SC EDUCATION OVERSIGHT COMMITTEE
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# AGENDA

## Academic Standards and Assessments Subcommittee

Monday, May 21, 2018
10:00 a.m.
Room 433, Blatt Building

I. Welcome ..... Dr. Danny Merck

II. Approval of Minutes of March 19, 2018 ..... Dr. Danny Merck

III. Action Item:
High School Industry Certification and Credentials ..... Dr. Danny Merck
Dr. David Mathis
SC Department of Education

IV. Action Item:
Guidelines for eLearning for School Make-up Days ..... Melanie Barton

Adjournment.

Academic Standards and Assessment
Dr. Danny Merck, Chair
Neil Robinson, Vice Chair
Barbara Hairfield
Sen. Greg Hembree
Dr. John Stockwell
Patti Tate

# Meeting Minutes

Academic Standards and Assessments Subcommittee

March 19, 2018

10:00 a.m., Room 433 Blatt Building

Subcommittee Members Present:

Academic Standards and Assessments: Dr. Danny Merck; Barbara Hairfield; Sen. Greg Hembree; Neil Robinson, Dr. John Stockwell; and Patti Tate

Other EOC Members Present: Rep. Dwight Loftis

EOC Staff Present: Dr. Kevin Andrews; Melanie Barton; Hope Johnson-Jones; Dr. Rainey Knight; Bunnie Ward; and Dana Yow

Dr. Merck welcomed members and guests in attendance.

The minutes of the November 20, 2017 joint meeting of the Academic Standards and Assessments and Public Awareness Subcommittees were approved as distributed.

Dr. Merck called upon Ms. Barton to summarize the response of the South Carolina Department of Education (SCDE) to Report #1 provided by HumRRO and approved by the EOC on June 12, 2017. Report #1 focused on item development and test construction for SC READY and Algebra 1 and included content alignment for Algebra 1. Ms. Barton noted that SCDE's response to most of Report #1's recommendations involved documentation of item development, item analysis and test form construction. The Department noted that the agency responded to the recommendations in three manuals that were compiled and submitted to HumRRO on October 18, 2017. Upon receiving SCDE's response dated March 1, 2018, EOC staff confirmed with HumRRO that the manuals had been updated pursuant to the recommendations. EOC members, however, had expressed to staff their desire that SCDE's response should have contained more explicit comments verifying how the recommendations had been adequately addressed, especially those of an Urgent or High priority. As noted by Ms. Barton, the manuals are important because they contain information that will assist in the review of the assessments by the United States Department of Education as required by the Every Student Succeeds Act (ESSA) plan which must be approved by the U.S. Department of Education. For the future, Mr. Robinson and Ms. Hairfield asked for more specificity in the SCDE response.

Liz Jones, Director of the Office of Assessment at the SCDE, responded that many of the recommendations made in the report had been made to documents that are identified as proprietary property of Data Recognition Corporation (DRC), the contractor for the SC Ready and EOCEP assessments. She could not reproduce portions of those documents without explicit permission from DRC.

Members asked that in the future a more detailed description of how the report recommendations are addressed could be presented without compromising the proprietary rights of DRC. Ms. Jones responded that she would consult with DRC about how to provide more satisfactory responses for a review of the next report.

Dr. Merck then introduced HumRRO staff in attendance, Dr. Andrea Sinclair and Dr. Arthur Thacker who summarized the content of the second HumRRO report on SC READY and end-of-course assessments in Algebra 1, English 1 and Biology 1 hereby referred to as Report #2. They reviewed the purpose and structure of the evaluation, which were closely aligned. The report included evaluations of: (a) test items, (b) test blueprints and construction, (c) test administration, (d) scaling, equating, and scoring, (e) psychometric validity, and (f) satisfaction of the minimum legal requirements as required by Section 59-18-325 of the South Carolina Code of Laws for SC READY. Report #2 contains two separate sections, a technical evaluation section which addresses items (a) through (e), and a legal evaluation section, conducted by an outside expert, Dr. S.E. Phillips PhD, JD, which addresses item (f).

Dr. Sinclair began by summarizing the areas of strengths of the SC READY assessments, which include the following. Item development processes follow industry best practices, and there is good overall alignment among the test items, content standards, and the test blueprint. Items are appropriate in difficulty and discrimination. Items are of high quality, not easily guessed, and field test items are imbedded in operational forms, enhancing the validity of the item development processes. HumRRO was also able to match DRC psychometric processing closely. Scores from the assessment appear to be good indicators of state standards, have sufficient reliability (>.85), and the standard setting processes to delineate the four performance levels are defensible and well-documented.

Recommendations were prioritized in the following order: Urgent, High, Medium, and Low. Dr. Sinclair discussed the recommendations regarding the match of the Depth of Knowledge (DOK) indicated by the standards to the DOK of items, clarification of the population of students used to develop national norms, and of the interpretation of the vertical score scale. Dr. Sinclair also noted that if a significant number of schools continue taking paper and pencil tests, then the state should conduct propensity score matching studies to confirm that scores on paper and pencil and online tests are comparable.

Dr. Sinclair concluded that the SC READY assessments generally adhere to sound testing practices as described by the test Standards, and thereby support the validity of the test scores for their intended uses and purposes. And, overall, the SC READY assessments meet all of the eight minimum legislative criteria prescribed in state law.

Sen. Hembree, Mr. Robinson, and Ms. Hairfield asked for clarification about the vertical score, especially when two students in different grade levels obtained the same score. Dr. Thacker responded that, although students may have the same score, they have had different exposure to content in their grade levels, and that this issue becomes less clear as there are more grade levels between the students. Dr. Sinclair described the importance of having an independent replication of the psychometric processes of scaling the assessment.

Ms. Hairfield inquired about the reading demands on the SC READY mathematics assessment. Dr. Sinclair responded that there is always an intent to minimize the impact of the reading levels on an assessment to ensure that the student's mathematics skills are assessed. Ms. Hairfield also asked about the possibility of different responses on text-dependent analysis (TDA) items. Dr. Thacker responded that this is addressed using Differential Item Functioning (DIF) analyses.

Dr. Sinclair then summarized the results for the End-of-Course Evaluation Program (EOCEP) assessments in Algebra 1, English 1 and Biology 1. Much of the items and test construction processes, and the documentation, were the same for EOCEP as for SC READY. One issue is the difference between scores on paper/pencil and online assessments, which will no longer be relevant when all assessments are administered online. Ms. Hairfield inquired regarding the ability of the tests to assist teachers in support of curriculum and instruction. Dr. Thacker responded that having performance level descriptors (PLDs) for sub-scores would enhance the usefulness of the sub-scores reported.

Sen. Hembree noted that, overall, Report #2 determines that our state's assessments are generally meeting industry standards and credited the Department of Education and others for their work.

Mr. Robinson made a motion to recommend to the full EOC adoption of Report #2 and seek feedback from the South Carolina Department of Education on implementation of the recommendations, especially all High and Urgent Priority recommendations by June with more detailed responses than were provided in the Department's response to Report #1. Sen. Hembree seconded the motion. Ms. Hairfield reiterated the need for more detailed response by SCDE to the second report. The motion carried unanimously.

Dr. Merck then called upon the South Carolina Department of Education to provide updates on the WIN Career Readiness System and the student engagement survey.

Dan Ralyea, Director of the Office of Research and Data Analysis at SCDE, first provided an overview of the Positive Effective Learning Environment Survey, a product of AdvancED, that was procured by the Department on February 12, 2018. The 20-question survey is administered to students in grades 3 through 12 and was previously piloted in at least ten school districts. The survey analyzes the behavior or effort of a student in the classroom; the students' investment in learning; and the student's emotion or feeling about the classroom and school. The results of the survey describe three levels of engagement and two sub-levels: Committed (Invested and Immersed); Compliant (Strategic and Ritual); and Disengaged (Retreatism and Rebellion). Mr. Ralyea noted that North Dakota is also piloting the survey. Dr. Merck and Sen. Hembree asked questions about the administration of the survey.

Then, Liz Jones, Director of the Office of Assessment at SCDE, discussed the Worldwide Interactive Network, Inc. (WIN) career readiness assessment. WIN was procured by the SC Department of Employment and Workforce and the South Carolina Department of Education on February 5, 2018. The procurement review panel included individuals appointed by the South Carolina Chamber of Commerce. WIN was first published by the state of Florida in 2012. The states of Florida, New York, Arizona and Kentucky administered the assessment. There are four components of the assessment: Applied Mathematics; Locating Information; Reading for

Information; and Essential Soft Skills, a pass/fail assessment. The test will be administered this spring between April 17 and April 25. Students will earn a Bronze, Silver, Gold or Platinum Credential, as when students took WorkKeys. Ms. Hairfield asked about the differences between WIN and WorkKeys. Mr. Robinson mentioned that he was meeting with representatives from Volvo after the meeting and asked what information he could provide. Dr. Sheila Quinn, Deputy Superintendent for the Division of Innovation and Effectiveness at SCDE advised Mr. Robinson that the test would give employers information similar to WorkKeys. Ms. Hairfield recommended that the Department provide a document to districts that describe the similarities and differences between the two tests. Sen. Hembree asked how the test aligns with our current state standards in mathematics and English language arts. Ms. Jones stated that the Department has not done that analysis. Sen. Hembree asked if there were any opt-out provisions for parents and students. John Payne, Director of Special Education Services at SCDE stated that opt-outs might negatively impact students with IEPs. Dr. Stockwell asked about the length of the contract with WIN. Ms. Jones responded that it is a five-year contract. Dr. Merck asked if there were any test prep available. Ms. Jones responded that test preparation was limited this year.

There being no further business, the meeting was adjourned.

# EDUCATION OVERSIGHT COMMITTEE

**Subcommittee:** Academic Standards and Assessments

**Date:** May 21, 2018

**ACTION ITEM**
High School Industry Certifications and Credentials

**PURPOSE/AUTHORITY**
Section 59-18-900 of the Education Accountability Act (EAA) as amended by Act 94 of 2017 requires the EOC to "determine the criteria for and establish performance ratings of excellent, good, average, below average, and unsatisfactory for schools." Furthermore, "the same categories of performance ratings also must be assigned to individual indicators used to measure a school's performance including, but not limited to, academic achievement, student growth or progress, graduation rate, English language proficiency, and college and career readiness." The EAA also encourages students to earn industry credentials to be career ready. In addition, the state longitudinal data system created by Section 59-18-1950 requires the Revenue and Fiscal Affairs Office to measure the continuous improvement of the state public education system and the college and career readiness and success of its graduates by documenting "working-aged adults in South Carolina by county who possess a postsecondary degree or industry credential."

**CRITICAL FACTS**
The EOC has approved a college/career readiness indicator to evaluate the performance of high schools. High schools can earn up to 25 points based on the percentage of high school graduates who are college or career ready. A student may be deemed "career ready" if the high school graduate is a Career and Technical Education (CTE) completer and, where applicable, has earned a national industry credential (or state if national not available) as determined by the business community. The attached list of industry credentials, which has been vetted by local, regional and state organizations, including the EEDA Coordinating Council, is being proposed by the South Carolina Department of Education (SCDE) for use in the 2017-18 accountability system. The business community, represented by the Coordinating Council for Workforce Development, recommends that the list be reviewed and amended annually.

**TIMELINE/REVIEW PROCESS**

| | |
|---|---|
| September 11, 2017 | EOC approved indicators for school report card ratings including initial definition of career ready but requests business community define industry credentials to "count" within career-ready indicator. |
| December 11, 2017 | EOC amended indicator of career ready to include high school graduates who successfully complete a state-approved, work-based learning exit evaluation from an employer. The work-based learning program would have to meet minimum requirements. |
| February 15, 2018 | EEDA Coordinating Council reviewed and endorsed initial list of industry credentials. |
| May 1, 2018 | Coordinating Council for Workforce Development, led by the SC Dept. of Commerce, endorses list of industry credentials put forth by SCDE. |

**ECONOMIC IMPACT FOR EOC**
None

**Fund/Source:**

**ACTION REQUEST**

☒ **For approval** ☐ **For information**

**ACTION TAKEN**

☐ **Approved** ☐ **Amended**

☐ **Not Approved** ☐ **Action deferred (explain)**

SC EDUCATION OVERSIGHT COMMITTEE

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On May 7, 2018 the South Carolina Department of Education submitted to the Education Oversight Committee (EOC) a list of 130 assessment/certification/industry credentials to measure career readiness for school year 2017-18. A Career and Technology Education (CTE) completer who successfully completes one of the 130 assessments and earns a credential or certification would be deemed "career ready" for purposes of the accountability system and school ratings issued this fall. These 130 assessment/certification/industry credentials have received the endorsement of the EEDA Coordinating Council and the Coordinating Council for Workforce Development (CCWD) along with the support of various employers throughout the state as noted on the attachment. PowerSchool will be used to collect at the school level information on certifications and credentials earned. The following table summarizes the number of assessment/certification/industry credentials by career cluster. There are two assessments – Microburst EmployABILITY soft skills certification and OSHA 10 – that apply to all clusters.

