

The Role of Industry-Recognized Credentials in High School Completion and Postsecondary Enrollment in the State of Florida

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Jobs that pay livable wages increasingly call for people to have education beyond a high school diploma.



Demand for postsecondary credentials

- **Nationally recognized, independently created industry certifications are one path forward.**
- **Many states are finding ways to promote industry certifications to students.**
- **In 2017, 39 states had some formal policy associated with industry-recognized credentials (ACTE 2017).**

Florida's Career and Professional Education (CAPE) Act

Established in 2007 to provide rigorous, relevant coursework leading to industry certification and college credits

State approved industry certifications

- Critical to FL employers
- Achievable by secondary students
- Require a minimum of 150 instructional hours

In 2017-18

- 236 specific certifications nested in 12 career areas
- CAPE Industry Certification Funding List

In 2021, Florida will audit all of the certifications and associated courses to see that they are aligned with employment outcomes.

Incentives for earning certifications

Students and families do not

- ✗ Pay for exam costs
- ✗ Schedule exams
- ✗ Arrange transportation to exam site

Students do

- ✓ Receive relevant school-based instruction
- ✓ Get the potential for college credit via some certifications

Schools get points in School Report Card

- + Number of students taking exams
- + Number of students passing exams

Dramatic increase in certifications earned by Florida high school students

954

certifications earned
in 2007-08

123,829

certifications earned in
2017-18

↑ 130% increase

RESEARCH QUESTIONS:

- Do students have equal opportunities to earn certifications?
- Does earning a certification benefit students?

Florida Industry Certification Study

- **Exploratory study funded by IES**
 - 7/2017 through 6/2021
- **Builds upon research conducted for OCTAE to examine the rollout of this program.**
 - **First cohort of high school students under CAPE Act (Grade 9 in 2007-08)**
 - **Florida administrative data**
 - **Interviews with district officials**

Study aims

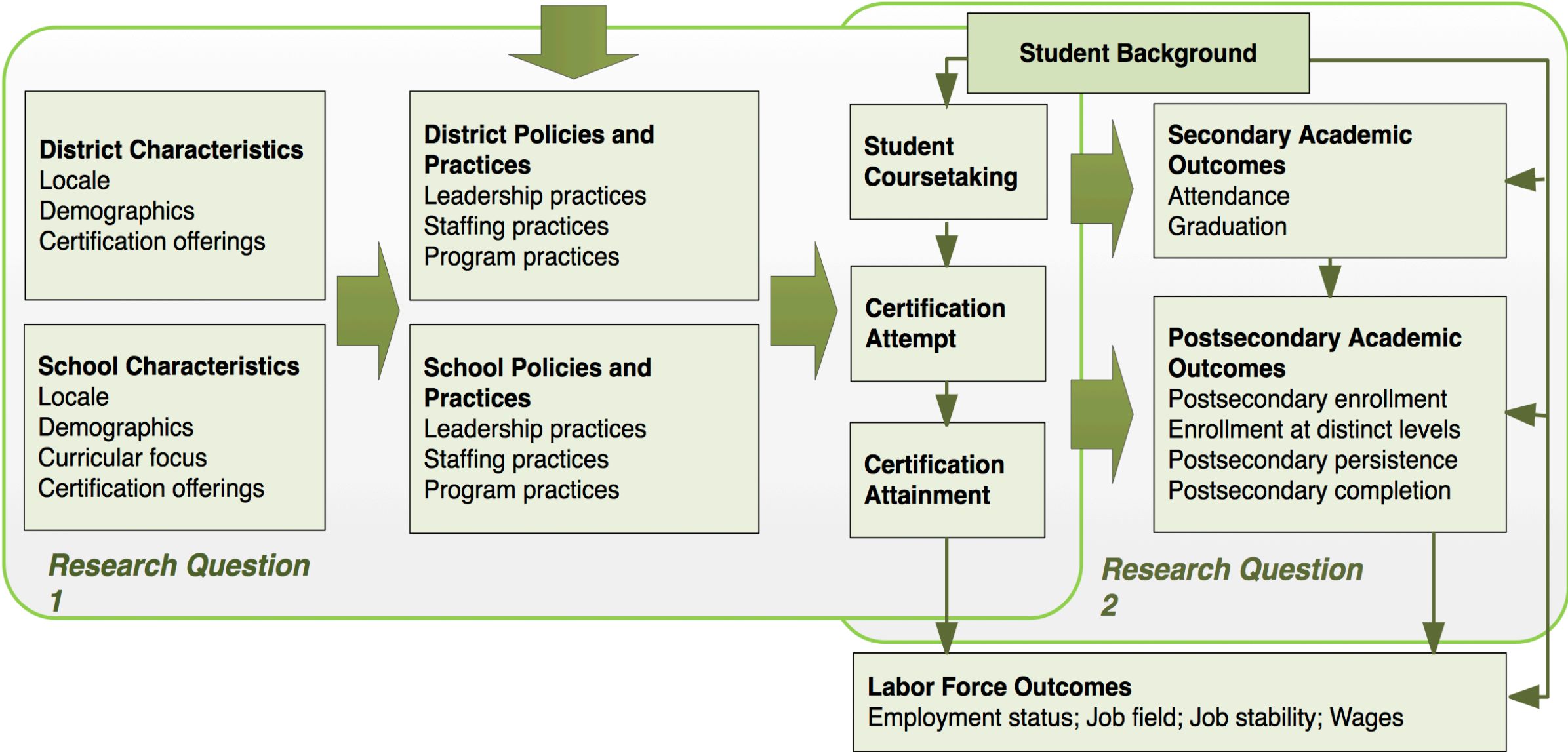
Identify which high school practices are associated with a higher likelihood of passing certification exams

Test whether obtaining a certification is associated with secondary and postsecondary academic success

And to determine whether

- **These relationships are the same for different kinds of students**
- **These relationships are the same for different kinds of certifications**

State Context: Certification Policies and Incentives



Data sources

**RTI-developed
web-based survey**

**School and district practices for
administering CAPE program**

**Florida DoE Education
Data Warehouse**

**Student certification-earning, academic
progress in high school and college**

Burning Glass data

Labor market demand for certifications

**NCES Common Core of
Data Public School
Universe**

School and district context

**National Student
Clearinghouse**

**College enrollment, persistence, degree
attainment for those not enrolled in public
FL postsecondary institutions**

Statewide survey on district and high school CAPE implementation

In 2018, we conducted a web-based survey of every district and traditional or vocational high school in Florida.

