

Stackable Credentials in Career Education at California Community Colleges

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Sarah Bohn and Shannon McConville

Supported with funding from the ECMC Foundation,
the James Irvine Foundation, and the Sutton Family Fund



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The state is investing in career education programs

- Career education pathways allow students to acquire skills for advanced jobs and higher earnings
 - Especially important for students who do not get four-year degrees
- Community colleges are primary providers of career education
 - Wide range of students
- Since 2014, the state has invested more than \$1 billion
 - Career Pathways Trust and CTE incentive grants
 - Strong Workforce program provides ongoing support

Stackable credentials are especially important for students who start with short-term credentials

- Multiple, related credentials allow students to build skills over time
 - Sequences often start with short-term certificates
 - Multiple exit and entry points, clear mapping
- Opportunities for career advancement and increased earnings
- Connected to other initiatives within the community college system
 - Guided pathways, new online college

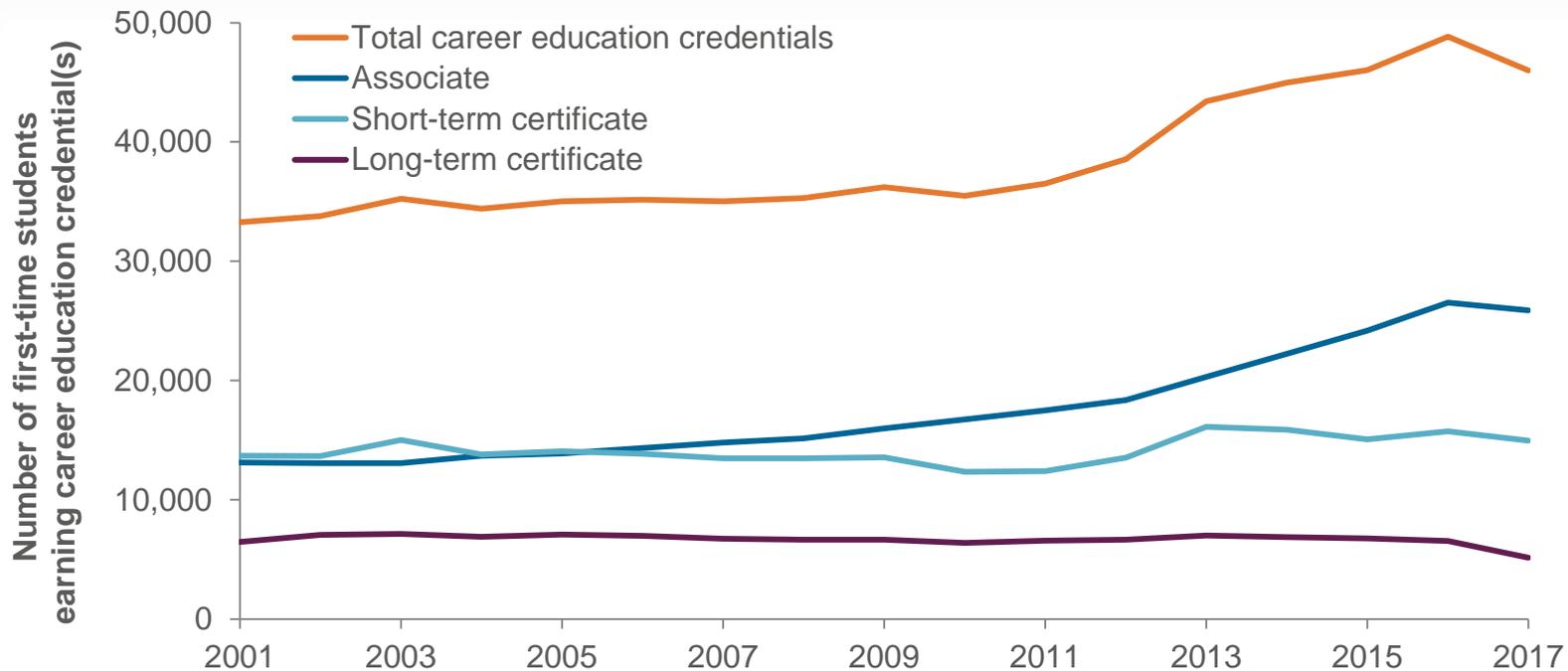
We need comprehensive evidence on pathways and students who stack credentials