**Number of Assessment/Certification/Industry Credentials by Career Cluster**
**School Year 2017-18**

| Career Cluster | Number |
|---|---|
| **Agriculture Food and National Resources** | 10 |
| **Architecture & Construction** | 25 |
| **Arts, A/V Technology & Communications** | 8 |
| **Business Management & Administration** | 7 |
| **Education & Training** | 4 |
| **Finance** | 0 |
| **Government & Public Administration** | 1 |
| **Health Science** | 12 |
| **Hospitality & Tourism** | 6 |
| **Human Services** | 6 |
| **Information Technology** | 29 |
| **Law, Public Safety, Corrections & Security** | 3 |
| **Manufacturing** | 5 |
| **Marketing** | 0 |
| **Science, Technology, Engineering & Mathematics** | 2 |
| **Transportation, Distribution & Logistics** | 10 |
| ***ALL*** | 2 |
| **TOTAL** | **130** |

In addition, SCDE proposes that for school year 2018-19, the EOC also approve 34 additional assessments that lead to a certification or industry credential. The following table identifies these assessments by career cluster:

**Number of Assessment/Certification/Industry Credentials by Career Cluster**
**School Year 2018-19**

| Career Cluster | Number |
|---|---|
| **Agriculture Food and National Resources** | 1 |
| **Architecture & Construction** | 2 |
| **Arts, A/V Technology & Communications** | 7 |
| **Business Management & Administration** | 1 |
| **Education & Training** | 0 |
| **Finance** | 0 |
| **Government & Public Administration** | 0 |
| **Health Science** | 0 |
| **Hospitality & Tourism** | 0 |
| **Human Services** | 0 |
| **Information Technology** | 0 |
| **Law, Public Safety, Corrections & Security** | 7 |
| **Manufacturing** | 5 |
| **Marketing** | 0 |
| **Science, Technology, Engineering & Mathematics** | 1 |
| **Transportation, Distribution & Logistics** | 10 |
| **ALL** | 0 |
| **TOTAL** | **34** |

Staff Recommendations to the Academic Standards and Assessments Subcommittee:

1. For the accountability system for school year 2017-18, 130 assessment/ certification/industry credentials as proposed by the South Carolina Department of Education, endorsed by the EEDA Coordinating Council and the Coordinating Council for Workforce Development, and supported by various businesses in the state be approved.

2. For the accountability system for school year 2018-19, 34 additional assessment/ certification/industry credentials as proposed by the South Carolina Department of Education be *tentatively* approved. The staff further recommends that this fall the EEDA Coordinating Council and the Coordinating Council for Workforce Development review these 34 assessment/certification/industry credentials and propose deletions or additions for consideration by the EOC at its October 2018 meeting, if possible.