77%

response rate

96%

of the schools and all districts offered certifications

KEY TOPICS

- Program administration
- Strategies for promoting certifications
- Teacher qualifications
- Challenges and benefits of program
- Program costs

Florida Education Data Warehouse

We requested data for four cohorts of first-time 9th grade students, following them from grade 8 into postsecondary education.

Student

- Demographic data
- Middle school/high school transcript
- Certification attempts and earning
- High school exit/completion
- Postsecondary enrollment (Florida public institutions)
- Postsecondary degree attainment

Teacher

- Credentials
- Courses taught

Expected grades of students in each cohort, each year

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Cohort 1 (N = 218,392)	8	9	10	11	12	12+1	12+2	12+3	12+4
Cohort 2 (N = 224,264)	--	8	9	10	11	12	12+1	12+2	12+3
Cohort 3 (N = 225,638)	--	--	8	9	10	11	12	12+1	12+2
Cohort 4 (N = 229,467)	--	--	--	8	9	10	11	12	12+1

Burning Glass data

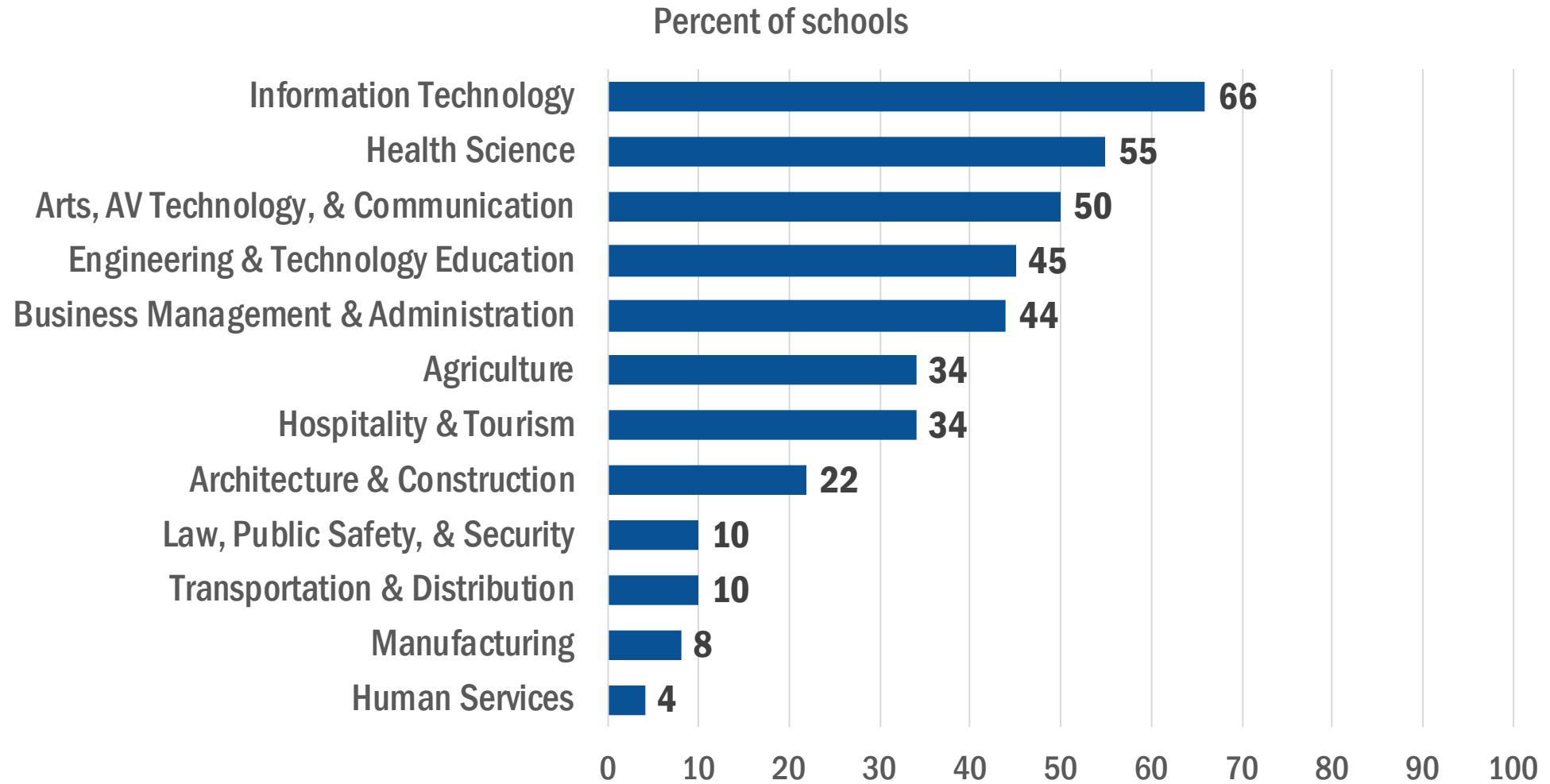
- One record per job posting (plus file with 1+ certifications per job)
- Identify credentials needed for job
- **1,129,587** unique job postings for January-December 2017:
 - 17% of these job postings required one or more sub-baccalaureate certifications (n = 187,979).
 - These **187,979** jobs require a total of **307,753** sub-baccalaureate certifications (about 1.6 per job). These break down as follows:
 - 62% in Health Science
 - 15% in Business Management and Administration
 - 12% in Information Technology
 - 2% in Hospitality & Tourism
 - 2% in Law, Public Safety & Security
 - The remaining 7% are in smaller categories

Currently creating analytic files

- **Link the survey data to the FL administrative data for analyses of factors influencing certifications**
- **Map credentials in Burning Glass data to those on the CAPE Funding List.**
- **Create student analytic file from various FL datasets**
- **Propensity score matching to identify comparison group**
 - **Certification earners to non-earners**
 - **Earners in a particular certification area to certification-earners in other certification areas.**