- Previous findings on stackable credentials in health were promising
 - Significant returns to stacking credentials
 - Few pathways exist
- We expanded our focus across several other major disciplines
 - Identified stackable pathway features
 - Examined which groups of students obtain related credentials
- We also connected pathway designs to student outcomes

Outline

- Overview of career education students
- Stackable credential pathways at community colleges
- Pathway features that foster student success
- Key takeaways

First-time students are increasingly likely to earn career education credentials

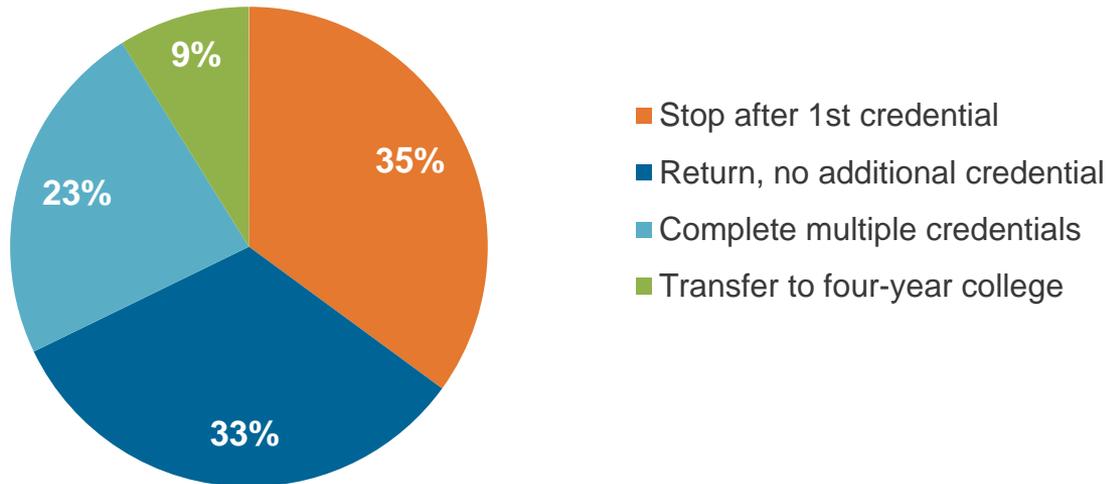


Stackable sequences most often start with short-term certificates

- Short-term credentials can be earned relatively quickly
- But research suggests earnings return is lower
- 40% of community college students start with short-term awards
 - Nearly half are age 30 or older, 80% have no more than a high school education
- To improve long-term employment opportunities and earnings, students could benefit from completing additional credentials

Most short-term certificate earners return to college but fewer than one in four earn another credential

Three-year trajectories for students who initially earn a short-term certificate



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Identifying stackable credential programs

- Scanned community college websites and course catalogs
 - Identified programs that offer related coursework and credentials
- Developed criteria to identify features of two types of pathways
 - Progressive pathways offer a sequence of awards that lead to higher-level credentials
 - Lattice pathways offer clusters of interconnected credentials that start from core set of course(s)

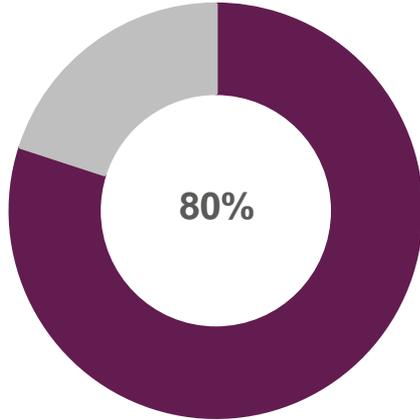
Progressive pathways are the most common type...

