Collecting Data on Industry-recognized Skill Awards

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Certification Data Exchange Project (CDEP)

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# Credentials, Defined

<table>
<thead>
<tr>
<th></th>
<th>Certificate</th>
<th>Certification</th>
<th>Degree</th>
<th>License</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Awarded By...</strong></td>
<td>Education Institution</td>
<td>Business, trade associations, industry</td>
<td>Education Institution</td>
<td>Government Agency</td>
</tr>
<tr>
<td><strong>Results From...</strong></td>
<td>Course of Study</td>
<td>Assessment</td>
<td>Course of Study</td>
<td>Meeting Requirements</td>
</tr>
<tr>
<td><strong>Indicates...</strong></td>
<td>Education</td>
<td>Skill Mastery</td>
<td>Education</td>
<td>Legal Permission</td>
</tr>
<tr>
<td><strong>Completed In...</strong></td>
<td>&lt;2 Years</td>
<td>Variable</td>
<td>2+ Years</td>
<td>Variable</td>
</tr>
<tr>
<td><strong>Maintained By...</strong></td>
<td>N/A</td>
<td>Skill practice, re-assessment</td>
<td>N/A</td>
<td>Re-application, continuing education</td>
</tr>
<tr>
<td><strong>Example...</strong></td>
<td>ServSafe Food Handler, Green Manufacturing Specialist, Certificate in Business Administration</td>
<td>Certified Welder (CW), Certified Logistics Technician (CLT), Certified International Information Systems Security Professional (CISSP)</td>
<td>Bachelor of Science, Master of Science, Doctor of Engineering</td>
<td>Registered Nurse (RN), Cosmetologist, Master Plumber</td>
</tr>
</tbody>
</table>

*ACTE, 2015, What is a Credential? Fact Sheet*
Education and Workforce Need

• Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV) accountability
  • 2S1 and 1P1: ... passed technical skill assessments that are aligned with industry-recognized standards, if available and appropriate ...
  • 3S1: ... earned a proficiency credential ...
  • 2P1 ... earned an industry-recognized credential ...

• Increase data comparability across states
• Encourage better integration of industry standards
• Demonstrate value of CTE programs
Certifier Need

• Learn more about their consumers
  • How they benefit from industry certifications
  • Academic credentials also earned and timing of attainment

• Learn more about education providers incorporating industry certifications

• Demonstrate value of industry certifications
Certification Data Exchange Project

• Grew out of a 2012 Illinois-CompTIA pilot

• Additional pilots with:
  • CA, IL, IA, NC, KY; FL and OK (past)
  • CompTIA, MSSC, ACT

• Recipient of technical assistance from the Office of Career, Technical, and Adult Education for past three years
Data Matching

- Match certification records with student data using first name, last name, location, month/year of birth (with some variation)
- Use Social Security Number (SSN) to match with unemployment insurance wage records
- Report back aggregate results
Roadmap

1. Raise awareness and gain consensus on need
2. Develop use cases and conduct pilot projects
3. Develop standards and guidelines on data sharing
4. Establish national data exchange clearinghouse
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Records Exchanged

• More than 89,000 duplicated CompTIA exam records for California, Florida, Illinois, Iowa, Oklahoma, North Carolina and Kentucky
  • Most states matched with postsecondary systems
  • Oklahoma matched with its CareerTech system
• Illinois matched more than 4,000 records with the Manufacturing Skill Standards Council
• California and ACT shared more than 1 million records
Characteristics of Certified Individuals

• Vast majority of CompTIA-certified individuals across participating states were male
• In most states, majority of certified individuals were White
  • California was an exception, with about an equal percentage of White and Latino/Hispanic certified
• Wide range of ages was represented, with many earning CompTIA certifications in their 20s
Post-award Earnings (CompTIA, IL)

* Includes only those who had earnings at t, t+2, t+4 at a minimum of $2,970 per quarter