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| 1 | Agriculture, Food & Natural Resources | Food Safety and Science Certification | iCEV Multimedia / National Collegiate Livestock Coaches Association | USDA, Clemson |
| 2 | Agriculture, Food & Natural Resources | Outdoor Power Equipment | Equipment and Engine Training Council (EETC) | USDA, Clemson, Piedmont Tech, John Deere, Husqvarna, Briggs & Straton, Log Creek Timber, Pageland Farm Equipment, EnviroAg, |
| 3 | Agriculture, Food & Natural Resources | Livestock Selection & Evaluation Certification | iCEV Multimedia / National Collegiate Livestock Coaches Association | USDA, Clemson, Piedmont Tech, John Deere, Husqvarna, Briggs & Straton, Log Creek Timber, Pageland Farm Equipment |
| 4 | Agriculture, Food & Natural Resources | Veterinary Medical Applications Certification | iCEV Multimedia / National Collegiate Livestock Coaches Association | Clemson University; Piedmont Technical College |
| 5 | Agriculture, Food & Natural Resources | Principles of Flora Design Certification | iCEV Multimedia / National Collegiate Livestock Coaches Association | Clemson University |
| 6 | Agriculture, Food & Natural Resources | Meat Evaluation Certification | iCEV Multimedia / National Collegiate Livestock Coaches Association | USDA, Clemson |
| 7 | Agriculture, Food & Natural Resources | Fundamentals of Animal Science Certification | iCEV Multimedia / National Collegiate Livestock Coaches Association | USDA, Clemson |
| 8 | Agriculture, Food & Natural Resources | Plant Science Certification | iCEV Multimedia / National Collegiate Livestock Coaches Association | USDA, Clemson |
| 9 | Agriculture, Food & Natural Resources | Food Safety and Science Certification | iCEV Multimedia / National Collegiate Livestock Coaches Association | USDA, Clemson |
| 10 | Agriculture, Food & Natural Resources | Principles of Small Engine Technology Certification | Equipment & Engine Training Council | USDA, Clemson, Piedmont Tech, John Deere, Husqvarna, Briggs & Straton, Log Creek Timber, Pageland Farm Equipment, EnviroAg, |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| 11 | ALL | Microburst EmployABILITY Soft Skills Certification | Microburst | ACS Technologies, Amana, Bertram Yachts, Carolina Filters, Colonial Life, Dayton Surperior, Diamond Crystal Brands, EMS Chemie, Energizer, Federal Mogul, Fuji, General Electric, GlaxoSmithKline, Hargray Communications, International Paper, Intertape Polymer Group, Kaydon, Kimberly Clark, Masonite, MeadWestvaco, Milliken, Nestle, Roche, SCANA, Sctsman Ice, Sonoco Products, Thompson Industrial, University of South Carolina, Westinghouse, Charleston Metro Chamber, Greenwood Mills, Piedmont Technical College, Greenwood Genetic Center, Greenwood Area Habitat for Humanity, Eaton, Greenwood Partnership Alliance, |
| 12 | ALL | OSHA 10 | Occupational Safety and Health Administration (OSHA) | SC Technical College System, Cato Electric, Screwmatics, Inc., O'Reilly Auto Parts, Southern Shield, Sunbelt, Duvall Enterprises, Thompson Turner Construction, Michelin, Horry-Georgetown Home Builders Association, Lineburger Construction, Bridgestone, Cummings, Amazon, Target Inc. |
| 13 | Architecture & Construction | ADDA – Certified Apprentice Drafter | American Design Drafting Association (ADDA) | * SC Technical College System |
| 14 | Architecture & Construction | Certified Associate in Project Management (CAPM) | Certified Associate in Project Management (CAPM) | Contract Construction, SPAWAR |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| 15 | Architecture & Construction | EPA Section 608 | Environmental Protection Agency (EPA) | * SC Technical College System, Lennox International, Atlantic Housing, Pinnacle Property Management |
| 16 | Architecture & Construction | HVAC Excellence | HVAC Excellence | * SC Technical College System |
| 17 | Architecture & Construction | NATE - Air Conditioning | North American Technician Excellence (NATE) | * SC Technical College System |
| 18 | Architecture & Construction | NATE - Air Distribution | North American Technician Excellence (NATE) | SC Technical College System- ALL NATE areas - Blythewood Heating and Air, Lennox International, Carolina Comfort Systems, Gene's Heating and Air, J&J Air |
| 19 | Architecture & Construction | NATE - Commercial Refrigeration (Service Only) | North American Technician Excellence (NATE) | SC Technical College System |
| 20 | Architecture & Construction | NATE - Gas Heating | North American Technician Excellence (NATE) | SC Technical College System |
| 21 | Architecture & Construction | NATE - Ground Source Heat Pump Loop Installer (Service Only) | North American Technician Excellence (NATE) | SC Technical College System |
| 22 | Architecture & Construction | NATE - Heat Pumps | North American Technician Excellence (NATE) | SC Technical College System |
| 23 | Architecture & Construction | NATE - Hydronics Gas (Service Only) | North American Technician Excellence (NATE) | SC Technical College System |
| 24 | Architecture & Construction | NATE - Hydronics Oil (Service Only) | North American Technician Excellence (NATE) | SC Technical College System |
| 25 | Architecture & Construction | NATE - Light Commercial Refrigeration (Service Only) | North American Technician Excellence (NATE) | SC Technical College System |
| 26 | Architecture & Construction | NATE - Oil Heating | North American Technician Excellence (NATE) | SC Technical College System |
| 27 | Architecture & Construction | NCCER – A/C Ref. Technology | National Center for Construction Education and Research (NCCER) | Contract Construction, Roebuck Builders |
| 28 | Architecture & Construction | NCCER – Carpentry | National Center for Construction Education and Research (NCCER) | Contract Construction, Roebuck Builders, Cobb Construction, R. E. Harrison, Greenwood Area Habitat for Humanity, Hilton Head Island Builders Association |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| 29 | Architecture & Construction | NCCER – Core | National Center for Construction Education and Research (NCCER) | Contract Construction, Roebuck Builders |
| 30 | Architecture & Construction | NCCER – Electricity | National Center for Construction Education and Research (NCCER) | Contract Construction, Roebuck Builders |
| 31 | Architecture & Construction | NCCER – Masonry | National Center for Construction Education and Research (NCCER) | Contract Construction, Roebuck Builders |
| 32 | Architecture & Construction | NCCER – NCCT National Construction Career Test | National Center for Construction Education and Research (NCCER) | Contract Construction, Roebuck Builders |
| 33 | Architecture & Construction | NCCER – Plumbing | National Center for Construction Education and Research (NCCER) | Contract Construction, Roebuck Builders |
| 34 | Architecture & Construction | RCA-Basic Principles for Construction | Residential Construction Academy (RCA) | Contract Construction, Roebuck Builders |
| 35 | Architecture & Construction | RCA-Electrical Principles | Residential Construction Academy (RCA) | Contract Construction, Roebuck Builders |
| 36 | Architecture & Construction | RCA-Electrical Wiring | Residential Construction Academy (RCA) | Contract Construction, Roebuck Builders |
| 37 | Architecture & Construction | RCA-House Wiring | Residential Construction Academy (RCA) | Contract Construction, Roebuck Builders |
| 38 | Arts, A/V Technology & Communications | Adobe® Certified Associate - Graphic Design & Illustration with Adobe Illustrator | Adobe® | Berkeley County Government, Spartan Custom, Altman Printing, Turner Graphics, OEC Graphics, Latitude Printworks, Ritrama, National Wild Turkey Federation |
| 39 | Arts, A/V Technology & Communications | Adobe® Certified Associate - Rich Media Communication with Adobe Flash | Adobe® | Berkeley County Government, Spartan Custom, Altman Printing, Turner Graphics, OEC Graphics, Latitude Printworks, Ritrama |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| 40 | Arts, A/V Technology & Communications | Adobe® Certified Associate - Visual Communication with Adobe Photoshop | Adobe® | Berkeley County Government, Spartan Custom, Altman Printing, Turner Graphics, OEC Graphics, Latitude Printworks, Ritrama, National Wild Turkey Federation |
| 41 | Arts, A/V Technology & Communications | Adobe® Certified Associate–Print & Digital Media Publication with Adobe InDesign | Adobe® | Berkeley County Government, Spartan Custom, Altman Printing, Turner Graphics, OEC Graphics, Latitude Printworks, Ritrama, National Wild Turkey Federation |
| 42 | Arts, A/V Technology & Communications | Adobe® Certified Associate-Video Communication with Adobe Premiere Pro | Adobe® | Berkeley County Government, Spartan Custom, Altman Printing, Turner Graphics, OEC Graphics, Latitude Printworks, Ritrama, National Wild Turkey Federation |
| 43 | Arts, A/V Technology & Communications | Adobe® Certified Associate-Web Communication with Adobe Dreamweaver | Adobe® | Berkeley County Government, Spartan Custom, Altman Printing, Turner Graphics, OEC Graphics, Latitude Printworks, Ritrama |
| 44 | Arts, A/V Technology & Communications | Adobe® Certified Expert | Adobe® | Berkeley County Government, Spartan Custom, Altman Printing, Turner Graphics, OEC Graphics, Latitude Printworks, Ritrama |
| 45 | Arts, A/V Technology & Communications | PrintED®-GAERF® | Graphic Arts Education and Research Foundation (GAERF®) | Berkeley County Government, Spartan Custom, Altman Printing, Turner Graphics, OEC Graphics, Latitude Printworks, Ritrama |
| 46 | Business Management & Administration | MOS: Office 2010 - Access 2010 | Microsoft ® | Berkeley County Government, Nucor, ECPI University |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| 47 | Business Management & Administration | MOS: Office 2010 - Excel 2010 Expert | Microsoft ® | Berkeley County Government, Nucor, ECPI University |
| 48 | Business Management & Administration | MOS: Office 2010 - Word 2010 Expert | Microsoft ® | Berkeley County Government, Nucor, ECPI University |
| 49 | Business Management & Administration | MOS: Office 2016 – Access 2016 | Microsoft ® | Berkeley County Government, Nucor, ECPI University |
| 50 | Business Management & Administration | MOS Office 2016 – Excel 2016 Expert | Microsoft ® | Berkeley County Government, Nucor, ECPI University |
| 51 | Business Management & Administration | MOS: Office 2016 – Word 2016 Expert | Microsoft ® | Berkeley County Government, Nucor, ECPI University |
| 52 | Business Management & Administration | MOS: Microsoft Office Access 2013 | Microsoft ® | Berkeley County Government, Nucor, ECPI University |
| 53 | Education & Training | Early Childhood Education Certification | American Association of Family and Consumer Sciences (AAFCS) | Dorchester School District Two After School Programs, Lander University, SC Technical College System, First Steps, HeadStart, SC State University, Winthrop University, Kinder Care, Inc. National Childcare Association |
| 54 | Education & Training | ParaPro Assessment | ParaPro | Trident Technical College, Dorchester School District Two After School Programs, All SC School Districts |
| 55 | Education & Training | South Carolina Early Childhood Credential | South Carolina Early Childhood Credential | SC Technical College System, Greenville First Steps, Primrose Academy |
| 56 | Education & Training | The Child Development Associate Credential | American Association of Family and Consumer Sciences (AAFCS) | Trident Technical College, South Carolina State College, Winthrop |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| | | | | University, Central Carolina Technical College, NAEYC |
| 57 | Government & Public Administration | The National Incident Management System Certifications | Federal Emergency Management Agency (FEMA) | Berkeley County Government; |
| 58 | Health Science | Certified Electronic Health Records Specialist | National Healthcareer Association (NHA) | Roper, Spartanburg Regional Healthcare, Mary Black Hospital System |
| 59 | Health Science | Career Safe OSHA 10-Hour General Industry (Healthcare) Credential | Occupational Safety and Health Administration (OSHA) | SC Hospital Association, Strand Orthopedics, Carolina Orthopedics, National Healthcare, Kingston Nursing Home, Spartanburg Regional Healthcare System, Mountainview Nursing Home, Middle Tyger Community Center, Spartanburg Community College, Mary Black Hospital System, Studio Rejuvenate, Palmetto Health |
| 60 | Health Science | Certified Nurse Aide (CNA) | South Carolina Department of Health and Human Services (SCDHHS) | Hospitals systems: St Francis, Providence, Roper, Trident, MUSC, McLeod, Palmetto, SC Technical College System, Spartanburg Regional Healthcare, Mary Black Hospital, Self Regional Healthcare, Lander University, Beaufort Memorial Hospital, National Health Care Corp. of Bluffton, Bayview Manor of Beaufort, National Health Care, SC Technical College System, Tidelands Health, Loris |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| | | | | Rehab and Nursing Center, Aiken Regional Medical |
| 61 | Health Science | Certified Patient Care Technician (CPCT) | National Healthcareer Association (NHA) | Hospitals systems: St Francis, Providence, Roper, Trident, MUSC, McLeod, Palmetto, SC Technical College System, Spartanburg Regional Healthcare, Mary Black Hospital, Self Regional Healthcare, Lander University, Beaufort Memorial Hospital, National Health Care Corp. of Bluffton, Bayview Manor of Beaufort, National Health Care, SC Technical College System, Tidelands Health, Loris Rehab and Nursing Center, Aiken Regional Medical |
| 62 | Health Science | Electrocardiographic (EKG) Technician | American Society of Phlebotomy Technicians (ASPT) | Spartanburg Community College, Greenville Technical College |
| 63 | Health Science | Emergency Medical Technician | Emergency Medical Technician (EMT) | Berkeley County Government, Roper Hospital, Spartanburg EMS, Anderson County Fire, MedShore EMS, Simpsonville Fire, Belton Fire, Pelzer Fire, Powdersville Fire |
| 64 | Health Science | First Responder | American Red Cross | Roebuck Fire Department, Reidville Fire Department, Sumter Fire Department, Anderson County Fire, MedShore |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| | | | | EMS, Simpsonville Fire, Belton Fire, Pelzer Fire, Powdersville Fire |
| 65 | Health Science | Healthcare Providers Basic Life Support (BLS) | American Heart Association (AHA) | Hospitals: Roper, Trident, MUSC, Spartanburg Regional Healthcare, Mary Black Hospital, Self Regional Healthcare, Lander University; Beaufort Memorial; National Healthcare Corp of Bluffton; Bayview Manor |
| 66 | Health Science | Medical Billing and Coding Specialist | National Healthcareer Association (NHA) | Palmetto Health, Spartanburg Regional Healthcare, Mary Black Hospital, Roper, SC Technical College System, |
| 67 | Health Science | National Health Science Assessment | National Consortium for Health Science Education (NCHSE) | Self Regional Healthcare, Lander University |
| 68 | Health Science | Pharmacy Technician | Pharmacy Technician Certification Board (PTCB) | CVS, WalGreens, Cut Rate Drug Store, Palmetto Health |
| 69 | Health Science | Phlebotomist | The American Society of Phlebotomy Technicians (ASPT) | SC Technical College System, Greenville First Steps, Primrose Academy |
| 70 | Hospitality & Tourism | ACF Retail Commercial Baking Assessment | American Culinary Federation (ACF) | SC Technical College System, Kroger, Publix, Whole Foods, Baker's Sweet, Bi-Lo, Walmart, Fuddruckers, Longhorn |
| 71 | Hospitality & Tourism | NOCTI Cooking and Baking Certification | National Restaurant Association | SC Technical College System, Kroger, Publix, Whole Foods, Baker's Sweet, Bi-Lo, Walmart, Fuddruckers, Longhorn |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| 72 | Hospitality & Tourism | ProStart® | National Restaurant Association | SC Technical College System, Bob Jones University, Chef360 |
| 73 | Hospitality & Tourism | ServSafe® Food Handler | ServSafe® | SC Technical College System, Marcos Pizza, Daisy Cakes, Nacho Taco, Cribbs Kitchen, Bojangles, Zaxbys, Caro-Mi Restaurant, Sports Break, Break on the Lake, Main Event Catering, University of South Carolina Beaufort, Golden Corral, Captain D's, The Hamptons, Bob Jones University, Chef360; Marriot Vacations Worldwide Hilton Head; Sodexo of Beaufort |
| 74 | Hospitality & Tourism | ServSafe® Manager | ServSafe® | SC Technical College System, Art Institute of Charleston, Marcos Pizza, Daisy Cakes, Nacho Taco, Cribbs Kitchen, Bojangles, Zaxbys, Caro-Mi Restaurant, Sports Break, Break on the Lake, Main Event Catering, Golden Corral, Captain D's, The Hamptons, Bob Jones University, Chef360 |
| 75 | Hospitality & Tourism | Skills, Tasks, and Results Training (START) Certification | American Hotel & Lodging Educational Institute (AHLEI) | Trident Technical College, University of South Carolina, College of Charleston, Marriott, Hyatt, American Hotel & Lodging Association |
| 76 | Human Services | South Carolina Cosmetology License | South Carolina Board of Cosmetology | Required by all licensed providers |
| 77 | Human Services | South Carolina Esthetician | South Carolina Board of Cosmetology | Required by all licensed providers |
| 78 | Human Services | South Carolina Hair Braiding Registration | South Carolina Board of Barber Examiners | Required by all licensed providers |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| 79 | Human Services | South Carolina Master Hair Care License | South Carolina Board of Barber Examiners | Required by all licensed providers |
| 80 | Human Services | South Carolina Nail Technician License | South Carolina Board of Cosmetology | Required by all licensed providers |
| 81 | Human Services | South Carolina Registered Barber License | South Carolina Board of Barber Examiners | Required by all licensed providers |
| 82 | Information Technology | Autodesk User Certification for Maya | Autodesk® | SPAWAR, Contract Construction, PLTW |
| 83 | Information Technology | Cisco Certified Entry Networking Technician | Cisco ® | Self Regional Healthcare |
| 84 | Information Technology | Cisco Certified Network Associate | Cisco ® | SC Technical College System |
| 85 | Information Technology | CompTIA A+ | CompTIA: Information Technology (IT) Industry & Association | SPAWAR, Heritage Trust Federal Credit Union, ECPI University, FUSE Marketing, Chappelear and Associates, Anderson Magazine, HPC Consulting, Computer Connection, Paladin Cloudware, Tri-County Technical College; Netopsis of Beaufort |
| 86 | Information Technology | CompTIA DHTI+ | CompTIA: Information Technology (IT) Industry & Association | SPAWAR, Heritage Trust Federal Credit Union, ECPI University |
| 87 | Information Technology | CompTIA IT Fundamentals | CompTIA: Information Technology (IT) Industry & Association | SPAWAR, Heritage Trust Federal Credit Union, ECPI University, FUSE Marketing, Chappelear and Associates, Anderson Magazine, HPC Consulting, Computer Connection, Paladin Cloudware, Tri-County Technical College |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| 88 | Information Technology | CompTIA Network+ | CompTIA: Information Technology (IT) Industry & Association | SPAWAR, Heritage Trust Federal Credit Union, ECPI University, FUSE Marketing, Chappelear and Associates, Anderson Magazine, HPC Consulting, Computer Connection, Paladin Cloudware, Tri-County Technical College; Netopsis of Beaufort |
| 89 | Information Technology | CompTIA Security+ Certification | CompTIA: Information Technology (IT) Industry & Association | SPAWAR, Heritage Trust Federal Credit Union, ECPI University, FUSE Marketing, Chappelear and Associates, Anderson Magazine, HPC Consulting, Computer Connection, Paladin Cloudware, Tri-County Technical College |
| 90 | Information Technology | Computer Service Technician Certificate - CST | Accredited Information Technology Certifications - ETA International | SPAWAR, Heritage Trust Federal Credit Union, ECPI University |
| 91 | Information Technology | Database Design & Programming with SQL | Oracle® | SC Technical College System |
| 92 | Information Technology | Database Foundations Certified Junior Associate | Oracle® | SC Technical College System |
| 93 | Information Technology | IC 3 (Internet and Computer Core Certification) | IC 3 (Internet and Computer Core Certification) | SPAWAR, FUSE Marketing, HPC Consulting, Computer Connection, Paladin Cloudware |
| 94 | Information Technology | Java Foundations Certified Junior Associate | Oracle® | SPAWAR, Berkeley County Government |
| 95 | Information Technology | Microsoft A+ | Microsoft ® | Berkeley County Government |
| 96 | Information Technology | Microsoft Certified Solutions Associate (MCSA) | Microsoft ® | Charleston County School District |
| 97 | Information Technology | Microsoft Technology Associate (MTA) Certification | Microsoft ® | Charleston County School District |
| 98 | Information Technology | Network Computer Technician Certification – NCT | National Center for Construction Education and Research (NCCER) | ECPI University |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| 99 | Information Technology | Network Systems Technician Certification – NST | Accredited Information Technology Certifications - ETA International | SC Technical College System |
| 100 | Information Technology | Oracle® | Oracle® | SC Technical College System |
| 101 | Information Technology | Oracle® Certified Associate, Java SE8 Programmer | Oracle® | SC Technical College System |
| 102 | Information Technology | Programming with PL/SQL | Oracle® | SC Technical College System |
| 103 | Information Technology | Systems Security Certified Practitioner - SSCP from (ISC)²® | Systems Security Certified Practitioner - SSCP from (ISC)²® | ADT Business Security, Vivint Smart Home Security System, CPI Security, FrontPoint, Life Shield, Bravo 1, Vector Security |
| 104 | Information Technology | TestOut Network Pro Certification | TestOut® | Netopsis of Beaufort, Kershaw School District |
| 105 | Information Technology | TestOut PC Pro Certification | TestOut® | Netopsis of Beaufort |
| 106 | Information Technology | TestOut Security Pro Certification | TestOut® | SC Technical College System |
| 107 | Information Technology | TestOut Windows Server Pro: Advance Services (Part 3) | TestOut® | SC Technical College System |
| 108 | Information Technology | TestOut Windows Server Pro: Install and Configure (Part 1) | TestOut® | SC Technical College System |
| 109 | Information Technology | TestOut Windows Server Pro: Manage and Administer (Part 2) | TestOut® | SC Technical College System |
| 110 | Information Technology | Wireless Network Technician Certification - WNT | Accredited Information Technology Certifications - ETA International | SPAWAR |
| 111 | Law, Public Safety, Corrections & Security | Emergency Telecommunicator Certification | National Academies of Emergency Dispatch (NAED) | Berkeley County Government, Roper Hospital, Williamston Police Department, MedShore EMS |
| 112 | Law, Public Safety, Corrections & Security | NFPA 1001 Firefighter I and Firefighter II Certification | South Carolina Fire Academy (SCFA) | Goose Creek Rural Fire Department, Poplar Sprints Fire Department, Roebuck Fire Department, Reidville Fire Department, Bluffton Township |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| | | | | Fire Department, South Carolina Fire Academy, all local agencies |
| 113 | Law, Public Safety, Corrections & Security | OSHA Firefighter | Occupational Safety and Health Administration (OSHA) | Goose Creek Rural Fire Department, Poplar Sprints Fire Department, Roebuck Fire Department, Reidville Fire Department, Sumter Fire Department, South Carolina Fire Academy, all local agencies |
| 114 | Manufacturing | American Welding Society (AWS) | American Welding Society (AWS) | Landmark Construction, Trident Construction, TICO of Ridgeland, Pender Brothers of Beaufort, Lowcountry Pavers, JCB of North America, Wildcat, IMS of Belton, Lollis Metal, Tri-County Technical College, Trantec |
| 115 | Manufacturing | Electronics Technician | Electronics Technicians Association (ETA) | SC Technical College System |
| 116 | Manufacturing | NCCER - MSSC - Mechatronics | (NCCER) Manufacturing Skills Standards Council (MSSC) CPT Certified Production Technician | Contract Construction, Volvo and ABB Robotics, Bosch N.Charleston, Scout Boats, Hubner Mt. Pleasant, Trident Technical College |
| 117 | Manufacturing | NCCER – Welding Technology | National Center for Construction Education and Research (NCCER) | Landmark Construction, Contract Construction, Nucor |
| 118 | Manufacturing | NIMS Credential | National Institute for Metalworking Skills (NIMS) | Nucor, Spartanburg Community College, Greenville Technical College, Spartanburg Steel, SEW Eurodrive, Gestamp, Amamco, Aberger, AFL, Springfield Tool & Die |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| 119 | Science, Technology, Engineering & Mathematics | Autodesk Inventor Certified User Exam | Autodesk® | SPAWAR, Contract Construction, Eaton, Darby Electric, Oneal Engineering, Advanced Automation |
| 120 | Science, Technology, Engineering & Mathematics | CSWA- SolidWorks Associate Certification | SolidWorks | SPAWAR |
| 121 | Transportation, Distribution & Logistics | ASE – Auto Collision Repair | Automotive Service Excellence (ASE) | Rick Hendricks, Dave Edwards Toyota, RPM, UTI, Greenville Technical College, Bradshaw Automotive, State Farm, Keystone, Klingspar, Piedmont Technical College, Peacock Auto Collision Center, Boundary Street Collision, Finish Masters, Ballentine Toyota |
| 122 | Transportation, Distribution & Logistics | ASE – Auto Technology | Automotive Service Excellence (ASE) | Rick Hendricks, Dave Edwards Toyota, RPM, UTI, Greenville Technical College, Bradshaw Automotive, State Farm, Piedmont Technical College, Vaden Chevrolet, Grainger Nissan, BMW, Blanchard CAT, Benson Ford, Vic Bailey VW, Piedmont Honda, Fairway Ford, Toyota of Easley, Penske, Lexus Dealership of Hilton Head, Ballentine Toyota |
| 123 | Transportation, Distribution & Logistics | ASE Medium/Heavy Duty Diesel Engine | Automotive Service Excellence (ASE) | Rick Hendricks |
| 124 | Transportation, Distribution & Logistics | Commercial Driver's License Permit | Federal Motor Carrier Safety Administration (FMCSA) | Berkeley County School District |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| 125 | Transportation, Distribution & Logistics | I-CAR Prolevel 1 | Inter-Industry Conference on Auto Collision Repair (I-CAR) | Greenville Technical College |
| 126 | Transportation, Distribution & Logistics | I-CAR Prolevel 2 | Inter-Industry Conference on Auto Collision Repair (I-CAR) | Greenville Technical College |
| 127 | Transportation, Distribution & Logistics | I-CAR Prolevel 3 | Inter-Industry Conference on Auto Collision Repair (I-CAR) | Greenville Technical College |
| 128 | Transportation, Distribution & Logistics | S/P2 – Auto Collision Repair | Safety and Pollution Prevention Certification (S/P2) | Dave Edwards Toyota, RPM, UTI, Greenville Technical College, Bradshaw Automotive, State Farm, Keystone, Klingspar, Piedmont Technical College, Finish Masters |
| 129 | Transportation, Distribution & Logistics | S/P2 – Auto Technology | Safety and Pollution Prevention Certification (S/P2) | Dave Edwards Toyota, RPM, UTI, Greenville Technical College, Bradshaw Automotive, State Farm, Piedmont Technical College, Blanchard CAT, Benson Ford, Vic Bailey VW, Piedmont Honda, Fairway Ford, Toyota of Easley, Penske |
| 130 | Transportation, Distribution & Logistics | S/P2 Ethics and You in the Automotive Industry | Safety and Pollution Prevention Certification (S/P2) | Dave Edwards Toyota, RPM, UTI, Greenville Technical College, Bradshaw Automotive, State Farm, Piedmont Technical College |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| ***Vetted by CATE Directors, Advisory Councils, and Businesses beginning in 2018-19*** | | | | |
| 1 | Agriculture | EETC Principles of Small Engine Technology Certification | iCEV | |
| 2 | Architecture & Construction | Certified LabVIEW Associate Developer (CLAD) | National Instruments | PLTW, SREB Clean Energy, SCE&G, Santee Cooper |
| 3 | Architecture & Construction | NOCTI: HBI-Home Builders Institute Student Certification | National Association of Home Builders (NAHB) Residential Construction-National Occupational Competency Testing Institute (NOCTI) | Horry Georgetown Home Builders Association |
| 4 | Arts, A/V Technology & Communications | Apple® Final Cut Pro X Professional Post-Production | Apple® | Lander University |
| 5 | Arts, A/V Technology & Communications | Apple® Logic Pro Professional Music Production | Apple® | Lander University |
| 6 | Arts, A/V Technology & Communications | Apple® Certified iOS Technician (ACiT) | Apple® | Lander University |
| 7 | Arts, A/V Technology & Communications | Apple® Certified Mac Technician (ACMT) | Apple® | Lander University |
| 8 | Arts, A/V Technology & Communications | Certified Technology Specialist (CTS) | ANSI Accreditation | Fox Music, Koger Center, Alabama Theater, Harbison Theater, Colonial Center |
| 9 | Arts, A/V Technology & Communications | Certified Technology Specialist - Design (CTS-D) | ANSI Accreditation | Fox Music |
| 10 | Arts, A/V Technology & Communications | Certified Technology Specialist - Installation (CTS-I) | ANSI Accreditation | Fox Music |
| 11 | Business | Intuit Quickbooks | Quickbooks | Accounting, Williford Roofing and Construction, Moore and Moore CPA, Profound Real Estate, |
| 12 | Law, Public Safety, Corrections & Security | Haz. Mat. Awareness (Firefighter) | SC Fire Academy | Goose Creek Rural Fire Department, Poplar Springs Fire Department, Roebuck Fire |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| | | | | Department, Reidville Fire Department, Sumter Fire Department, South Carolina Fire Academy; Bluffton Township Fire Department |
| 13 | Law, Public Safety, Corrections & Security | Haz. Mat. Operations (Firefighter) | SC Fire Academy | Goose Creek Rural Fire Department, Sumter Fire Department, South Carolina Fire Academy; Bluffton Township Fire Department |
| 14 | Law, Public Safety, Corrections & Security | Basic Auto Exterication (Firefighter) | SC Fire Academy | Goose Creek Rural Fire Department, Poplar Springs Fire Department, Roebuck Fire Department, Reidville Fire Department, Sumter Fire Department |
| 15 | Law, Public Safety, Corrections & Security | Hybrid Firefighter I Class Code 1402 | SC State Certification | Goose Creek Rural Fire Department |
| 16 | Law, Public Safety, Corrections & Security | Hybrid Firefighter II Class Code 1403 | SC State Certification | Goose Creek Rural Fire Department |
| 17 | Law, Public Safety, Corrections & Security | CTC Firefighter I Class Code 1196 | International Certification/IFSAC & ProBoard | Goose Creek Rural Fire Department |
| 18 | Law, Public Safety, Corrections & Security | CTC Firefighter II Class Code 1197 | International Certification/IFSAC & ProBoard | Goose Creek Rural Fire Department |
| 19 | Manufacturing | MSSC: CPT Safety | Manufacturing Skill Standards Council (MSSC) | Continental Tire, Volvo |
| 20 | Manufacturing | MSSC: CPT Quality Practices | Manufacturing Skill Standards Council (MSSC) | Continental Tire, Volvo |
| 21 | Manufacturing | MSSC: CPT Manufacturing Processes and Production | Manufacturing Skill Standards Council (MSSC) | Continental Tire, Volvo |
| 22 | Manufacturing | MSSC: CPT Maintenance Awareness | Manufacturing Skill Standards Council (MSSC) | Continental Tire, Volvo |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| 23 | Manufacturing | LEAN (Six Sigma) Manufacturing Certification | Council for Six Sigma/SME/AME | Continental Tire, Volvo |
| 24 | Science, Technology, Engineering & Mathematics | CATIA V5 Part Design Certificate | CATIA | Boeing, Lockheed Martin, Electrolux, TriMech |
| 25 | Transportation, Distribution & Logistics | Briggs and Stratton | Briggs and Stratton | USDA, Clemson, Piedmont Tech, Briggs & Straton, Log Creek Timber, Pageland Farm Equipment, EnviroAg, |
| 26 | Transportation, Distribution & Logistics | Snap-on/NC3: 504 Multimeter Certification | Snap-on/NC3 - National Coalition of Certification Centers (NC3) | Rick Hendricks, Dave Edwards Toyota, RPM, UTI, Greenville Technical College, Bradshaw Automotive, State Farm, Piedmont Technical College, Vaden Chevrolet, Grainger Nissan, BMW, Blanchard CAT, Benson Ford, Vic Bailey VW, Piedmont Honda, Fairway Ford, Toyota of Easley, Penske, Lexus Dealership of Hilton Head, Ballentine Toyota |
| 27 | Transportation, Distribution & Logistics | Snap-on/NC3: ShopKey Pro Service & Repair Information Level 1 | Snap-on/NC3 - National Coalition of Certification Centers (NC3) | Rick Hendricks, Dave Edwards Toyota, RPM, UTI, Greenville Technical College, Bradshaw Automotive, State Farm, Piedmont Technical College, Vaden Chevrolet, Grainger Nissan, BMW, Blanchard CAT, Benson Ford, Vic Bailey VW, Piedmont Honda, Fairway Ford, Toyota of Easley, Penske, Lexus Dealership of Hilton Head, Ballentine Toyota |

| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| 28 | Transportation, Distribution & Logistics | Snap-on/NC3: ShopKey Pro & SureTrack Advanced Level 2 | Snap-on/NC3 - National Coalition of Certification Centers (NC3) | Rick Hendricks, Dave Edwards Toyota, RPM, UTI, Greenville Technical College, Bradshaw Automotive, State Farm, Piedmont Technical College, Vaden Chevrolet, Grainger Nissan, BMW, Blanchard CAT, Benson Ford, Vic Bailey VW, Piedmont Honda, Fairway Ford, Toyota of Easley, Penske, Lexus Dealership of Hilton Head, Ballentine Toyota |
| 29 | Transportation, Distribution & Logistics | Snap-on/NC3: Verus Edge Navigation & Scanner Operation | Snap-on/NC3 - National Coalition of Certification Centers (NC3) | Rick Hendricks, Dave Edwards Toyota, RPM, UTI, Greenville Technical College, Bradshaw Automotive, State Farm, Piedmont Technical College, Vaden Chevrolet, Grainger Nissan, BMW, Blanchard CAT, Benson Ford, Vic Bailey VW, Piedmont Honda, Fairway Ford, Toyota of Easley, Penske, Lexus Dealership of Hilton Head, Ballentine Toyota |
| 30 | Transportation, Distribution & Logistics | Snap-on/NC3: Verus Edge Lab Scope Operation & Data Management | Snap-on/NC3 - National Coalition of Certification Centers (NC3) | Rick Hendricks, Dave Edwards Toyota, RPM, UTI, Greenville Technical College, Bradshaw Automotive, State Farm, Piedmont Technical College, Vaden Chevrolet, Grainger Nissan, BMW, Blanchard CAT, Benson Ford, Vic Bailey VW, Piedmont Honda, Fairway Ford, Toyota of Easley, Penske, Lexus |

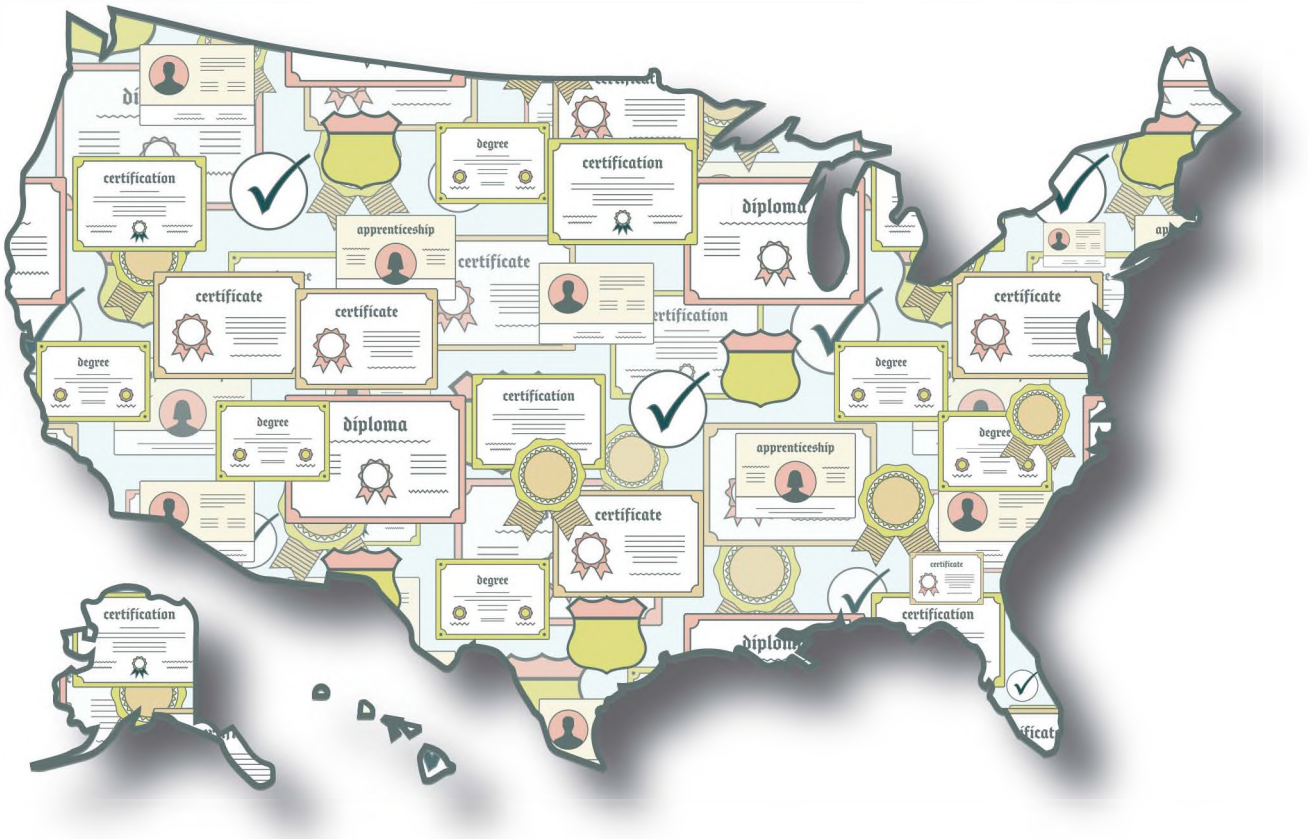
| | Career Cluster | Assessment/Certification/Industry Credential | Certifying Agency/Industry | Business Support |
|---|---|---|---|---|
| | | | | Dealership of Hilton Head, Ballentine Toyota |
| 31 | Transportation, Distribution & Logistics | EPA Section 609 Certification<br>-Required by law for reclaiming/recycling refrigerant (Clean Air Act) -Auto Tech | EPA | Butler Marine, Webster Marine, Sea Island Marine |
| 32 | Transportation, Distribution & Logistics | Yamaha: Marine Mechanic Certification (Marine Tech - New Program at ACE) | Yamaha | Butler Marine, Webster Marine, Sea Island Marine |
| 33 | Transportation, Distribution & Logistics | ABYC: Marine Mechanic Certification (Marine Tech - New Program at ACE) | ABYC | Butler Marine, Webster Marine, Sea Island Marine |
| 34 | Transportation, Distribution & Logistics | Forklift Operator | | Belk Distribution Center, Pepsi Bottling, Reddy Ice, DHL Supply Chain, General Electric |

Source: SC Department of Education, May 7, 2018 to EOC.