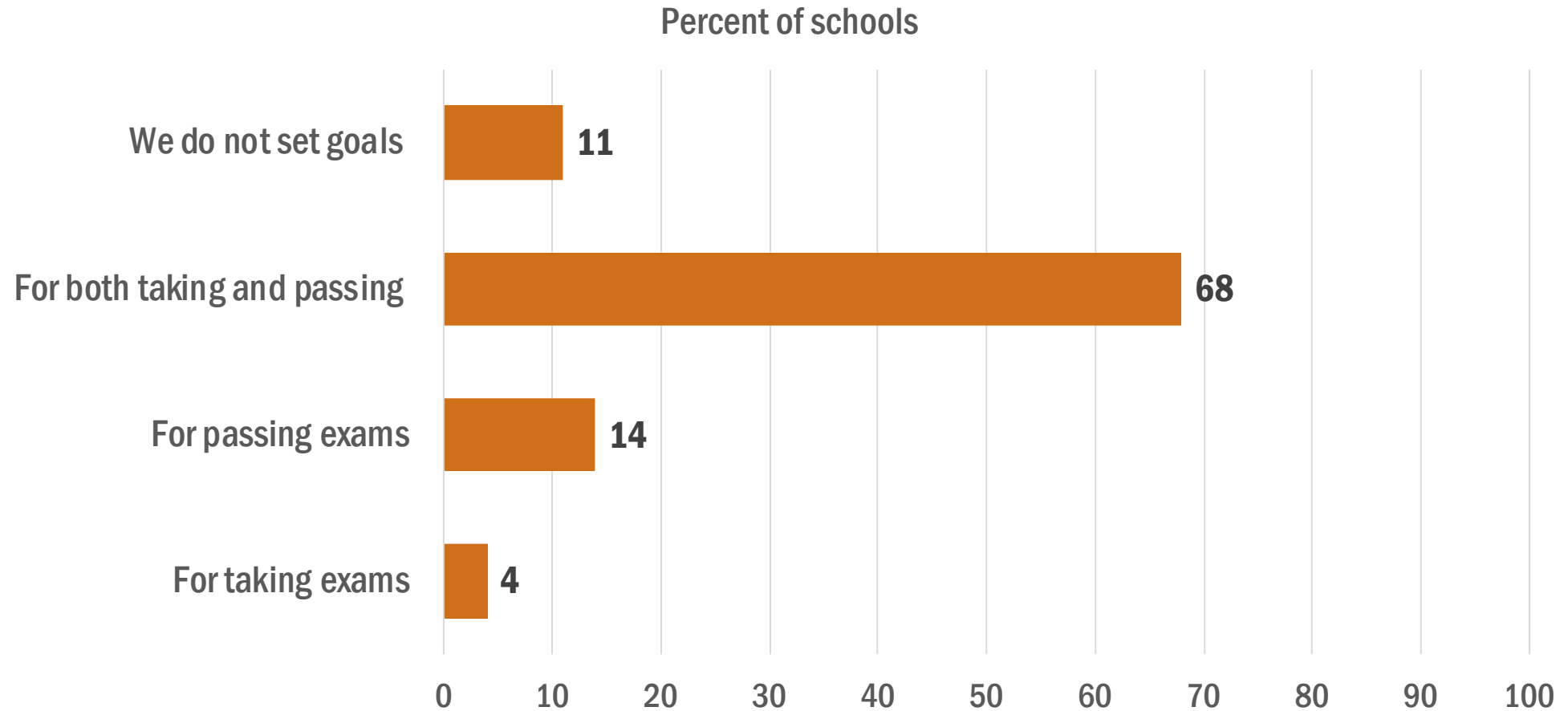
INITIAL FINDINGS

64% of schools emphasize particular career areas



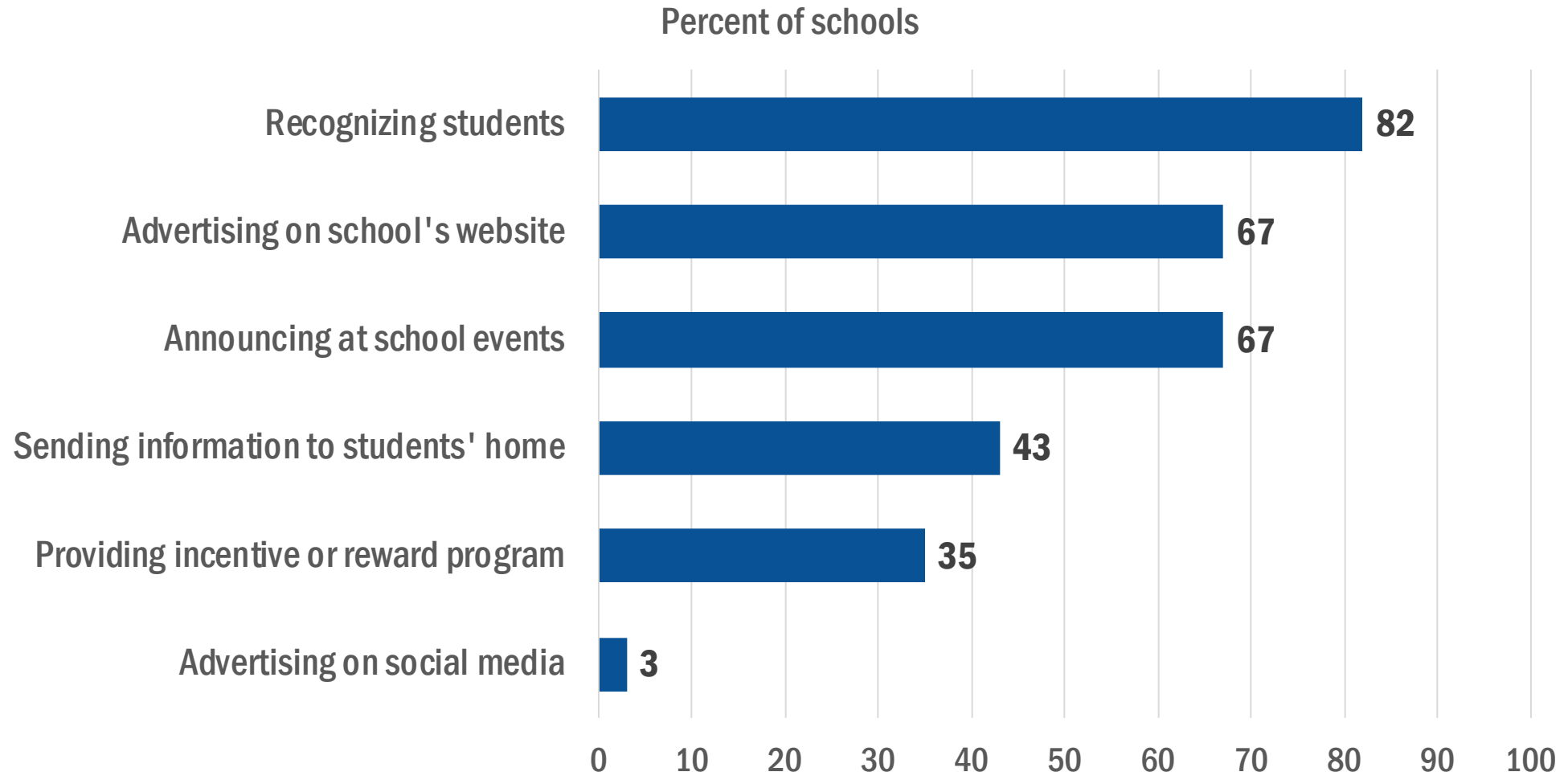
Note: Because respondents could choose more than one area, percentages do not total 100%.

