Certification Data Exchange Project
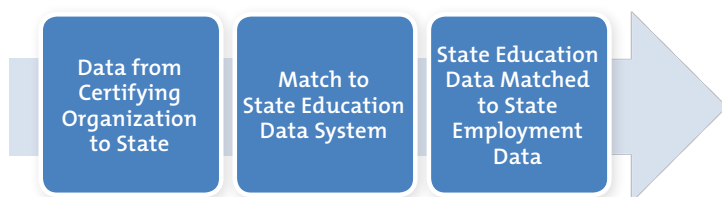
Measuring the Impact of Industry Credentials

THE CREDENTIAL LANDSCAPE HAS BEEN EXPANDING beyond degrees to encompass postsecondary certificates, industry certifications, state-issued licenses and digital badges. This proliferation offers new options and flexibility for both students and employers, but also raises questions as to which credentials hold value in the workplace and improve student's education and workplace outcomes, particularly industry certifications awarded outside of the educational system.

Data on which students are earning certifications awarded by industry and the impact of certifications on employment and earnings has been limited. That's all changing with the Certification Data Exchange Project, which is matching third-party industry certification data with state education and workforce data to learn:

- Which students take certification exams?
- Which students earn certifications?
- What impact do these certifications have on individuals' employment and wages?

CompTIA-Illinois Pilot

Data from Certifying Organization to State	Match to State Education Data System	State Education Data Matched to State Employment Data

In 2012, the IT industry association CompTIA expanded its collaboration with education by taking a leading role in bringing industry and education data together, starting with Illinois, where the association is headquartered. CompTIA and Illinois asked: could the state access CompTIA data on individuals who had taken certification exams in Illinois, and match those test-takers with Illinois community college students? Then, could Illinois match those students with the state's unemployment insurance (UI) wage records to determine employment and earnings outcomes?

Illinois compared CompTIA data with community college student records, using the three data elements that CompTIA provided: first name, last name and zip code (CompTIA has begun collecting month and year of birth, so this element will be available for future matches). The state's education records were used to further facilitate the match, followed by comparison with UI wage records from the Illinois Department of Employment Security.

This initial Illinois-CompTIA pilot demonstrated that a match was possible, at a fairly high level of confidence, between the certification exam records and the state education and employment data. The resulting dataset provided demographic information on student test-takers and showed positive employment and earnings outcomes for Illinois community college students who earned certifications, relative to those who took exams but did not earn certifications.

Project Expansion

Since 2012, California, Florida, Iowa, Oklahoma, North Carolina and Kentucky have joined Illinois in flexing their data-matching muscles with records from CompTIA. Oklahoma is using data from its CTE centers that serve adults and high school students, while the other states are matching with their community college systems.

Several of these states are also in the process of matching state data with exam records from additional industry certification organizations: American Service Excellence/

National Automotive Technicians Education Foundation; the Manufacturing Skill Standards Council; and ACT, provider of the National Career Readiness Certificate. This extended pilot phase allows states and certifiers to test variations on the match procedure.

To facilitate matching, CompTIA has developed a data-sharing agreement that meets states' and certifiers' legal and privacy requirements. With guidance from the U.S. Department of Education Office of Privacy, CompTIA designed a one-page data-sharing agreement, which states have been able to sign and which has served as a template for new certifiers entering the project.

Early Findings

Extending the project to multiple states has enriched our understanding of how certification impacts students' employment outcomes. It has also demonstrated the wealth of additional information about students, programs and institutions that the matching process can provide.

While the match process is ongoing in several participating states, Illinois, Iowa, Oklahoma and California have progressed to exploring the association between certifications and earnings. Although each state's findings reflect variation in state workforce data, Illinois, Iowa and Oklahoma found higher earnings for students who attained certifications than for students who took certification exams but did not pass. California took a different approach, demonstrating an increase in the earnings of certified individuals from one year before to one year after certification.

	Earnings for Certified Students	Earnings for Non-certified Students
Illinois	Certified: $5,302/quarter (median)	Not Certified: $3,603/quarter
Iowa	Certified: $22,129/annual (median, adjusted to 2015Q1) $5,532/quarter (average)	Not Certified: $4,403/quarter
Oklahoma	Certified: $15.22/hour	Not Certified: $14.33/hour
California	Certified: $22,886/annual (average for certified students in 2012)—a 41.8% increase over average wage one year before certification	

This data is preliminary and more analysis is needed. However, these early findings point to the potential benefits of certification.

In addition to employment and earnings data, each state is exploring demographics and other characteristics of students who take certification exams, including the programs of study in which they are enrolled, as well as asking questions such as:

- What educational credentials do certified and non-certified students earn?
- Do test-takers enroll in college before, during or after they earn certifications?
- How many credit hours are completed by certified and non-certified students?

Next Steps

The U.S. Department of Education has signaled its support of this effort through two years of technical assistance, from fall 2014 through summer 2016, to further the data exchange process. In the second year, plans are to continue expanding the project and to develop standardized procedures and data-sharing protocols to streamline future efforts.

The long-term goal is for these standardized protocols to inform the creation of a national clearinghouse for certification data, similar to the National Student Clearinghouse and the Federal Employee Data Exchange System, to conduct matches and facilitate the legal aspects of the data-sharing process.

www.acteonline.org/certification_data