# Counting U.S. Secondary and Postsecondary Credentials

A Credential Engine Report

April 2018




Credential Engine™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## About Credential Engine

Credential Engine is a non-profit whose mission is to bring transparency to all credentials, reveal the marketplace of credentials, increase credential literacy, and allow students, workers, employers, educators, and policy makers to make more informed decisions about credentials and their value.

As part of Credential Engine's work, we are producing a reliable and comprehensive count of every unique credential in the United States—and eventually the world—and improving the uniformity of how all credentials are described so they can be searched, discovered, compared, and valued.

## Acknowledgements

This report is made available through the generous support of Lumina Foundation.

Credential Engine retained the services of the Center for Regional Economic Competitiveness and the George Washington University Institute of Public Policy to conduct the research underlying this report. We want to recognize and thank the following individuals at each institution:

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Cherie Bennett, MPA Candidate
Carly Gordon, MPA Candidate
Briana Taylor, MPP Candidate

*Additional information about other efforts to make degrees, certificates, industry certifications, badges and other credentials easier to understand, use and interconnect is available at Connecting Credentials (www.ConnectingCredentials.org) managed by the Corporation for a Skilled Workforce with support from Lumina Foundation.*

## Letter from Credential Engine

Students and workers in the United States have access to a vast number of credentials to obtain, enhance, and signal their knowledge, skills, and abilities. There are many types of credentials—from high school diplomas, to degrees from accredited postsecondary educational institutions, to a wide range of non-degree credentials. Some of these are widely recognized and accepted, such as licenses, certifications, and registered apprenticeships; and some are newer to the scene, such as badges, Nanodegrees and MicroMasters. Every day the options within this highly complex landscape of credentials changes as new credentials are created, some are removed, occupational requirements shift with employer needs, and the economy continues its perpetual evolution.

Millions of students, workers, educators, and employers who make decisions in the convoluted U.S. credentials marketplace are greatly hindered by the lack of information on the nature of their options and how they compare with one another. In particular, as the necessity of obtaining postsecondary credentials for employability and earnings has increased, the consequences of the lack of information on credentials has resulted in significant labor market dysfunctions. Students, workers, businesses, and schools are making decisions blind, with considerable consequences for making wrong choices.

There are two main questions about credentials:

- How many are available in the U.S.?
- How can individuals—students, workers, counselors, hiring managers, educators, program administrators, and policymakers—make better decisions about the relative value of different credentials for their particular needs?

This research is the start of a complex process of answering the first question.

Credential Engine engaged the Center for Regional Economic Competitiveness (CREC) and the George Washington University Institute of Public Policy (GWIPP) to estimate the number of credentials in the U.S. The team systematically identified and reviewed over 100 websites that aggregate credential-granting programs and determined the extent to which these aggregators offer a comprehensive list of credentials. The review covered several credential types, including high school diplomas; postsecondary degrees; apprenticeships; occupational licenses; certifications; noncredit certificates; and emerging credentials such as badges, Nanodegrees, and MicroMasters.

The results of this report are only preliminary, but they are telling. Conservative estimates by our researchers indicated there are well over 300,000 confirmed credentials currently available in the United States alone. For many of the credential types our researchers looked into, there are not yet sufficient or reliable data sources to capture an accurate count, indicating the true total number of credentials is likely significantly higher.

Our research into developing a confirmed credential count has only just begun. We continue to dig into the available data and uncover new data sources that will help us reveal a more accurate picture of the marketplace. As the information is updated, we plan to share our findings in additional reports.

Simply compiling an inventory of credentials available in the marketplace does not answer questions around value. Credential Engine's open source Credential Transparency Description Language (CTDL)

contains a range of description terms that are designed to help reveal the relative value of credentials. Combining the data in the Credential Registry with other data sources such as wages, employment, employer preferences, and labor market information further improves the ability to reveal value. Ultimately, there needs to be a wide range of products and services that help individuals make sense of these data, apply it to their own circumstances, and make informed decisions that are best for them. Credential Engine is working to support a new marketplace of applications that will put these data into the hands of people in valuable and productive ways. And we here at Credential Engine plan to pursue additional research to answer questions surrounding the value of each credential for different audiences and purposes.

Through this inventory and our future reports, we look forward to working with our partners to improve the transparency of the credential marketplace, provide reliable credential data, and raise credential literacy.

**Scott Cheney**
*Executive Director*
*Credential Engine*

**April 2018**

## Executive Summary

The lead research teams from CREC and GWIPP investigated the current credential marketplace to create a preliminary confirmed count of U.S. credentials available in 2018.

The research review yielded three types of results:

1. Comprehensive count for credential type – The reviewers have a high degree of confidence that this report provides a comprehensive, if not complete count for:
   - Degrees by major/specialization from Title IV postsecondary institutions (those authorized to offer federal student loans),
   - For-credit certificates by major/specialization from Title IV postsecondary institutions,
   - Federally-registered apprenticeships, and
   - Online alternative degree programs.
2. Partial specific count for credential type – While the report provides a solid program count, this count represents a subset of a difficult-to-determine total:
   - High school diplomas,
   - Occupational licenses,
   - Certifications, and
   - Bootcamp certificates.
3. Absence of credential count – The first report is unable to provide a credible full or partial count for:
   - Non-credit certificates from Title IV postsecondary institutions,
   - Credentials from non-Title IV postsecondary institutions,
   - Non-registered apprenticeships, and
   - Badges.

The report's findings are summarized in Figure 1, followed by a discussion of the results, and implications for further research follow. Material in the report appendix includes: the definition of each credential type, the research methodology, and analysis for each type of credential.

### Summary Count of Credentials

This research confirms the existence of at least 334,114 credentials in the U.S., as indicated in Figure 1. Of these, 280,910 (84.3 percent) are provided by Title IV postsecondary institutions—213,913 degree programs (64.2 percent)[1] and 66,997 certificate programs (20.1 percent). Following, in descending order, are high school diploma programs (at least 23,454), registered apprenticeships (at least 13,656), state-issued occupational licenses (at least 8,864), certifications (at least 5,465), bootcamp certificates (at least 1,718), MicroMasters (23), and Nanodegrees (24).

1 The IPEDS result reflects one year of survey data. The number of respondents to the IPEDS survey varies each year, which impacts the precise credential count from one year to the next. Numbers reported are considered to be the "least number" for each type; more are likely in every category but cannot be identified in data sources.

Title IV institution programs account for the largest percentage of credential programs because each major or specialization at each award level in each institution (e.g., a Bachelor of Science in chemistry at the University of North Carolina at Chapel Hill) is counted as a distinct credential.

As noted, the data in this report are not complete. For example, this report does not include counts for noncredit postsecondary certificates, awards by non-Title IV institutions, unregistered apprenticeships, and badges. Research suggests that a more complete count of high school credentials, licenses, certifications, and bootcamps would not have as significant an impact on the total. And the unregistered apprenticeship credential is poorly tracked.

## Figure 1: 2018 Initial Count of Credential-granting Programs

| Credential Type | Count Completeness | Program Count | Comments | Source |
|---|---|---|---|---|
| **High School Diplomas** | **Partial** | **23,454** | An unknown number issue more than one type of credential | National Center for Education Statistics (NCES) – Digest of Educational Statistics and Private Schools Survey |
| Public Secondary School Districts | | 13,584 | | |
| Private High Schools | | 9,870 | | |
| **Postsecondary Degrees - Title IV Institutions** | **Complete** | **213,913** | All Title IV schools must provide degree program data to IPEDS. | NCES – Integrated Postsecondary Educational Data System (IPEDS)[2] |
| Associate's | | 47,099 | | |
| Bachelor's | | 113,550 | | |
| Master's | | 39,832 | | |
| Doctoral degree - research/scholarship | | 11,568 | | |
| Doctoral degree - professional practice | | 1,660 | | |
| Doctoral degree - other | | 204 | | |
| **Postsecondary For-credit Certificates - Title IV Institutions** | **Complete** | **66,997** | All Title IV schools must provide for-credit certificate program data to IPEDS. | |
| Award of less than 1 academic year | | 27,125 | | |
| Award of at least 1 but less than 2 academic years | | 27,011 | | |
| Award of at least 2 but less than 4 academic years | | 1,992 | | |
| Post-baccalaureate certificate | | 7,294 | | |
| Post-master's certificate | | 3,575 | | |
| **Postsecondary Non-credit Certificates - Title IV Institutions** | **Excluded** | **n/a** | No reliable data source found. Institutions do not report these awards to IPEDS. | |
| **Postsecondary Awards - non-Title IV Institutions** | **Excluded** | **n/a** | No reliable data source found. | |

2 The IPEDS result reflects one year of survey data. The number of respondents to the IPEDS survey varies each year, which impacts the precise credential count from one year to the next.

## Figure 1 - Continued

| Credential Type | Count Completeness | Program Count | Comments | Source |
|---|---|---|---|---|
| **Federally Registered Apprenticeships** | **Complete** | **13,656** | | Employment and Training Administration (ETA), U.S. Department of Labor (USDOL) - ApprenticeshipUSA |
| **Unregistered Apprenticeships** | **Excluded** | **n/a** | Concept not consistently defined. No reliable data source found. | |
| **Certifications** | **Partial** | **5,465** | Certification Finder does not capture all certification programs, no other comprehensive source available. | ETA, USDOL – Certification Finder |
| **Occupational Licenses (state-issued)** | **Partial** | **8,864** | License Finder does not capture all license programs, no other comprehensive source available. | ETA, USDOL – License Finder |
| **Online Alternative Degree Programs** | **Complete** | **47** | | |
| MicroMasters Total | | 23 | | edX |
| Nanodegrees | | 24 | | Udacity |
| **Bootcamp Certificates** | **Partial** | **1,718** | Covers only coding bootcamps, no other fields. | Coursereport.com |
| **Badges** | **Excluded** | **n/a** | No reliable data source found. | |
| **Grand Total** | **Partial** | **334,114** | | |

## Recommendations for Further Research

This report establishes baseline information needed to understand of the number of credentials in the U.S. The following recommendations are offered by the research team to strengthen this research and understanding of credentials in the future:

### High school diploma programs

**Issue:**

- NCES does not distinguish secondary school diplomas by their requisite coursework requirements.

**Recommendation:**

- Approach the Education Commission of the States, the National Association of Secondary School Principals, and the Council for American Private Education to explore approaches to counting the number of credentials offered across all public and private secondary schools.
- Include a count of diploma equivalencies (e.g. GEDs).

### Postsecondary non-credit certificate programs

**Issue:**

- Non-credit certificates offered by postsecondary institutions are not counted in IPEDS.

**Recommendation:**

- Approach the American Association for Adult and Continuing Education, the Association for Continuing Higher Education, and the University Professional and Continuing Education Association (UPCEA) to explore approaches to counting the number of non-credit certificates offered by postsecondary institutions.

### Postsecondary awards from non-Title IV postsecondary institutions

**Issue:**

- IPEDS does not include non-Title IV institutions.

**Recommendation:**

- Approach the Accrediting Council for Independent Colleges and Schools to explore approaches to identifying non-Title IV institutions and counting their respective credential programs.

### Unregistered Apprenticeships

**Issue:**

- A consistent definition of—and central registry for—apprenticeships that exist outside of the USDOL registry does not exist.

**Recommendation:**

- Monitor work at the USDOL and explore how to collect and publish unregistered apprenticeships to the Registry.

### Certifications

**Issue:**

- Comparison of programs in the USDOL's Certification Finder with other, less comprehensive, lists indicates that Certification Finder is incomplete.

**Recommendations:**

- Approach the USDOL contractor maintaining Certification Finder to explore methods for identifying additional programs that meet USDOL criteria.
- Approach the National Network of Business and Industry Associations to explore methods for identifying certification programs that do not meet USDOL criteria.
- Approach other credential data aggregators such as the National Student Clearinghouse to explore method for collecting certifications.

### Occupational Licenses

**Issue:**

- Comparison of licenses in the USDOL License Finder with other, less comprehensive, lists indicates that License Finder is incomplete.

**Recommendation:**

- Approach the USDOL contractor maintaining License Finder to explore methods for identifying additional programs that meet USDOL criteria.

### Bootcamps

**Issue:**

- We are unable to locate a list of bootcamps outside of coding.

**Recommendation:**

- Explore the prevalence of bootcamps outside of coding and not included in other credential categories (e.g., certificates).

### Badges

**Issue:**

- We are unable to locate a comprehensive registry of badges. Further, there is wide variation in the requirements for obtaining a badge, many of which have little or no apparent labor market value (e.g., a badge for electronic signature).

**Recommendation:**

- Regularly monitor the evolution of the badge movement, particularly the services identified by Open Badges.
- Approach IMS Global's OpenBadges workgroup to explore methods for collecting and differentiating badges.

## Conclusion

Preliminary results confirm the existence of over 300,000 credentials in the United States. It further determines that a definitive answer to the number of credentials is incomplete or nonexistent, meaning that the actual number may be significantly higher. Additional research is needed from Credential Engine, in partnership with external organizations, to develop a more complete list.

# Research and Methodology

## Overview

This section will break down the definitions used by the research team to define each type of credential, explain the research methodology, and discuss findings. In following section detailing the findings, the credential count and a brief overview of how that number was estimated is provided, followed by a list of the data source(s) used to inform conclusions. As previously noted, these findings are not complete and should be further investigated with additional research.

## Credential Definitions

Unless otherwise indicated, the research team used credential definitions from the Credential Transparency Description Language (http://credreg.net/ctdl/terms/ to inform the research effort. Those definitions are included here for reference.