Do schools set goals for certifications?



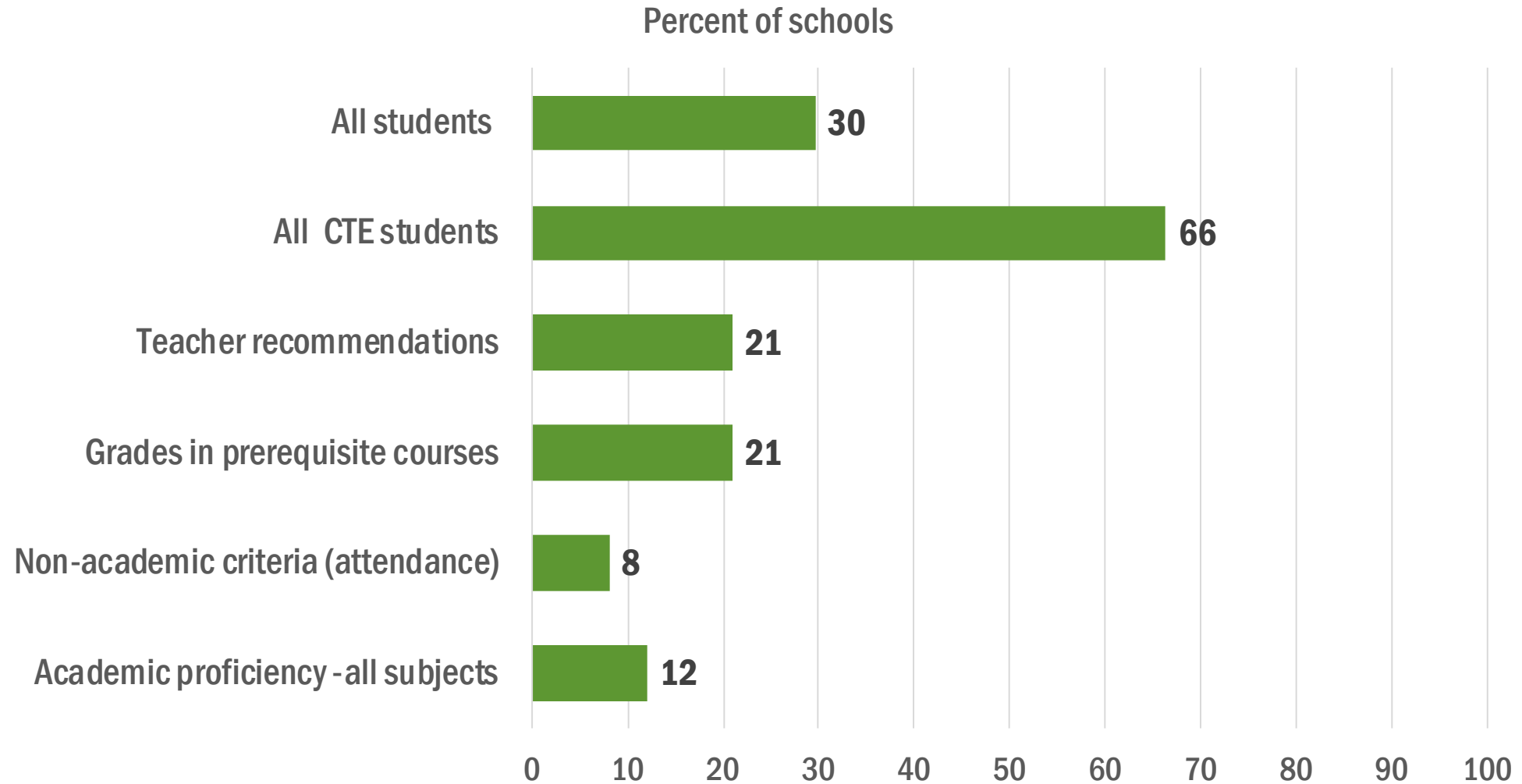
Note: Because of rounding, percentages do not total 100%.

How do schools promote certifications?