A progressive information technology (IT) pathway at Consumnes Rivers Community College

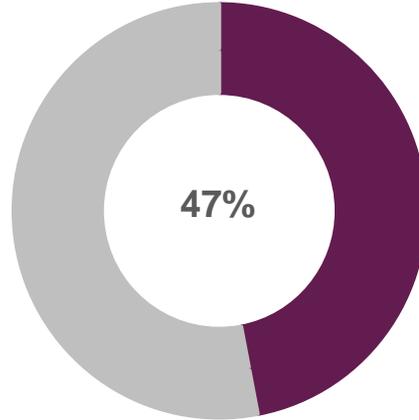


...but few are explicitly identified

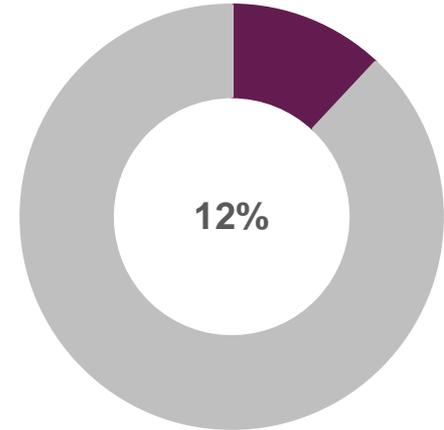
Any upgrade potential



Certificate-only paths

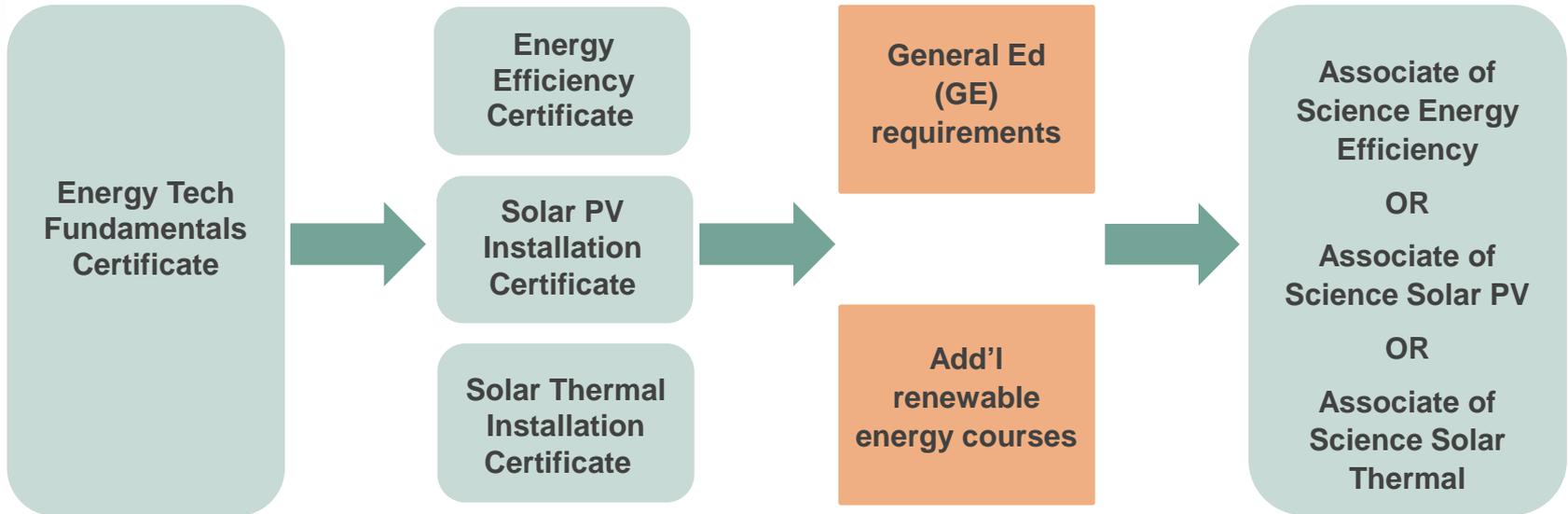


Explicit path sequence



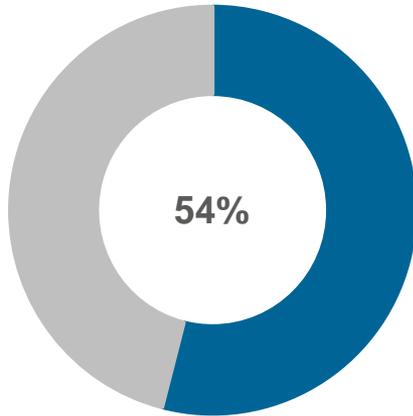
Lattice pathways are less common...