### Figure 2: Credential Definitions

| Credential | Definition |
|---|---|
| **Doctoral Degree** | Highest credential award for students who have completed both a Bachelor's degree and a Master's degree or their equivalent as well as independent research and/or a significant project or paper. |
| • **Research/Scholarship** | Doctoral degree conferred for advanced work beyond the master level, including the preparation and defense of a thesis or dissertation based on original research, or the planning and execution of an original project demonstrating substantial artistic or scholarly achievement. |
| • **Professional Practice** | Doctoral degree conferred upon completion of a program providing the knowledge and skills for the recognition, credential, or license required for professional practice. |
| • **Other**[3] | Doctoral degree that does not meet the definition of a doctor's degree—research/scholarship or a doctor's degree—professional practice. |
| **Master's Degree** | Credential awarded for a graduate level course of study where course work and activities advance skills beyond those of the Bachelor's degree or its equivalent. |
| **Bachelor's Degree** | College/university award for students typically completing three-to-five years of education where course work and activities advance skills beyond those of the first one to two years of college/university study. |
| **Associate Degree** | College/university award for students typically completing the first one-to-two years of post-secondary school education. |
| **Diploma** | Credential awarded by educational institutions for successful completion of a course of study or its equivalent. |

3 "2017-18 Survey Materials: Glossary." National Center for Education Statistics. November 14, 2017. Accessed February 20, 2018. https://surveys.nces.ed.gov/ipeds/Downloads/Forms/IPEDSGlossary.pdf.

## Figure 2 - Continued

| Credential | Definition |
|---|---|
| **Secondary School Diploma** | Diploma awarded by secondary education institutions for successful completion of a secondary school program of study. |
| **Non-Title IV Degree Programs** | Degree programs that do not receive Title-IV funding and therefore do not have the same reporting requirements as degrees found in IPEDS. |
| **Post-Master's Certificate**[4] | Award that requires completion of an organized program beyond the Master's degree, but does not meet the requirements of academic degrees at the doctor's level. |
| **Post-baccalaureate Certificate**[5] | Award that requires completion of an organized program of study beyond the bachelor's. It is designed for persons who have completed a baccalaureate degree but does not meet the requirements of a Master's degree. |
| **Award of at least 2 but less than 4 academic years**[6] | Award that requires completion of an organized program of study at the postsecondary level (below the baccalaureate degree) in at least two but less than four full-time equivalent academic years, or designed for completion in at least 60, but less than 120, semester or trimester credit hours, or in at least 90, but less than 180, quarter credit hours, or in at least 1,800, but less than 3,600, contact or clock hours. |
| **Award of at least 1 but less than 2 academic years**[7] | Award that requires completion of an organized program of study at the postsecondary level (below the baccalaureate degree) in at least one but less than two full-time equivalent academic years, or designed for completion in at least 30, but less than 60, semester or trimester credit hours, or in at least 45, but less than 90, quarter credit hours, or in at least 900, but less than 1,800, contact or clock hours. |
| **Award of less than 1 academic year**[8] | Award that requires completion of an organized program of study at the postsecondary level (below the baccalaureate degree) in less than one academic year (two semesters or three quarters), or designed for completion in less than 30 semester or trimester credit hours, or in less than 45 quarter credit hours, or in less than 900 contact or clock hours. |
| **Apprenticeship (registered)** (also: Apprenticeship Certificate) | Credential earned through work-based learning and earn-and-learn models that meet standards and are applicable to industry trades and professions. |
| **Apprenticeship (unregistered)**[9] | Arrangement that includes a paid-work component and an educational or instructional component, wherein an individual obtains workplace-relevant knowledge and skills; not officially registered with the USDOL. |

4 "2017-18 Survey Materials: Glossary." National Center for Education Statistics. November 14, 2017. Accessed February 20, 2018. https://surveys.nces.ed.gov/ipeds/Downloads/Forms/IPEDSGlossary.pdf
5 *Ibid.*
6 *Ibid.*
7 *Ibid.*
8 *Ibid.*
9 "Frequently Asked Questions about the Apprenticeship Program." United States Department of Labor. 2018. Accessed February 20, 2018. https://www.dol.gov/featured/apprenticeship/faqs.

## Figure 2 - Continued

| Credential | Definition |
|---|---|
| **Certification** | Time-limited, renewable credential awarded by an authoritative body to an individual or organization for demonstrating the designated knowledge, skills, and abilities to perform a specific occupation. |
| **License** (also: Occupational License) | Credential awarded by a government agency that constitutes legal authority to do a specific job and/or utilize a specific item, system or infrastructure and are typically earned through some combination of degree or certificate attainment, certifications, assessments, work experience, and/or fees, and are time-limited and must be renewed periodically. |
| **Badge** | Recognition designed to be displayed as a marker of accomplishment, activity, achievement, skill, interest, association, or identity. |
| **Bootcamps**[10] | Intense courses combine theory and practice in a condensed format that encourages a learning environment where knowledge is shared by all. |
| **MicroMaster** | A series of graduate online courses from various universities through the EdX platform to provide a deep learning in a specific career field with high recognition. MicroMasters students can apply to the university offering credit for the MicroMasters certificate and, if accepted, can pursue an accelerated and less expensive Master's degree. |
| **Nanodegree**[11] | An online certification through Udacity that typically takes less than 12 months to complete. |

### Detailed Methodology

The project entailed two research phases. Phase I included research on more traditional and well-documented credentials including registered apprenticeships, certifications, degrees, and occupational licenses, all of which are available within data tools from the U.S. Department of Labor's (USDOL) Employment and Training Administration (ETA) or the National Center for Education Statistics (NCES). Phase II included research on credentials that were more difficult to track, including unregistered apprenticeships, badges, online programs, MicroMasters, Nanodegrees, and high school diplomas.

Using the credential definitions in Figure 2 above, researchers identified websites that aggregated credentials for each type. They reviewed an extensive list of potential aggregators (see Appendix 2) to determine which were useful for the purposes of this research. Once the team determined the relevant websites, they reviewed each site to identify the most comprehensive aggregator in each credential category—i.e., the aggregator with the most distinct credentials included. In most cases,

10 Pearson US. "Choose your own (academic) bootcamp." Pearson. May 19, 2016. Accessed February 20, 2018. https://www.pearsoned.com/choose-academic-bootcamp/.
11 "Nanodegree." Udacity. 2018. Accessed February 20, 2018. https://www.udacity.com/.

one aggregator website emerged as most comprehensive for each credential type (shown in the "Source" column in Figure 1). To test the aggregators' comprehensiveness, the team selected at random a sample of 100 credentials (when at least 100 were available) per category and checked whether the credentials appeared in the comprehensive aggregator for that credential type. This provided a sense of how much confidence could be placed in the count identified through that aggregator for each credential category. Generally, this process allowed the team to identify a baseline count of credentials. As described throughout this section, there are other credentials that are neither captured by an aggregator nor easily extractable for a count in other sources.

## Findings by Credential Type

### High School Diplomas

The NCES Digest of Education Statistics website is the most comprehensive account of data on U.S. high school diplomas. It captures outcomes of high school completions, indicating whether a student received a regular diploma or not. The NCES Digest reports that the U.S. has 13,584 public secondary school districts, 98,277 public high schools, and 9,870 private high schools. Since private high schools do not fall easily into "districts" that all follow the same definitions and governance structures, the team was unable to develop a count of private high school districts. This makes it difficult to count types of high school diplomas awarded by private high schools.

Among public high schools, Achieve reports that there were 95 different kinds of high school diplomas awarded across the U.S. in 2015.[12] Upon further research, the researchers found that states provide the authority for their school districts to award between one (multiple states) and ten (New York) different types of diplomas. To provide a baseline estimate of public high school diplomas, researchers conservatively assumed that, on average, individual districts award one type of high school diplomas. Since some districts offer up to ten diplomas, this is believed to be a very conservative estimate of the total number of public high school diplomas. It is also assumed that each private high school is its own degree-granting program.

For private schools, perhaps the biggest overarching challenge with counting diplomas is determining whether to count based on individual high school or school district. For example, the Archdiocese of Washington, DC (metro Washington) is home to 18 Catholic high schools. Two of them are overseen by the Archdiocese of Washington; presumably, the others are governed by the religious orders (e.g., Society of Jesus, Sisters of the Holy Cross, etc.) that operate them. In addition to Catholic high schools, there are private high schools as varied as those offered by the Muhammed University of Islam, the Psychiatric Institute of Washington, the Lab School, the Village Academy, and the Kirov Institute of Ballet, all offering academic programs for students at least in grades 9-12. It is unclear whether each school has independent credential-granting authority. With these factors in mind, it is anticipated that the calculation of 23,454 high school diplomas is an undercount of this credential.

12 "How the States Got Their Rates: 2015 Graduates." Achieve. November 3, 2016. Accessed February 20, 2018. https://www.achieve.org/how-the-states-got-their-rates-2015-graduates.

### Data Source

**NCES Digest of Education Statistics**
(https://nces.ed.gov/fastfacts/display.asp?id=84)

Provides a compilation of statistical information covering the broad field of American education from prekindergarten through graduate school. While it captures counts of public high school districts and public and private high school institutions, it does not capture private high school "districts" (e.g., Catholic diocese).

## Postsecondary Degrees and Certificates

A degree is a credential that spans various award levels, including Associate's, Bachelor's, Master's, and Doctoral degrees. To develop a count of degree-related credentials, researchers identified the NCES' Integrated Postsecondary Education Data System (IPEDS) as the most comprehensive aggregator of degrees. IPEDS covers the universe of 7,000 schools categorized as Title IV institutions (i.e., those that offer student financial aid. Since IPEDS captures the universe of these credentials,the team did not seek other Title IV degrees to test in IPEDS. The team did, however, develop a separate count of online degree programs, which is covered in the "Online Programs" section of this report.

IPEDS does not capture data on credentials from degree-granting institutions that are not categorized under Title IV. The Accrediting Council for Independent Colleges and Schools provides some insight into these institutions: according to its membership list, there are 414 credential-granting institutions that do not appear in IPEDS.[13] However, degrees from these specific institutions require further research to reach an accurate count of relevant credentials. So, although the researchers are highly confident in the number of degrees from Title IV institutions in IPEDS, the count would be higher if it counted reliably extracted data on specific degrees from the 414 institutions not in IPEDS.

### Data Source

**NCES IPEDS 2016 Institutional Characteristics Survey, HD2016 (Preliminary release)**
Provides directory information for Title IV-funded institutions. The estimated total for IPEDS credentials is based on a provisional release of 2016-2017 IPEDS survey tables. There is no indication if the total number of programs and awards will decrease or increase following finalization.

**NCES IPEDS 2016 Completions Survey, C2016_A (Preliminary release)**
Provides awards/degrees conferred by program (6-digit CIP code), award level, race/ethnicity, and gender: July 1, 2015 to June 30, 2016.

## Apprenticeships

Apprenticeships fall into two general categories—registered and unregistered. This is an important distinction, because registered apprenticeship programs are highly regulated and must meet Federal and State standards and parameters. There is no comparable set of standards or parameters governing the operation of unregistered apprenticeship programs. Unless an issuer officially registers its apprenticeship with the USDOL, the parameters around other apprenticeships are blurry.

13 Accrediting Council for Independent Colleges and Schools. 2017. Accessed February 20, 2018. http://www.acics.org/.

ETA's ApprenticeshipUSA Toolkit was the most comprehensive aggregator of registered apprenticeships with 13,656 apprenticeships in its database. Since the USDOL does not consider an apprenticeship "registered" unless its issuer reports the program to the Office of Apprenticeship, the researchers are confident that 13,656 fairly represents the count of registered apprenticeships. To be certain that the aggregator contained registered apprenticeships exclusively, a sample of unregistered apprenticeships were tested from Glassdoor. The team found that less than one percent of what Glassdoor labeled as "apprenticeship" appeared in ApprenticeshipUSA, confirming that ApprenticeshipUSA is a comprehensive aggregator of only registered apprenticeships.

Counting unregistered apprenticeships is difficult at best for several reasons that flow from the lack of consistent program standards. As one of the Trump administration's stated top workforce development priorities, apprenticeships have gained notable attention and potential for growth. There are various other organizations that use the apprenticeship label, including private companies, that have their own ideas about what constitutes apprenticeships.

There are additional challenges that come with trying to establish a count of unregistered apprenticeships. For example, issuers often identify an apprenticeship as a program, not a tangible credential. In other words, there are cases where an apprenticeship is the training that one completes, not the actual credential that is awarded upon completion.

#### Data Source

**USDOL, ETA, Office of Apprenticeship - ApprenticeshipUSA Sponsor Database (Now Workforce GPSN)**

The ApprenticeshipUSA Sponsors Database (https://oa.doleta.gov/bat.cfm) is an interactive tool to browse registered apprenticeships by sponsor, zip code, state, and occupation. Updated December 2017.

Through the ApprenticeshipUSA Sponsors Database, users can link to the ApprenticeshipUSA Community of Practice on ETA's Workforce GPS website (https://apprenticeshipusa.workforcegps.org/) for additional information on apprenticeships. The ApprenticeshipUSA Community of Practice is an online resource for stakeholders from throughout the Apprenticeship system and its partners to share information and learn from peers regarding the innovative strategies and partnerships being used to train U.S. workers.

## Certifications

According to the USDOL, a certification demonstrates "specific skills or knowledge in an occupation, industry, or technology, and typically requires passing a test in order to earn the credential."[14] To find a count of certifications, researchers identified the Certification Finder tool on ETA's CareerOneStop website as the most comprehensive aggregator available. The tool is an online directory of third-party organizations that provides verification of skill or knowledge attainment based on generally accepted skill standards for an occupation.[15]

14 "Certification Finder." Employment and Training Administration. 2018. Accessed January 3, 2018. https://www.careeronestop.org/Toolkit/Training/find-certifications.aspx.

15 According to the ETA definition, certifications included must require some level of education, training, work experience, or an examination and cannot be a state-required license. Source: Certification Finder FAQ. CareerOneStop. U.S. Employment and Training Administration.