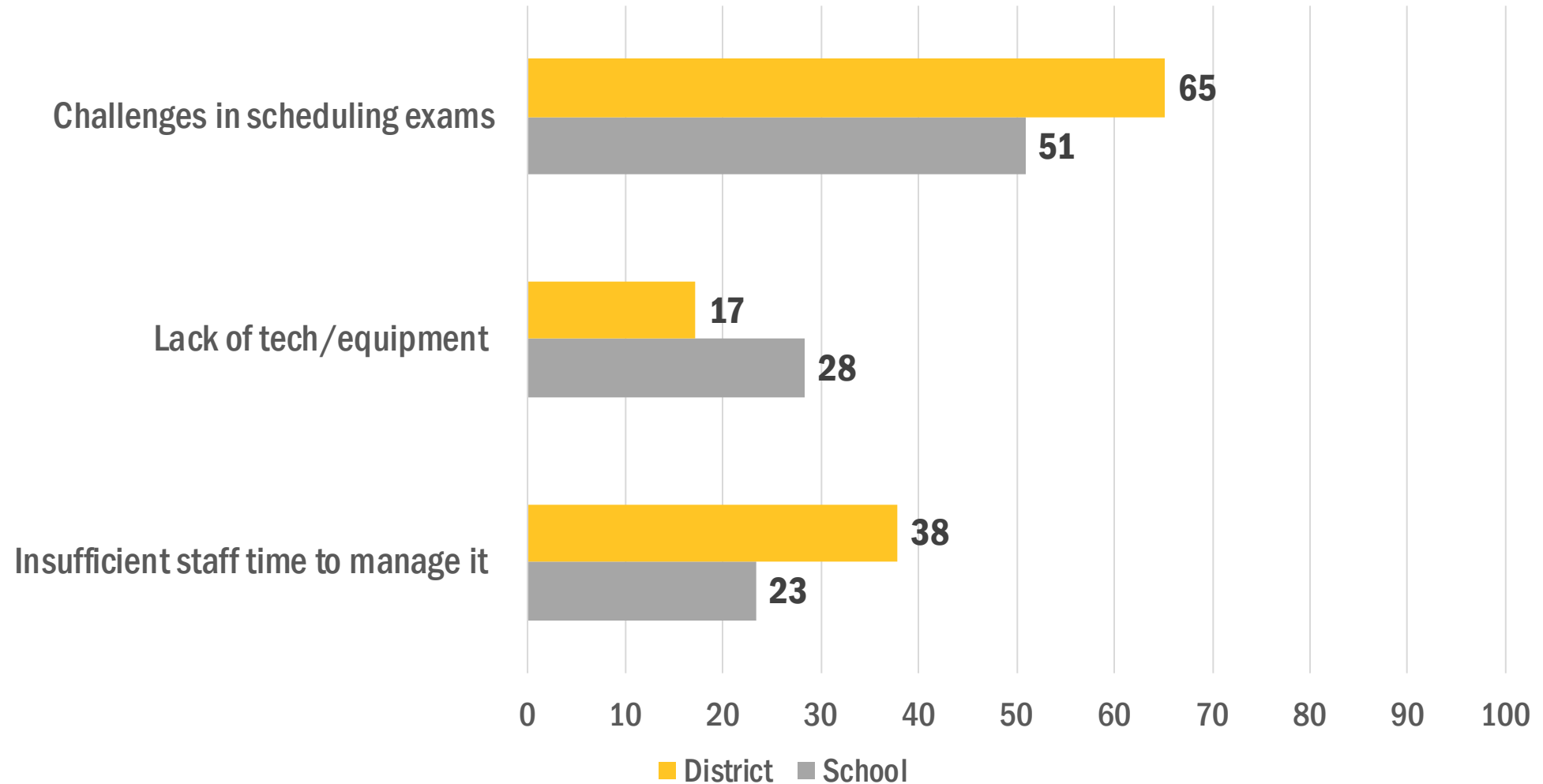
Note: Because respondents could choose more than one promotion strategy, percentages do not total 100%.

Which students do schools encourage to take these exams?



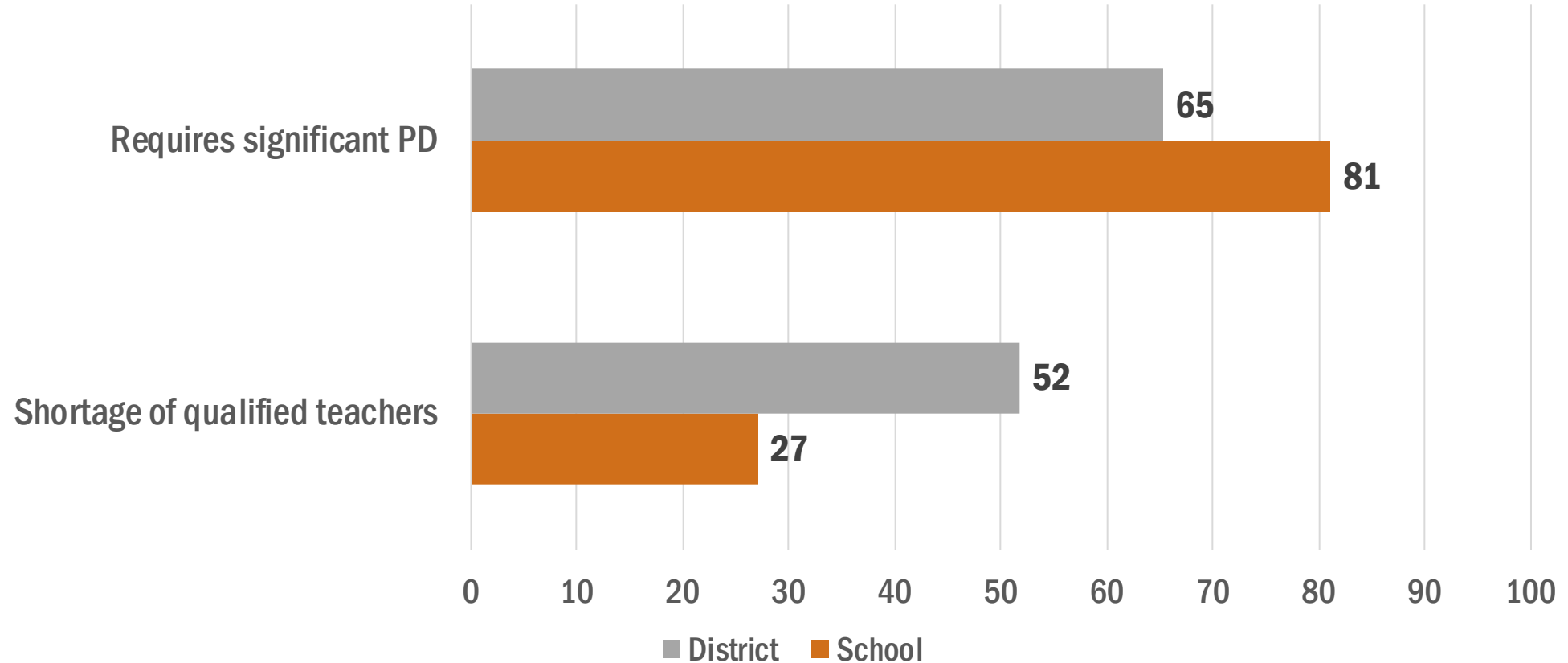
Note: Because respondents could choose more than one set of students, percentages do not total 100%.

What logistical challenges do schools and districts face?