* 236 appeared in wage records with this threshold
Roadmap

1. • Raise awareness and gain consensus on need

2. • Develop use cases and conduct pilot projects

3. • Develop standards and guidelines on data sharing

4. • Establish national data exchange clearinghouse
Standards and Guidelines

• Established one-page data-sharing agreement
  • Developed by CompTIA with guidance from the U.S. Department of Education Office of Privacy
  • Served as a template for others

• Established preferred match variables
  • First name, last name, zip code, month/year of birth and gender

• Developed uniform reporting templates
Roadmap

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Manufacturing Institute Pilot

• Stage 1: Demonstrate how to expand National Student Clearinghouse data set with certification and non-credit information
  • MSSC, NIMS and AWS reporting 5-year records to NSC
  • Selected states to report non-credit data
  • Matching all credential data with every record in NSC
  • Creating process guides

• Stage 2: Labor market test case with Census and expansion
  • Expanding to certification providers beyond manufacturing
  • Expanding to other states/institutions with non-credit programs
Recommendations

- Introduce the data-sharing process and its benefits early, taking into consideration agency governance and state laws and regulations
- Use CDEP’s data-sharing agreement template
- Identify a team and allocate time—about 30-40 hours—and resources to data matching and analysis
- Put in place data-sharing agreements between state education and workforce data agencies
- Turn to CDEP materials and to experienced CDEP states for guidance
Recommendations, cont.

• Use existing file transfer protocols
• Obtain a data dictionary from certifying organizations
• Use as many identifiers as possible and consistent with certification organizations’ liability under U.S. and international law
• Include for-credit and non-credit data
• Use CDEP’s standardized templates as a basis for developing your own reporting templates
• Provide instructions with the templates in order to gain uniformity in reporting
Industry-based Certifications and Accountability in Mississippi

Alexis Nordin, Research Associate III, Mississippi State University Research and Curriculum Unit
Background

• 2001:
  • Mississippi State University’s Research and Curriculum Unit (RCU) receives a grant from the Mississippi Department of Education (MDE) to conduct statewide assessment of secondary and postsecondary CTE students.

• 2017:
  • The RCU receives a 10-year, $13.6 million contract (MS-CPAS3) from the MDE to develop the next iteration of secondary CTE assessments in Mississippi.
Increasing Participation

Secondary CTE Students in Mississippi Taking National Certification Exams

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP2014</td>
<td>1,710</td>
</tr>
<tr>
<td>SP2015</td>
<td>3,141</td>
</tr>
<tr>
<td>SP2016</td>
<td>5,355</td>
</tr>
</tbody>
</table>
Increasing Participation

GRADUATES EARNING A CAREER READINESS CREDENTIAL

Number of CTE participant public high school graduates earning a career readiness credential.

* Some data values may be suppressed to protect the privacy of individuals and small groups of students.

Mississippi Department of Employment Security (MDES), 2004-2016
Mississippi Community Colleges Student Information Systems, 2006-2016
Mississippi Department of Education, 2004-2016

[Link to National Strategic Planning & Analysis Research Center (NSPARC) LifeTracks Report - 2017]
Is Participation Enough?

• Ultimate goals of the MS-CPAS3 contract are to:
  • “...offer more than an arbitrary score”
  • “...facilitate instructional modification”
  • “...improve teacher quality through assessment”

• Dr. Sean Owen, MS-CPAS3 principal investigator
• The Clarion Ledger, September 2017
Needs of Secondary Candidates

• Are national certification regulatory entities prepared to meet the needs of a growing pool of secondary-level candidates?

• Three critical considerations:
  • State/school/class-level data (broken down by domain)
  • Restrictions lifted that make national certifications unnecessarily challenging for secondary candidates
  • Access to testing accommodations
Domain Reports

• Reporting personally identifiable information (PII) of minors presents understandable challenges
  • Others are more baffling, such as the six approval levels required by one national certification regulatory entity to compile a report using PII to which the state educational agency (SEA) already has access
In some cases, national certification regulatory entities provide domain reports only at the individual candidate level, not at the class/instructor or state level, making it difficult to target professional learning needs.
In other cases, a domain report may be run with obvious errors (e.g., every row is duplicated, blank values, and so forth) which requires more wait time while reports are run again.
Barriers to Adopting National Certifications in Secondary Schools

- Certifications may expire within 2-3 years
  - How do you measure impact/value/ROI if certifications expire before students have a chance to use them?