An energy technology pathway at Los Angeles Trade Tech Community College

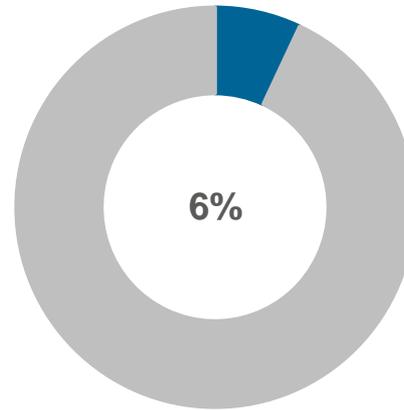


...and most lattice sequences are not well-defined

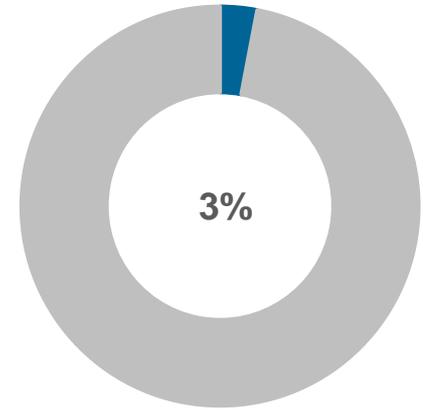
Launchpad to multiple credentials



Launchpad defined



Launchpad credential



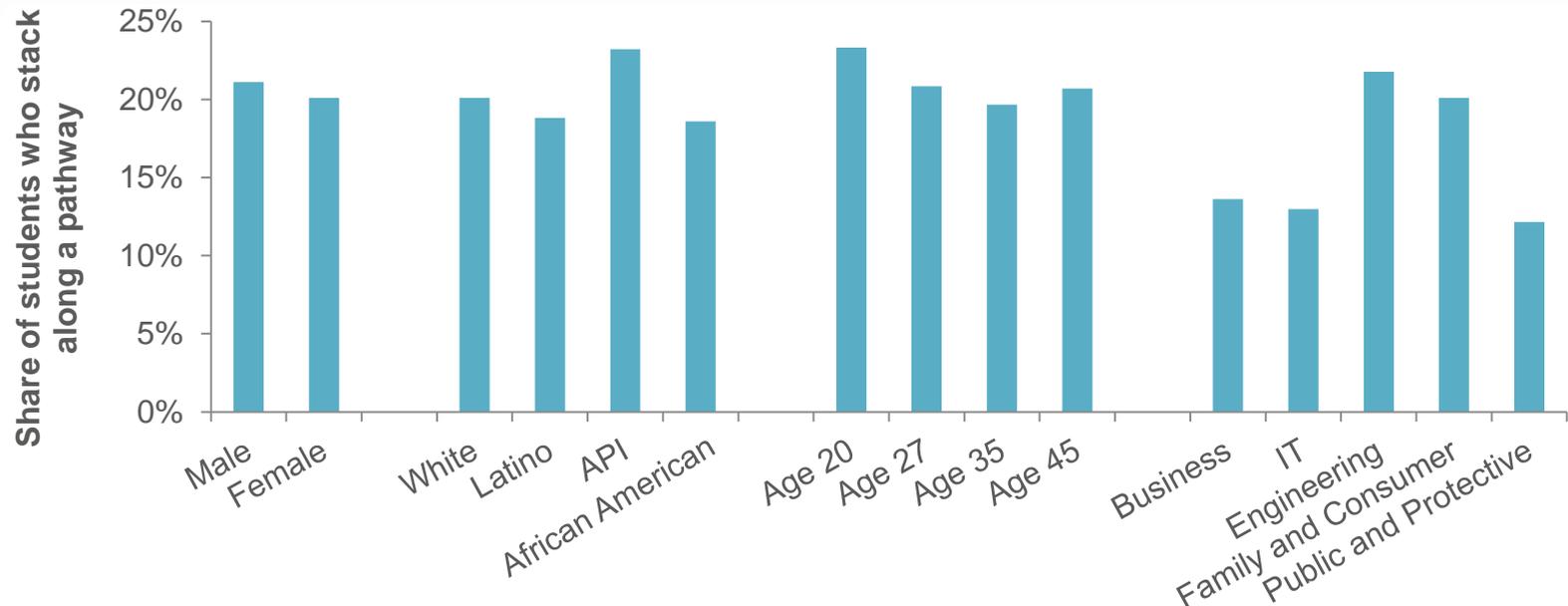
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Connecting program design to student success

