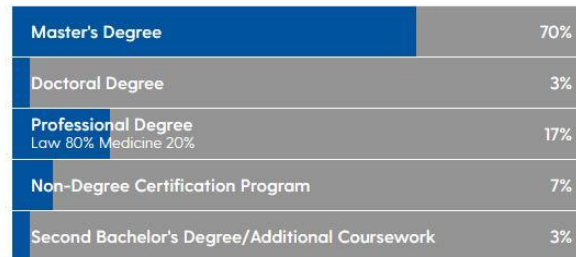
27 graduates

CAREER OUTCOMES

108 out of 151 graduates (72% knowledge rate)



CONTINUING EDUCATION



SALARY

27 graduates

| MEDIAN | MEAN |
|--------------------------|----------|
| \$36,000 | \$37,755 |
| 25th Percentile \$32,000 | |
| 75th Percentile \$42,000 | |

TOP EMPLOYERS

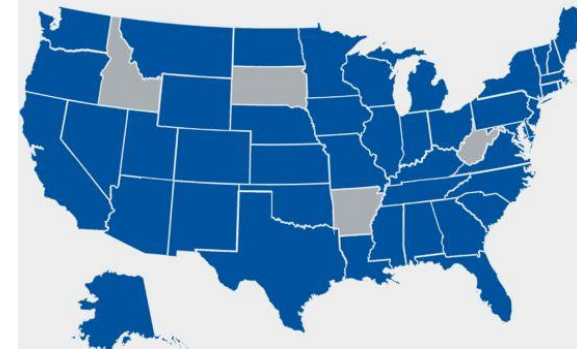
- University of Delaware
 - A Step Up Academy
 - ADD Systems
 - AXA
 - Adrianna Papell
- [View More](#)

TOP JOBS

- ABA Therapist
 - ABA Instructor
 - Academic Advising/Financial Aid Coordinator
 - Access Center Specialist
 - Adult Program Instructor
- [View More](#)

EMPLOYMENT BY LOCATION

Graduates of 2019 are finding success in 46 states in the U.S. (and Washington, D.C.) and 45 other countries around the world.



TOP INSTITUTIONS

- University of Delaware
 - Rutgers University New Brunswick
 - Johns Hopkins University
 - New York University
 - American University
- [View More](#)

TOP PROGRAMS

- Social Work - Master's
 - Law
 - Human Development & Family Sciences - Master's
 - Arts Management - Master's
 - Clinical & Counseling Psychology - Master's
- [View More](#)

Psychology BA graduates are commonly finding employment in these states and metro areas.

TOP STATES

- DE (21)
- NJ (17)
- NY (11)
- PA (8)
- MA (4)
- MD (4)
- CT (2)
- GA (2)
- NC (1)
- WA (1)

TOP METRO AREAS

- Wilmington, DE (18)
- New York, NY (15)
- Philadelphia, PA (5)
- Boston, MA (4)
- Washington, D.C. (3)
- Sussex County, DE (2)
- Atlanta, GA (2)
- Raleigh-Durham, NC (1)
- Seattle, WA (1)
- Tel Aviv, Israel (1)



GEORGIA STATE UNIVERSITY

Skill Builder

INFORMATION

Course/Program

Assignment/Activity

Author

Additional Text

COMPETENCIES



Critical Thinking/Problem Solving



Oral/Written Communication



Teamwork/Collaboration



Digital Technology



Leadership



Professionalism/Work Ethic



Career Management



Global/Intercultural Fluency

SKILLS

recognize, build, and appraise arguments

create and implement action plans

analyze visual data

conduct academic and archival research

mine and analyze data

create and implement solutions to crises/problems

identify errors in reasoning

provide useful summaries/precis

APPLIED

Critical Thinking/Problem Solving Skill



ATLANTA TECHNICAL COLLEGE

Atlanta Technical College (GA) has simple one-pagers for each program that highlights how quickly one can achieve certification and marketable skills.

Certification →
Time in college →
Jobs →
Salary →

1+ additional semester(s) =
More certifications, more jobs, higher salary

<https://atlantatech.smartcatalogiq.com/en/2021-2022/College-Catalog/Programs-of-Study/Computer-Information-Systems/Program-Information-and-Pathways>

ATLANTA TECHNICAL COLLEGE



Computer Programming Pathways

The Computer Programming program consists of courses designed to provide students with an understanding of the concepts, principles, and techniques required in writing computer software. Those interested in a computer programming should be highly motivated individuals who are interested in becoming an Information Technology professional. Program graduates will be competent in the technical areas of SQL, XHTML, systems analysis and design, database management, networking concepts, and the programming languages PHP, Visual BASIC, Java, C++, and JavaScript. The number of jobs in this field is projected to grow by 1% nationally and 2% in the State of Georgia over the next 10 years.

For more information contact:
Dr. Peter Ejindu, Ph.D.
Program Coordinator
404.225.4538
pejindu@atlantatech.edu
atlantatech.edu

Atlanta Technical College
1560 Metropolitan Parkway, SW
Atlanta, GA 30310-4446



ATLANTA TECHNICAL COLLEGE

*All job growth projections and estimated salaries are based on data from Emis (Economic Modeling Specialists Inc) and are updated annually.

Foundations of Computer Programming Certificate
1 Semester
4 Classes
Receive CompTia Network + Industry Certification
Careers: IT Support Specialist, Desktop Support Specialist, IT Technician, Field Service Technician
Estimated Starting Salaries at \$35,000/year

Java Programmer Certificate
1 Additional Semester, 4 Additional Classes
(3 to complete Certificate, 1 Towards Overall Program)
Receive Java SE 11 Industry Certification
Careers: Junior Programmer, Big Data Development, Android Development
Estimated Starting Salaries at \$42,000/year

C++ Programmer Certificate
1 Additional Semester, 4 Classes
(1 to Complete Certificate, 3 Towards Overall Program)
Receive CPA – C++ Certified Associate Programmer Industry Certification
Careers: Computer Programmer, Video Game Designer, Video Game Programmer
Estimated Starting Salaries at \$45,000/year

Computer Programming Associate's Degree
2 Additional Semester
8 Additional Classes
Careers: Computer Programmer, Embedded Software Engineer, Programmer Analyst
Estimated Starting Salaries at \$68,000/year

DALLAS COLLEGE



GEORGE MASON UNIVERSITY

Bachelor of Individualized Study (BIS)

<https://bis.gmu.edu/>

- Clear Transfer Credit and PLA Policy (average 71 credits accepted)
- Curriculum that includes support to college returners and guidance towards design program of study, research, and capstone project
- Continuous advising

64% of people who apply enroll in courses

80% of students who enroll graduate



Create a Profile:

WWW.COMPLETECOLLEGE.ORG



- Resources + Publications
- Strategy Toolkits
- Webinars & Podcasts
- Community Directory
- Events & Workshops
- Convenings
- Connect with the CCA Team



QUESTIONS

COMPLETE COLLEGE AMERICA



www.CompleteCollege.org



@CompleteCollege



delston@completecollege.org

COMPLETE COLLEGE AMERICA

The background of the slide features a large, faint, circular seal of the State of Indiana. The seal contains a landscape with a rising sun, mountains, and a river, surrounded by the text "SEAL OF THE STATE OF INDIANA" and the year "1816".

Indiana Commission for Higher Education

101 West Ohio Street, Suite 300

Indianapolis, IN

che.in.gov



INDIANA COMMISSION *for*
HIGHER EDUCATION