To test for Certification Finder's comprehensiveness, researchers compared a sample of certifications from non-federal websites against the records included in Certification Finder. They found that 60.8 percent of the certifications tested appeared in Certification Finder.

It appeared that there was a pattern that newer certifications and certifications with wordy or highly specific names were unlikely to appear in Certification Finder. ETA also confirmed a series of criteria that they used to determine which certification programs they would accept through CareerOneStop. Organizations that submit a certification must be accredited, offer certifications that reasonably align with O*NET occupations, and show evidence that there is a standards committee that oversees certification development. Therefore, while the team has a high degree of confidence that the count of certifications from Certification Finder is accurate, the researchers suggest that there are many more certifications in the marketplace that fall outside of ETA's criteria and are not included in Certification Finder.

**Data Source**

**USDOL, ETA - Certification Finder**

Provides names, certifying organizations, related occupations, and other details for more than 5,000 national certifications. Updated July 2017.

## Occupational Licenses

According to The State of Occupational Licensing, occupational licenses vary by state, are not always transferrable across state lines, and change frequently to accommodate new standards for occupations. State licensing is meant to promote worker and consumer safety and create a higher quality of services. As a result, the number of occupational licenses has increased dramatically in recent years; combined with the characteristics noted above, licenses are difficult to track and count.[16]

The researchers used ETA's License Finder—the largest available online aggregator of state-required occupational licenses—to test the availability of licenses from other sources. ETA stated that information on licenses in the database is submitted by each state's Labor Market Information office, which relies on licensing entities to provide updates on their offerings. To assess the comprehensiveness of License Finder, the team tested licenses primarily from the Center for the Study of Occupational Regulation (CSOR) in License Finder. Of the licenses tested, the team found almost 58 percent on License Finder. Since CSOR aggregates credential requirements for healthcare practitioners and technical occupations and healthcare support occupations, this methodology was also reversed and found that 35 percent of licenses from License Finder appeared in CSOR.

This process highlighted the challenge of naming conventions across sources. For example, the team tested Clinical Laboratory Technologist in Florida from License Finder in CSOR. CSOR did not list this specific license, but it did list Medical/Clinical Laboratory Technicians. Without an expertise in the field, it is difficult to tell if these are two different names for the same license, or if they are two completely different licenses. Furthermore, it is challenging to determine whether this is an issue of nomenclature or a general lack of clarity about occupations in certain fields. The same is true for occupations such as Licensed Clinical Social Worker vs. Licensed Professional Counselor. Without a greater awareness of the nuances in occupational titles, the team treated these occupations as distinct. It is also interesting to note that there is conflicting information across aggregators. For example, License Finder provides information

16 "The State of Occupational Licensing." National Conference of State Legislatures. October 11, 2017. Accessed February 20, 2018. http://www.ncsl.org/research/labor-and-employment/report-the-state-of-occupational-licensing.aspx

on licensure for Medical Laboratory Technicians in North Carolina; however, CSOR states that North Carolina does not require this license.

While the count of licenses represents all credentials currently available in License Finder, some licensing entities may not regularly report their offerings to state Labor Market Information LMI offices, which would suggest an undercount. Greater clarity on naming conventions from one source to the next would also impact the final count, since some licenses from CSOR may actually be in LicenseFinder, just captured under a different name.

**Data Source**
**USDOL, ETA - Occupational License Finder**
Provides occupational licenses, related occupations, and contact information for state agencies that issue license in all 50 states. Updated September 2017.

## Online Alternative Degree Programs

Online alternative degree programs are earned on the Web rather than in a classroom setting. They include MicroMasters and Nanodegrees. The most comprehensive aggregator for online alternative degree programs is Class Central. Since online alternative degree programs are one of the fastest growing credential categories, the count refreshes frequently—even daily in some instances.

MicroMasters are a series of graduate online courses from various universities that provide deep learning in a specific career field with high employer recognition. MicroMasters students can apply to the university offering credit for the MicroMasters certificate and, if accepted, can pursue an accelerated and less expensive Master's degree. A Nanodegree, on the other hand, is an online certification that typically takes less than 12 months to complete and is housed exclusively at Udacity.com.

Please note: This report does not include Massive Open Online Courses (MOOCs). Until further research suggests otherwise, we are not considering the completion of one course needed to earn a credential to be a credential, or subcredential, in and of itself. For instance, edX's mooc.org site indicates the highly popular MOOC "Analyzing and Visualizing Data with Excel" is "part of the Microsoft Professional Program Certificate in Big Data, and the Microsoft Professional Program Certificate in Data Science."

**Data Source**
**edX**
Online platform for micromasters.

**Udacity**
Exclusive provider of Nanodegrees.

## Bootcamps

Most bootcamps are technical training programs that teach the programming skills that employers look for in potential technology employees. Bootcamps are predominantly focused on programming or coding, but they may also refer to training programs in industries such as manufacturing or financial services.

The research team created a matrix of bootcamp aggregators and selected samples from Course Report, Bootcamps.in, and Thinkful's Bootcamp Finder to gauge each source's level of inclusivity. Of these,

Course Report was the most comprehensive aggregator with 1,718 bootcamps, all related to information technology or data science. Although 100 percent of bootcamps listed on either Bootcamps or Bootcamp Finder appeared in Course Report, not all bootcamps on Course Report were listed on the other two. Course Report also listed nearly 500 organizations that offer bootcamps, compared to fewer than 100 organizations on both Bootcamps.in and Bootcamp Finder.

Note, however, Course Report, Bootcamps.in, and Thinkful's Bootcamp Finder do not aggregate individual bootcamp courses. Rather, these websites aggregate bootcamp course providers, or schools. To get a count of every bootcamp course available would require visiting each bootcamp website and finding the total number of courses offered. For instance, Course Report houses 477 unique coding bootcamp schools. Each of these bootcamp schools offers many different courses. In some cases, a provider may offer a dozen different courses; in other cases, the provider may offer hundreds of courses. For the purposes of the partial count in this report, the team considers each bootcamp to represent one credential. Future research will seek to identify the actual number of credentials offered by each bootcamp.

Another challenge is that the term "bootcamp" is used in different ways by different providers. Sometimes it refers to the school or organization that offers courses; other times, it refers to a specific course. More broadly, "bootcamp" often describes a short, intense training program, regardless of purpose or subject matter focus. Inconsistent definitions of "bootcamp" and the liberal use of the term create difficulty when trying to count bootcamps. Perhaps most importantly, the team didn't find an aggregator that covered industries like manufacturing or financial services that offer many bootcamps. Therefore, there is a high degree of confidence in the final count of bootcamps from Course Report, but there are likely hundreds of providers that each offer bootcamps not included in the report.

#### Data Source

**Course Report (https://www.coursereport.com/)**
Provides a directory of coding schools offering bootcamps, as well as other resources for potential students.

## Badges

A digital badge is a validated indicator of accomplishment, skill, quality, or interest that can be earned in generally informal learning environments. Open digital badging makes it easy for anyone to issue, earn, and display badges across the Web—through an infrastructure that uses shared and open technical standards. The open badge movement began relatively recently in 2011 with the open-source software provider, Mozilla, so use of this credential is in a mostly nascent and rapidly-changing phase. In 2017, IMS Global took over management of the Open Badges specification and recently published Open Badges 2.0 which provides new features such as endorsements, versioning, and full adoption of JSON-LD.

The only badge aggregator website that the researchers identified is the Open Badge Passport. Open Badge Passport lists some badges, but only those that badge recipients decided to publicly share online. When an individual receives a badge only he or she can view the badge; badges are inherently private until shared with others. Individuals may share their earned badges through online services known as 'backpacks' which are essentially private platforms to display one's badges. If an employer receives a

17 "Digital Badges." HASTAC. 2018. Accessed February 20, 2018. https://www.hastac.org/initiatives/digital-badges.
18 "Open Badges 2.0." IMS Global Learning Consortium. 2018. Accessed February 20, 2018. https://www.imsglobal.org/activity/digital-credentials-and-badges.

'backpack' from a prospective hire, the employer can click on each badge to learn what the individual has accomplished to earn that badge and who issued it.

Organizations, and even individuals, issue badges for just about any reason to document informal learning. For example, one badge listed on Open Badge Passport is the "Lifting Others Up" badge, which can be earned by "uplifting or encouraging your classmates." This badge is clearly intended for students who attend a particular school, and the badge can only be awarded by that school. Another example, the "Digital Citizenship, Welfare and E-Safety Webinar for Teachers" badge is awarded to all individuals who have attended a particular webinar.

Although it is difficult to find individual badges that have been created or awarded, there are websites such as wiki.mozilla.org/Badges/Issuers and openbadges.org that do offer an aggregated list of organizations and institutions that provide badges. Unfortunately, these lists have many inconsistencies. Many of the organizations listed display available badges, some do not display any badges, and some actually do not offer badges at all. Rather, these organizations are badge services (like backpacks or consultant agencies) that work to design badges for companies.

While Open Badge Passport is the most comprehensive badge aggregator, it in no way represents the total number of existing badges. For instance, IBM offers over 1,500 different badges while only two of those badges are listed in Open Badge Passport.

There are multiple issues that make it difficult to get a full accounting of badges in the U.S. Many badge issuers use an educational technology product, such as Acclaim, Credly, or Badgr to host their badging program, but these products do not publish aggregate data on badges. Moreover, an unknown number of badge issuers host their own badging programs using open-source tools or custom solutions, which would make any accounting across badging products incomplete. Badges are also issued for a variety of purposes, so a simple count would combine career-relevant credentials and non-occupational or educational badges. Badges are also used internationally and more research is needed to isolate badges available in the U.S. Due to these challenges, a count of badges was removed from this inventory and additional research is needed to estimate the number of badges available.

### Data Source

**Mozilla**
Provides aggregated lists of organizations that provide badges.

**Open Badge Passport**
Provides aggregated information about digital badges.

# Appendix - Initial Inventory of Credential Information Aggregators

In order to obtain an accurate count of credential data, reliable resources are of the utmost importance. However, as noted in the previous section, not every credential type has complete information. For this initial report, Credential Engine has compiled a list of known available credential data aggregating organizations. As additional research is conducted, we anticipate this list to grow.

## Credential Information Aggregators by Type

### Postsecondary

Integrated Postsecondary Education Data System (IPEDS)
National Student Clearinghouse Research Center
American Association of College Registrars and Admissions Officers (AACRAO)
EDUCAUSE Core Data Service

**Guides**

- Peterson's Guides
- Fiske Guide to Colleges
- BigFuture, College Board
- Princeton Review

**State government organizations**

- State higher education commissions (members of State Higher Education Executive Officers [SHEEO])
- State Contacts (per U.S. Department of Education) – by state, the department of education, the higher education agency, special education agency, and adult education agency

### Accredited Postsecondary Programs

**U.S. Department of Education**

- Database of Accredited Institutions and Programs
- Nationally Recognized Accrediting Agencies
- Regional and National Institutional Accrediting Agencies
- Accrediting Agencies Recognized for Distance Education and Correspondence Education
- Accrediting Agencies Recognized for Title IV Purposes
- Specialized Accrediting Agencies
- Council for Higher Education Accreditation–23,000 accredited degree programs
- Accrediting Council for Independent Colleges and Universities
- Accrediting Bureau of Health Education Schools (ABHES)
- Accrediting Commission of Career Schools and Colleges (ACCSC)
- Accrediting Council for Continuing Education and Training (ACCET)
- Distance Education Accrediting Commission (DEAC)
- Council on Occupational Education (COE)

### Industry-recognized Certifications

Certification Finder, ETA
Industry-recognized Credentials, National Network of Business and Industry Associations
Certification Data Exchange Project, ACTE

Lists of professional certifications and designations, Wikipedia
- Areas of Professional Certification
- List of professional designations in the United States
- Professional titles and certifications
- Professional certification (business)
- Professional certification (computer technology)

American Certification Institute
National Coalition of Certification Centers
Skills USA – Career Essentials Suite
Manufacturing Institute – endorsed certifications
American Society of Association Executives

Certification Testing Services and Networks – General
- Prometric
- Certiport
- Pearson VUE
- Kryterion Global Testing Solutions
- PSI Services–Certification
- PAN
- National Center for Competency Testing
- Castle Worldwide

Certification Organizations – Specialized
- CompTIA
- Provusion (Pearson VUE)
- HR Certification Institute
- Project Management Institute
- Association of Energy Engineers
- EC Council
- Association of Boards of Certification (water and wastewater)

Certification Course Providers and Test Sites
- Southern Careers Institute, including Woz U
- Cengage
- Devore Technologies
- New Horizons

**Credential Certification Bodies**
ANSI Accreditation
Institute for Credentialing Excellence
National Commission for Certifying Agencies (National Organization for Competency Assurance)
International Certification Accreditation Council
International Accreditation Service

**Licensing**
License Finder, ETA
Center for the Study of Occupational Regulation
Council on Licensure, Enforcement and Regulation (CLEAR)
Institute for Justice – License to Work report
PSI Services–Licensing

## Apprenticeships

Employment and Training Administration

- Apprenticeship Finder, CareerOneStop
- ApprenticeshipUSA Toolkit
- ApprenticeshipUSA Sponsors
- Apprenticeship Statistics
- Available Occupations through Apprenticeships
- Careers with Registered Apprenticeships. My Next Move

Apprenticeship Services

- Elite Apprenticeships
- Apprenti
- Franklin Apprenticeships
- TranZed Apprenticeship Services
- TradesEDU
- Amazing Apprenticeships
- GetApprenticeship

State and local apprenticeship sites

- State Apprenticeship Office contact list
- Arizona
- Arkansas
- California
- Colorado – construction
- Connecticut
- Delaware
- District of Columbia
- Florida
- Hawaii
- Idaho
- Iowa
- Kansas
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Missouri
- Montana
- New Jersey
- New York
- North Carolina
- North Dakota
- Oregon
- Pennsylvania
- Rhode Island
- South Carolina
- South Dakota
- Texas
- Vermont
- Virginia
- Washington
- Wisconsin

- Chicago
- Seattle
- Water District, Southern California

College Programs (as examples)

- Lakeshore Technical College, WI
- Midstate Technical College, WI
- Madison Area Technical College, WI

## Badges

Background

- Inside Higher ED
- UPCEA/Pearson Survey: Demographic Shifts in Educational Demand and the Rise of Alternative Credentials
- Education Week

Badge Systems. Open Badges in Higher Education

Open Badges

- Who is issuing open badges?