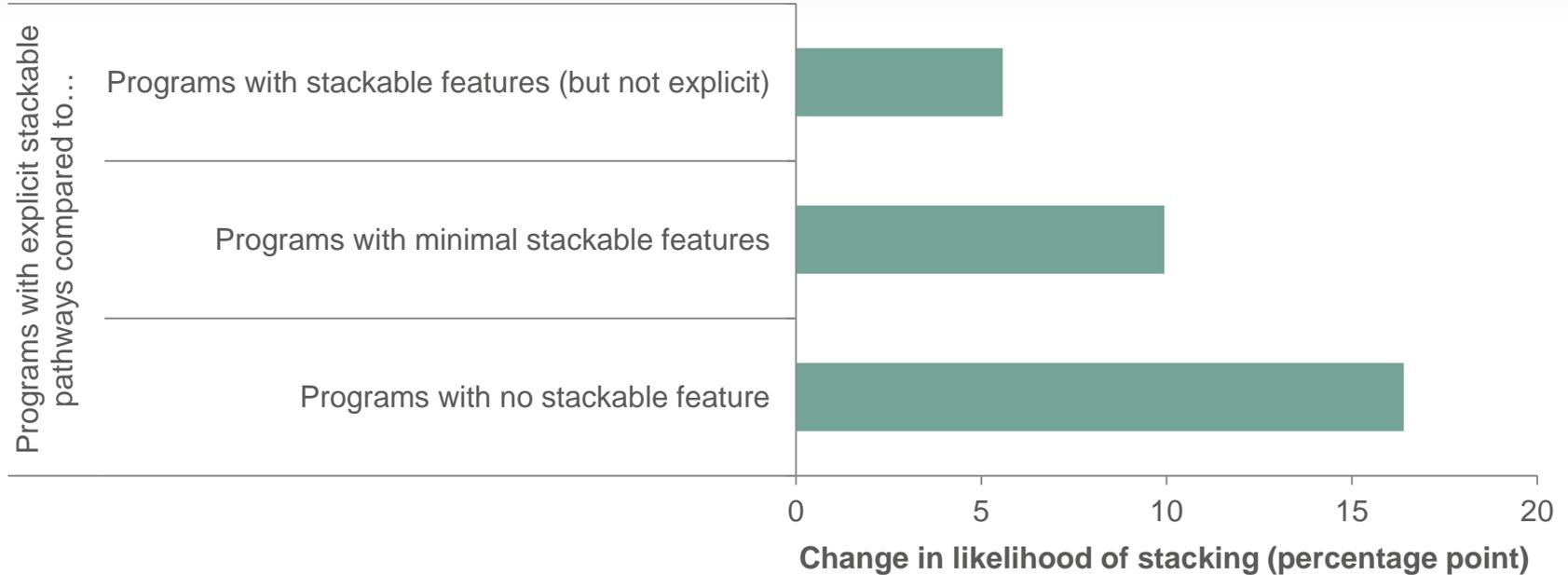
- Link pathway features to student-level data
- Control for multiple program, student, and college factors
- Examine whether students in programs with well-defined stackable pathways are more likely to stack credentials