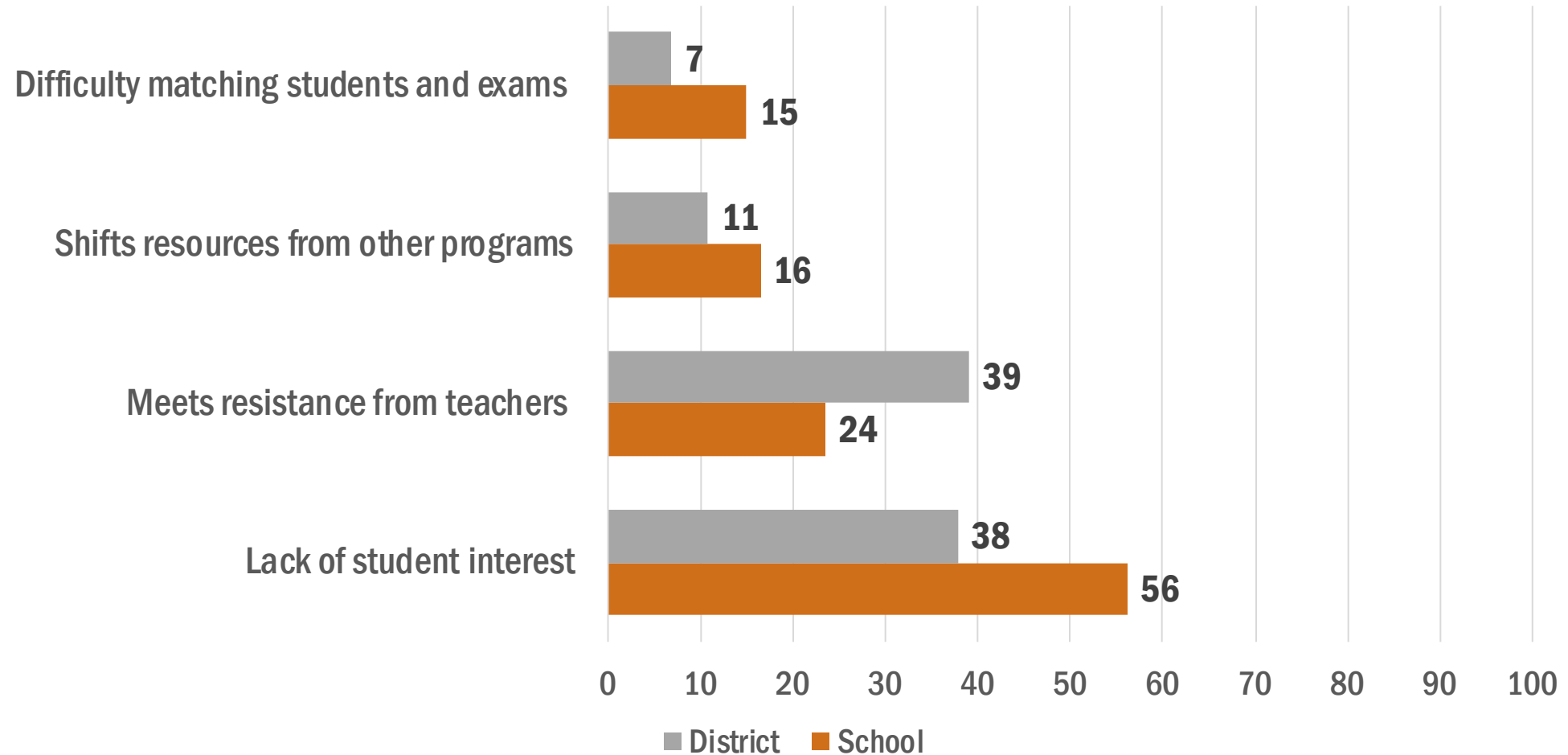
Note: Because respondents could choose more than one challenge, percentages do not total 100%.

What staffing challenges do schools and districts face?



Note: Because respondents could choose more than one challenge, percentages do not total 100%.

What cultural challenges do schools and districts face?



Note: Because respondents could choose more than one challenge, percentages do not total 100%.

INFORMATION FROM ADMINISTRATIVE DATA

Number of students earning certifications each year, by cohort

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Cohort 1 (N = 218,392)	9,275	12,600	13,898	17,600	174	11
Cohort 2 (N = 224,264)	--	13,237	11,312	16,046	22,651	382
Cohort 3 (N = 225,638)	--	--	12,152	14,216	19,258	25,942
Cohort 4 (N = 229,467)	--	--	--	16,604	16,269	22,394

Cohort-level certification rate

Of 9th grade students
in 2013-14

22%

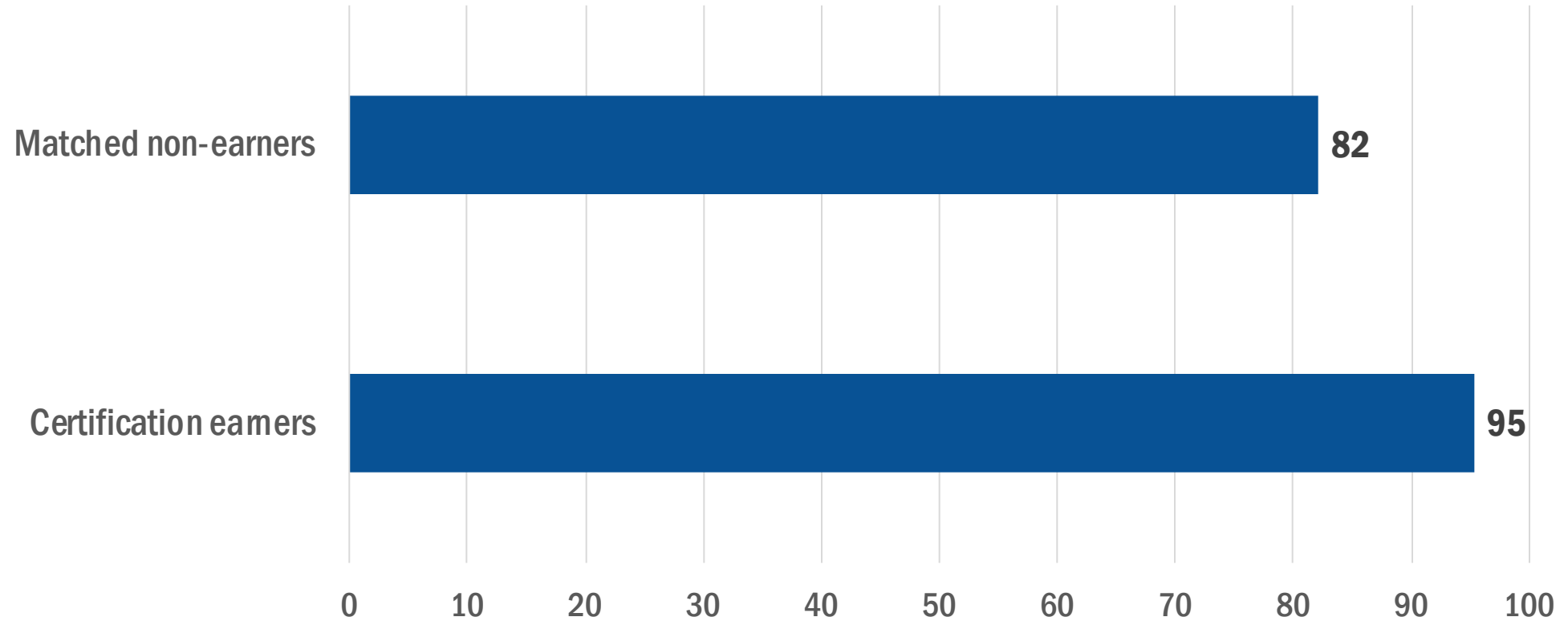
earned a certification
within 4 years.