- Certifications may require hundreds of work hours within a tight time frame
  - Employers may be reluctant to have minors working in their businesses due to age/safety/insurance restrictions
  - High school students may not have a reliable vehicle—or even a driver’s license

- National certification regulatory entities may make decisions without ever considering a secondary audience:
  - Major changes/updates released any time of year, even during heavy secondary testing times
  - Length of a test may make it prohibitive for a secondary audience (e.g., one hour versus two hour exams)
  - Requiring multiple forms of government-issued ID for a student who may be age 16
Accommodations

• National certification exams are set up for equality (sameness) instead of equity (fairness)

• “We [in assessment] have a lot to learn from our Special Education colleagues about differentiating assessment to get equity for children with special needs.”

Source: Dr. John Fischetti, keynote speech, 2017 Consortium for Research on Educational Assessment and Teaching Effectiveness (CREATE) conference
Accommodations

• Some national certification regulatory entities outsource accommodation requests.
• These national certification regulatory entities work with the accommodations team to set exam-specific accommodation policies.
• Common accommodations (e.g., reader) are not available for all national certification exams, which should be considered in advance when preparing a student’s Individualized Education Program (IEP).
• The student receives the accommodation correspondence/decision and then must inform the proctor.
• Some national certification regulatory entities may have policies requiring students needing accommodations to go to separate test sites.
Accommodations

• The guidelines for different disabilities/exams may require that medical documentation be updated within a certain time frame of the test depending on the diagnosis (anywhere from 1-5 years).

• In Mississippi, IEP reevaluations happen every few years, but medical reevaluations may not be required as frequently (depending on IEP versus 504 plans).

• To get appointments with doctors to update disability information may take weeks or months, particularly in rural areas.

• The overall timeline of getting an accommodation written into an IEP can already take over 6 months.
Accommodations

• Exam-specific accommodation decisions may take a month or more.

• One school district’s story:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 9, 2017</td>
<td>Accommodation request/paperwork submitted for extended time</td>
</tr>
<tr>
<td>March 20, 2017</td>
<td>Student receives first correspondence from the national certification regulatory entity; school responds same day</td>
</tr>
<tr>
<td>March 21-April 3</td>
<td>Test coordinator sends three emails checking status of request; RCU follows up with telephone call</td>
</tr>
<tr>
<td>April 3, 2017</td>
<td>Student takes certification exam having never received the accommodation</td>
</tr>
<tr>
<td>April 5, 2017</td>
<td>Requested accommodation is approved</td>
</tr>
</tbody>
</table>
Accommodations

• What if that child were yours?
Accommodations

• What is Plan B if a student does not receive an accommodation?
Discussion

• Pearson VUE:
  • Districts may opt not to use Pearson’s parental consent form, but the release of information “should include the parent/guardian signature and state that the parent is permitting the release of information to Pearson VUE.”

Source: Email from Pearson VUE Accommodations Team, March 2017
• What does/should informed parental consent look like?
Discussion

• What legal/administrative elements does your state have in place to share data with third parties?
Discussion

• What is your current process for matching student record information and wage data where there is no student ID or SSN available?

• Does your state have particular data match challenges, such as movement across state borders?

• Would your state be open to participating in a clearinghouse for industry certification data?
Contact Us

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  www.acteonline.org/certification_data

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• MSU Research and Curriculum Unit
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• Alexis Nordin, Mississippi State University
  alexis.nordin@rcu.msstate.edu
Up Next…

• Virtual Office Break from 3:15-3:30
• Collaboration Roundtables start at 3:30