Small differences in stacking across demographic groups



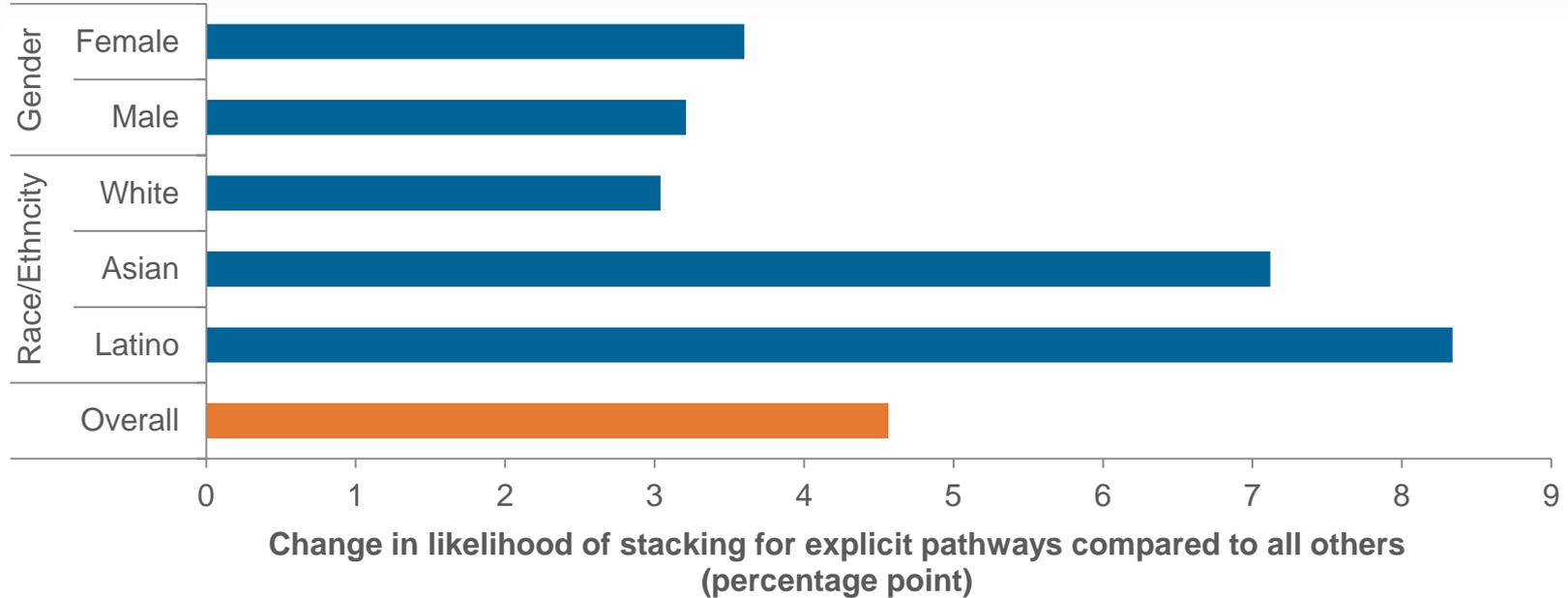
Notes: Estimates are regression adjusted for several student characteristics including demographics, markers of disadvantage, and measures of ability.

Well-defined pathways increase the odds of stacking



Notes: Estimates from fixed effects models that control for student characteristics, program characteristics, and colleges. All results shown are statistically significant.

Explicit pathways could help narrow achievement gaps



Notes: Estimates from separate fixed effects models for each group that control for additional student characteristics, program characteristics, and college. All results shown are statistically significant.

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Key takeaways

- Large share of career education students who earn short-term certificates return to community colleges for additional training
- Colleges can strengthen career pathways for these students by designing career education programs with explicit credential sequences
- It is important to ensure that additional credentials expand career opportunities and improve labor market outcomes

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Notes on the use of these slides

These slides were created to accompany a presentation. They do not include full documentation of sources, data samples, methods, and interpretations. To avoid misinterpretations, please contact:

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Thank you for your interest in this work.