School classification	Definition	# Schools 2016-17 (%)
Low certification	Less than 10%	96 (25%)
Middle certification	10 - 25%	181 (48%)
High certification	More than 25%	104 (27%)

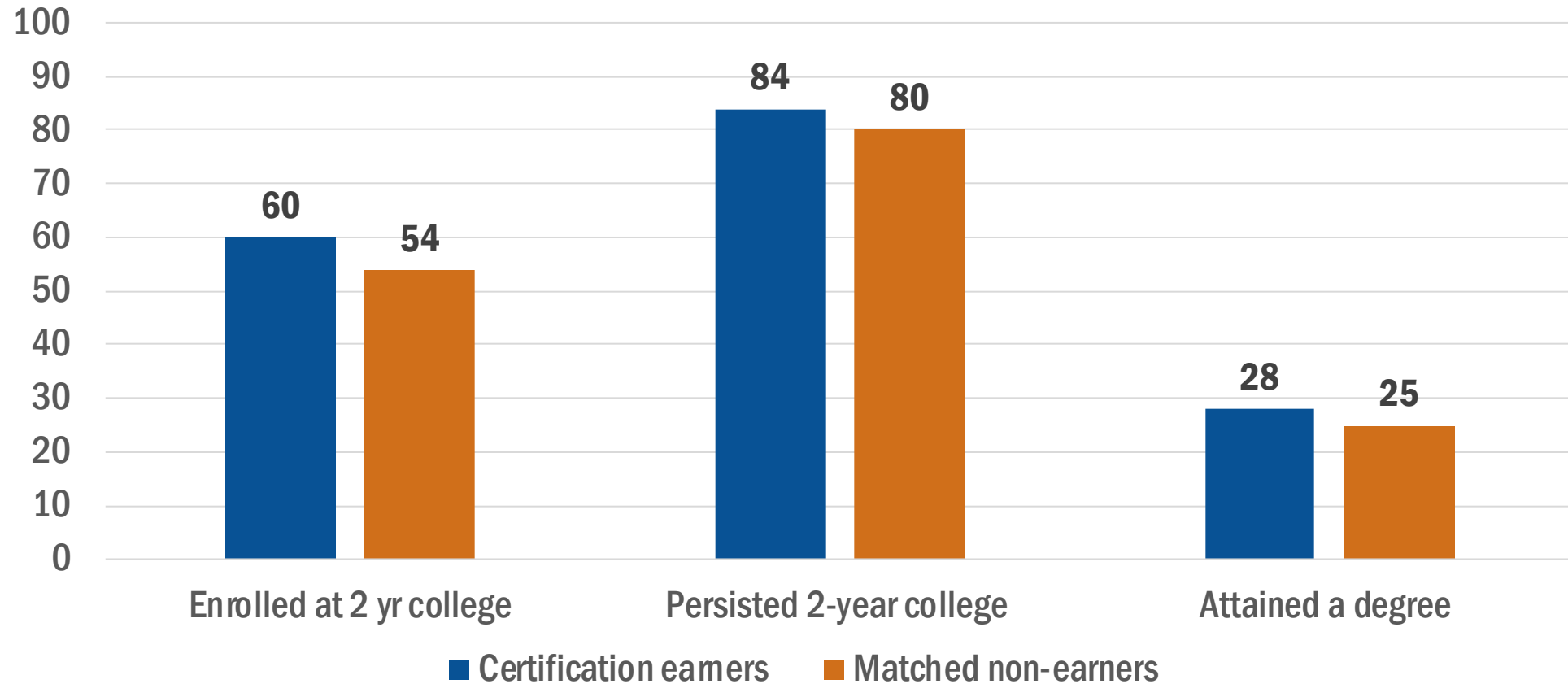
RESULTS FROM OCTAE STUDY

In 2017, we wrote a report for OCTAE about the first cohort of students going through this program.

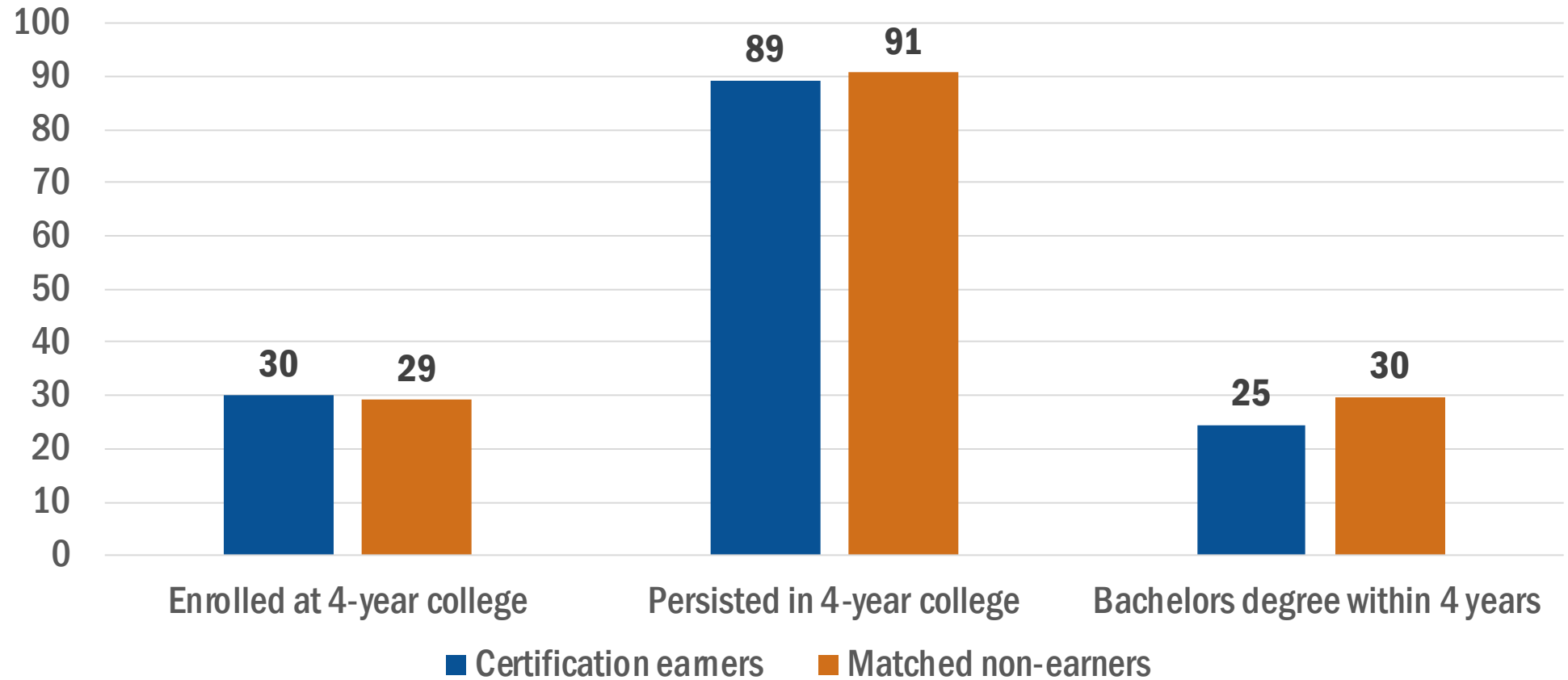
High school graduation: initial cohort, certification earners vs. non-earners