IMS Global Learning Consortium

Badge Alliance

LRNG

10 Million Better Futures

Open Badges in Higher Education

Reconnect Learning

HASTAC (Humanities, Arts, Science, and Technology Alliance and Collaboratory)

Badge award services – general

- Open Badges – participating services
- Credly
- Accredible
- Acclaim
- Merit Pages
- Badgr
- BadgeChain
- Open Badge Factory
- BadgeOS

Badge award services – for educators

- PD Learning Network
- BloomBoard
- Digital Promise

Associations – overview article, with examples

Overview articles

- MeetingsNet
- WBT Systems
- TalentedLearning
- AICPA Digital Badges
- AEA Open Badges

Subjects

- Community STEM Badging System

Companies

- IBM Open Badges

Educational institutions
- Colorado Community College System
- Foundation for California Community Colleges
- Mt. Vernon Institute for Innovation

Local
- BmoreSTEM
- Maryland Out of School Time

## Coding boot camps
- Course Report
- Bootcamps.in
- Bootcamp Finder

## Online Programs
- Coursemania
- Guide to Online Schools
- Online College Courses
- edX programs–micromasters. professional
- Coursera
- Udacity
- Udemy
- Pluralsight
- Lynda
- Grovo
- LearnDataSci
- Codecademy
- 180 Skills
- General Assembly
- Cybrary
- Pluralsight

## Cross-credential
- Data Downloads. ETA
- Association of Test Publishers
- ACE College Credit Recommendation Service
  (National Guide to College Credit for Workforce Training)
- Army COOL (Credentialing Opportunities On-Line)
- Workforce Credentials Coalition, WDQC (partners in 14 states)
- Association for Talent Development (ATD)

For more information, please visit www.credentialengine.org

Notes:

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# EDUCATION OVERSIGHT COMMITTEE

**Subcommittee:** Academic Standards and Assessments

**Date:** May 21, 2018

**ACTION ITEM**

**Guidelines for eLearning for School Make-up Days** – *Contingent upon final action by the General Assembly and Governor on H.4950*

**PURPOSE/AUTHORITY**

Proviso 1A.86. of the 2018-19 General Appropriation Bill (H.4950) as adopted by the House of Representatives on March 14, 2018 requires the EOC to implement a pilot program that includes online or virtual instruction for school make-up days. The proviso requires the EOC to adopt guidelines for schools to participate in the pilot by August 1, 2018. On the other hand, H.4950 as adopted by the Senate includes Proviso 1A.93., authorizing the Department of Education to approve districts wanting to use alternative methods, including online or virtual instruction, "towards up to three days of schedule make up time."

**CRITICAL FACTS**

At its April 9, 2018 meeting the full EOC received a presentation from the Superintendent and staff of Anderson School District 5 on a proposal to use eLearning for school make-up days. Based upon the information provided and guidelines implemented by the Indiana Department of Education, the EOC staff is proposing draft guidelines for the initiative *if* the House version of the proviso is enacted. The urgency is to ensure that districts desiring to participate in the pilot would be able to submit an application based upon the draft guidelines and could be approved for participation in the pilot as early as the EOC's June 11, 2018 meeting. Early approval of districts in the pilot provides districts the opportunity to amend their school calendars in a timely fashion.

**TIMELINE/REVIEW PROCESS**

| | |
|---|---|
| March 14, 2018 | House gives third reading to H.4950, which includes Proviso 1A.86. |
| April 9, 2018 | Anderson School District 5 presents to EOC |
| April 12, 2018 | Senate gives third reading to H.4950, which includes Proviso 1A.93. |

**ECONOMIC IMPACT FOR EOC**

The EOC will absorb the cost of evaluating the pilot and reporting on its impact.

**Fund/Source:**

**ACTION REQUEST**

☒ **For approval** ☐ **For information**

**ACTION TAKEN**

☐ **Approved** ☐ **Amended**

☐ **Not Approved** ☐ **Action deferred (explain)**

SC EDUCATION OVERSIGHT COMMITTEE
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## Explanation

The following are ***draft*** requirements for implementing the eLearning pilot program to comply with Proviso 1A.86. of the 2018-19 General Appropriation Act as adopted by the House of Representatives. These ***draft*** requirements are also based on *eLearning Day Criteria* implemented by the Indiana Department of Education for school year 2017-18 and on current laws and regulations of South Carolina.[1]

> *The Education Oversight Committee shall be responsible for and have control over the construct and implementation of the pilot program for alternative methods of instruction for make-up days. For the current fiscal year, the Education Oversight Committee shall select school districts around the state for a pilot program to utilize alternative methods of instruction which may include, but are not limited to, online or virtual instruction for scheduled make up time. All make up time must reflect the number of hours of the make-up days the instruction will cover. All make up time must meet state requirements for elementary and secondary school days. The Education Oversight Committee shall provide guidelines to the selected school districts no later than August 1, 2018. All districts shall continue to report to the Department of Education all days missed, reasons for the absences, days made up, and now the alternative method of instruction used. The Education Oversight Committee shall work with the Educational Television Commission (ETV) and the State Library to utilize and coordinate available ETV and State Library resources and explore alternative means of delivery to districts that may lack proper access to online instruction.*
>
> *The school districts shall report the following information to the Education Oversight Committee by April 1, 2019: method(s) of implementation utilized, advantages and disadvantages of the method(s) used, and any feedback received from parents or guardians.*
>
> *The Education Oversight shall report those findings to the Chairman of the House Ways and Means Committee and the Chairman of the Senate Finance Committee by June 1, 2019.*[2]

[1] Indiana Department of Education. https://www.doe.in.gov/elearning/elearning-day-program. Accessed on May 1, 2018.

[2] Proviso 1A.86. of the Fiscal Year 2018-19 General Appropriation Act as adopted by the House of Representatives.

## Requirements for District Participation in eLearning Pilot

The superintendent of the school district and the chair of the board of trustees of the school district must certify to the Education Oversight Committee (EOC) that the district:

1. Meets the following minimum requirements to participate in the eLearning pilot to use eLearning to make up days missed due to inclement weather;
2. Agrees to provide data to the EOC or independent consultants hired by the EOC to evaluate implementation of the pilot. The data elements will be mutually agreed upon by the EOC and the pilot school districts; however, all data elements will be consistent across districts participating in the pilot; and
3. Agrees to facilitate the collection of online surveys as requested by the EOC to identify the successes and challenges of the pilot from the perspective of administrators, classroom teachers, students, and parents.

## Approval of Districts for Participation in Pilot

The following are recommendations proposed by the EOC staff for determining which districts participate in the pilot:

1. Only school districts that submit documentation certifying their ability to meet the following minimum requirements for participation will be considered for participation in the pilot.
2. No more than five districts will be approved for participation in the pilot in school year 2018-19 with districts that successfully complete the application process approved in the order received.
3. To the extent possible, the districts selected for the pilot will represent various sizes and geographic locations as well as alternative methods of instruction.
4. Pending final approval of the 2018-19 General Appropriation Act, the EOC will begin approval of districts for participation in the pilot beginning at its June 11, 2018 meeting.

| Requirements | Certification or Information Needed from District |
|---|---|
| **All Schools** | The district certifies that eLearning will be implemented for **all** schools in the district for one or more make-up days due to inclement weather.<br><br>**___YES ___NO** |
| **Instructional eLearning Days** | Section 59-1-425 of the South Carolina Code of Laws defines an instructional day and the requirements for make-up days. The law defines an instructional day for elementary students to be a minimum of 5.5 hours a day and for secondary students, 6.0 hours. Regulation 43-172 stipulates that "a pupil shall maintain membership in a minimum of 200 minutes of daily instruction or its equivalency for an annual accumulation of 36,000 minutes."<br><br>For any eLearning day used, the district certifies that each eLearning day will be 5.5 hours for students in kindergarten through grade 8 and 6.0 hours for students in grades 9-12, or a minimum of 200 minutes of daily instruction.<br><br>**___YES ___NO**<br><br>Will any eLearning days be used for specific built-in, make-up days like Martin Luther King Day, Presidents' Day, Memorial Day, etc.?<br><br>**___YES ___NO**<br><br>**If Yes**, which days? _____<br>_____<br>_____ |
| **Number of eLearning Days** | Will the district limit the number of days of eLearning used for make-up days?<br>**___Yes ___No**<br><br>**If Yes** . . .<br><br>At a maximum, how many eLearning days could be used for make-up days? _____<br><br>How will the district decide when/if eLearning days will occur?<br>_____<br>_____<br>_____ |

| Requirements | Certification or Information Needed from District |
|---|---|
| **Number of eLearning Days** | How will the district notify parents and staff of implementation of an eLearning day? _____<br>_____<br>_____ |
| **eLearning Lessons** | The district certifies that the eLearning lessons will address academic content or skills that would have been addressed if school had been in session in a traditional setting.<br><br>**___Yes ___No** |
| **Access** | The district certifies that **all** students in the district have access to a device or an app to complete all eLearning lessons.<br><br>**___Yes ___No**<br><br>The district has assigned a digital device for all students in grades __ through ___ which can be taken home daily. Please identify which devices have been assigned.<br>_____<br><br>All students in grades ___ through ___ have access to a digital device or app as documented by _____.<br><br>Please provide specific information on apps to be used to complete eLearning lessons. |
| **Demonstrated Access to Students of eLearning lesson plans** | The district certifies that all students and teachers either have access to the Internet away from school buildings or have access to the eLearning assignments.<br><br>**___Yes ___No**<br><br>Please check *all* that apply below and provide any additional information on how the district will document access.<br><br>___ The district will collect information from each teacher and parent/guardian documenting that the student has access to broadband Internet access at home and can download necessary apps. |

| Requirements | Certification or Information Needed from District |
|---|---|
| **Demonstrated Access to Students of eLearning lesson plans** | ___ The district will collect information from each teacher and parent/guardian documenting what devices that teachers and students use to access the Internet outside of school.<br><br>___ The district will work with teachers and parents to access discounted Internet access at home.<br><br>___ The district will allow students to download eLearning assignments onto their devices.<br><br>___ The district will allow students to work offline in a learning management system like Google Drive or allow for offline work.<br><br>___ Other (Please specify) |
| **Notification** | The district certifies that students and parents/guardians will be informed of their eLearning targets for any day missed by inclement weather and made up with eLearning by 9 a.m.<br><br>**___Yes ___No** |
| **Teacher Responsibility** | The district certifies that each classroom teacher of record will be responsible for uploading eLearning assignments and will have "office hours" to answer questions or assist parents/guardians and students in completing the virtual assignments.<br><br>**___Yes ___No**<br><br>Please provide information on the specific responsibilities of classroom teachers. |
| **Student Responsibility** | The district certifies that each student and parents/guardians have a clear understanding of the responsibility of students to complete the eLearning assignments.<br><br>**___Yes ___No** |

| Requirements | Certification or Information Needed from District |
|---|---|
| **Student Responsibility** | Please respond to the following questions:<br><br>How will the district communicate to students and parents? _____<br>_____<br>_____<br><br>How many days will the student have to complete all make-up work? __<br><br>How will incomplete work be handled? _____<br>_____<br>_____ |
| **Accommodations** | For students with disabilities who do not use an online platform for eLearning or for whom an online platform is not appropriate, teachers will provide parents/caregivers with appropriate educational materials and learning activities for student use.<br><br>All students who have accommodations for instruction will be provided with or have access to those accommodations.<br><br>For limited English proficient students, teachers will provide parents/caregivers appropriate educational materials and learning activities for student use per the Individual Learning Plan.<br><br>**___Yes ___No**<br><br>Please describe how the district will handle the above accommodations.<br>_____<br>_____<br>_____ |
| **Technical Support** | If students or parents have problems with accessing the eLearning assignments, how will the district respond to questions or concerns?<br><br>_____<br>_____ |
| **Learning Management System** | The district has a learning management system that will post the assignments for eLearning day and will document that student assignments are collected and completed.<br><br>**___Yes ___No** |

| Requirements | Certification or Information Needed from District |
|---|---|
| **Learning Management System** | Please identify the learning management system or systems to be used.<br><br>Please denote grade levels served: _____ |
| **Other Support** | Is the district interested in reviewing and using eLearning resources provided by Discus through the South Carolina State Library and/or SC ETV?<br><br>**___Yes ___No** |
| **Reporting** | The district agrees to work with the Education Oversight Committee (EOC) and its staff to monitor and document the implementation and impact of eLearning for school make-up days. The reporting will include, but is not limited to: methods of implementation utilized; advantages and disadvantages; barriers and opportunities; and feedback from administrators, teachers, students, and parents/ guardians. The EOC will not assess the impact on student achievement.<br><br>**___Yes ___No** |
| **Key Contact** | Please provide the name, title and contact information for the district employee who will be responsible for implementation of eLearning:<br><br>Name: _____<br><br>Title: _____<br><br>Email: _____<br><br>Phone Number: _____ |

**By signing below, _____ (*District name*) certifies that it meets the above requirements to participate in the eLearning pilot for school make-up days and that it will provide the necessary data and cooperation to the Education Oversight Committee (EOC) to monitor and evaluate implementation of the eLearning pilot for school make-up days.**

Superintendent: _____

Signature of Superintendent: _____

Date: _____

Chair of Board of Trustees _____

Signature of Board Chair: _____

Date: _____