2-year college outcomes: initial cohort, certification earners vs. non-earners

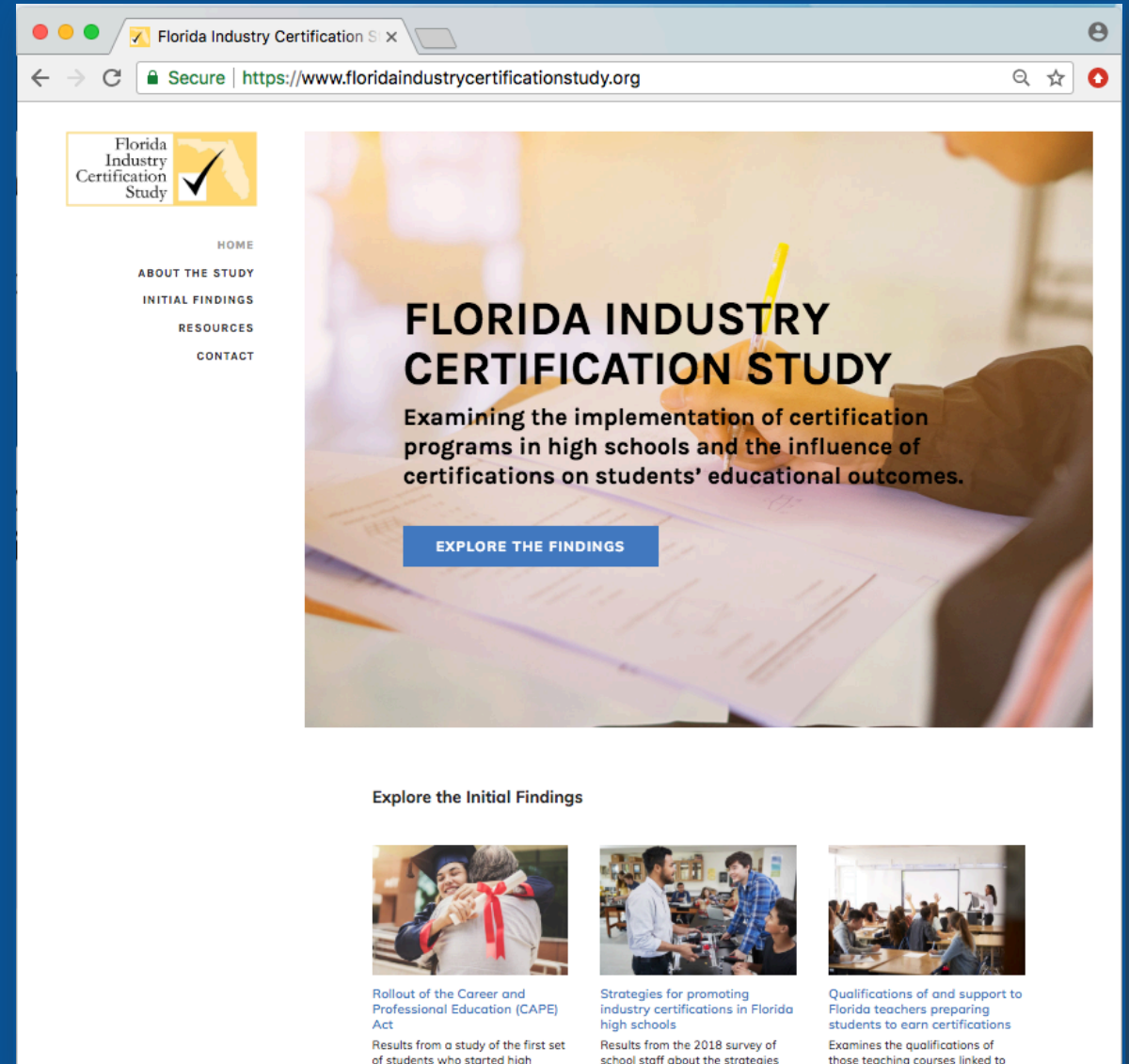


4-year college outcomes: initial cohort, certification earners vs. non-earners



COMING SOON!

Practitioner-oriented website featuring issue briefs



The screenshot shows a web browser window with the URL <https://www.floridaindustrycertificationstudy.org>. The page features a navigation menu on the left with the following items: HOME, ABOUT THE STUDY, INITIAL FINDINGS, RESOURCES, and CONTACT. The main content area is dominated by a large hero image of hands reviewing documents. Overlaid on this image is the title "FLORIDA INDUSTRY CERTIFICATION STUDY" in large, bold, black letters, followed by the subtitle "Examining the implementation of certification programs in high schools and the influence of certifications on students' educational outcomes." Below the subtitle is a blue button with the text "EXPLORE THE FINDINGS".

Below the hero image, there is a section titled "Explore the Initial Findings" which contains three columns of content, each with a small image and a brief description:

- Rollout of the Career and Professional Education (CAPE) Act**
Results from a study of the first set of students who started high
- Strategies for promoting industry certifications in Florida high schools**
Results from the 2018 survey of school staff about the strategies
- Qualifications of and support to Florida teachers preparing students to earn certifications**
Examines the qualifications of those teaching courses linked to

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