**EDUCATION AND EMPLOYMENT RESEARCH CENTER**

# Collecting and Understanding Noncredit Community College Data: A Taxonomy and How-To Guide for States

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## About The Authors

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## Acknowledgments

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# Project Background

More than two-thirds of US adults who are considering further education report that they prefer a nondegree option—up from about one-half prior to the pandemic[1]—and there is growing interest and investment in short-term flexible training options to prepare individuals for the workforce. Community college noncredit education is one sizable and growing source of occupational training, but, until recently, there have been few large-scale studies of this type of learning.[2] It is imperative to cultivate a better understanding of noncredit education and nondegree credentials, but multiple studies have shown that only about three-quarters of states collect any data on their noncredit programming.[3] Furthermore, data on nondegree credentials such as certificates, certifications, licensure, badges, and microcredentials varies widely across the states where such data exist, and collection methods are still under development in many places.[4]

Many of the states that collect noncredit data have limited measures of program features and training effects and high rates of missing information. Inconsistencies in data definitions between states are commonplace, preventing a comprehensive understanding of noncredit education.[5] Direct comparisons across states are difficult. At the most basic level, very little is known about the characteristics of noncredit programs, their objectives, and what they entail—like instructional time, instructional format, requirements for entry, linkages to further education, awarding agencies, cost, and types of nondegree credentials awarded.

An important step in rectifying this shortfall is developing a better understanding of program-level data on noncredit offerings at community colleges. Such an effort would aid in further data collection, inform ongoing measurement efforts, and ensure future policy discussions are more grounded in the realities of these educational offerings. To that end, with support from the National Center for Science and Engineering Statistics/National Science Foundation, the Rutgers Education and Employment Research Center (EERC) and key partners at University of North Carolina at Charlotte, University of Michigan, and University of California, Irvine, are working with state leaders across the country to examine noncredit data. Our study is guided by four key goals:

1  Strada. (2020, September 16). *Public viewpoint: Interested but not enrolled: Understanding and serving aspiring adult learners.* https://cci.stradaeducation.org/pv-release-september-16-2020/

2  See Bahr, P. R., Columbus, R., Cepa, K., May-Trifiletti, J., & Kaser, S. (2022). *Investigating the hidden college: A study of community college noncredit education in five states*. University of Michigan and Opportunity America. https://bit.ly/CCNoncredit_FiveStates

3  Erwin, M. (2019). Noncredit enrollment and related activities. National Postsecondary Education Cooperative. https://nces.ed.gov/ipeds/pdf/NPEC/data/NPEC_Paper_Noncredit_Enrollment_and_Related_Activities.pdf; this study was funded by the US Department of Education.

4  Leventoff, J. (2018). *Measuring non-degree credential attainment*. National Skills Coalition. https://www.nationalskillscoalition.org/resource/publications/measuring-non-degree-credential-attainment-a-50-state-scan/

5  D'Amico, M. M. (2017). Noncredit education: Specialized programs to meet local needs. In K. B. Wilson & R. L. Garza-Mitchell (Eds.), *New directions for community colleges: No. 180. Forces shaping community college missions* (pp. 57–66). Jossey-Bass. https://doi.org/10.1002/cc.20281; Erwin, 2019; Romano, R. M., & D'Amico, M. M. (2021, July/August). How federal data shortchange the community college. *Change: The Magazine of Higher Learning, 53*(4), 22–28. https://doi.org/10.1080/00091383.2021.1930978

- Increase understanding of noncredit data infrastructure by developing an inventory of and consistent operational definitions for state-level noncredit data elements.

- Collect and examine noncredit course/program-level data to explore noncredit offerings and their associations with enrollment rates, outcomes, instructional characteristics, and financial arrangements.

- Uncover the operational and policy drivers of noncredit offerings.

- Provide relevant policy implications.

In addition, the project is convening a learning community of states on data for noncredit education and nondegree credentials. This project lays the groundwork for developing a common definitional language for use in future data collection and analysis efforts with the overarching aim of improving understanding of the value and quality of noncredit programs and nondegree credentials.

# The Context for Noncredit Data Collection

The purpose of this document is to provide a practical guide for states and institutions working to improve their noncredit data infrastructure. This can be done by initiating systematic noncredit data collection for those without a strong tradition in this area, adding data elements to existing data collection, refining what is collected by utilizing more universal operational definitions of data elements, and prioritizing a more complete noncredit dataset.

This guide is a product of the project described above, particularly our work with three state agencies that collect noncredit data that have thus far served as exemplars for noncredit data collection: Iowa, Louisiana, and Virginia. The data and lessons learned from these three states can be explored in greater detail in our individual state and cross-state reports. We find many drivers of noncredit data collection, such as documenting the short-term workforce training mission of community colleges, mandated reporting for state-level funding, and the need for a comprehensive picture of student outcomes.

Our overall efforts to share guidance on noncredit data collection are intended to assist institutions and states to capture more complete noncredit data and work toward a common understanding of this important function within higher education. Our current project contributes to these efforts by proposing a noncredit data taxonomy that outlines key categories and data elements for noncredit datasets, provides operational definitions of data elements, discusses key implications of more robust noncredit data collection, and provides a set of principles to follow when building the noncredit data infrastructure in institutions and states.

# Noncredit Data Taxonomy

To advance understanding of what level of noncredit data collection should occur at the state level, from data systems down to specific data elements, we have created a taxonomy that includes recommended data categories and accompanying operational definitions for specific data elements. Throughout the process of working with states to understand their noncredit data elements and the drivers of data collection, we have found that each state is on a *noncredit data journey*—working continuously to augment and refine the data being collected.

While we will explore specific recommendations in a later section, the following pages outline a basic taxonomy for states and institutions that presents specific data elements with corresponding operational definitions. This guide can serve as a data menu to assist states and institutions in determining what information to collect as they progress on their noncredit data journeys. We note that, while this list is inclusive of all data elements captured by at least one of our first three partner states, other data elements may be captured elsewhere. We expect this taxonomy to evolve over time as we work with additional states.

Our noncredit data taxonomy (Figure 1) includes four primary categories: purpose & design, outcomes, demographics & enrollment, and finance. The first two categories are conceptualized similarly to elements of nondegree credential quality developed by researchers at EERC in 2019:[6] *Purpose & Design* encompasses the focus of the program offering and how it is conveyed to learners, and *Outcomes* consist of the completion, credential attainment, and labor market outcomes of learners. The latter two categories provide important information to understand the nature of these program offerings: *Demographics & Enrollment* addresses the characteristics of learners and the number of learners, and *Finance* captures the funding sources that support noncredit activity. The sections that follow describe these data categories and present operational definitions for potential data elements that correspond with each one.

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6    Van Noy, M., McKay, H., & Michael, S. (2019). Non-degree credential quality: A conceptual framework to guide measurement. Rutgers Education and Employment Research Center.

**Figure 1**
*Noncredit Data Taxonomy*

| Purpose & Design | • Field of Study<br>• Noncredit Type<br>• Program Length<br>• Delivery<br>• Associated Credentials |
| --- | --- |
| Outcomes | • Academic Outcomes<br>• Labor Market Outcomes<br>• Nondegree Credential Outcomes |
| Demographics & Enrollment | • Enrollments<br>• Demographics<br>• Identifiers |
| Finance | • Tuition<br>• State and Federal Funding |

## Purpose & Design

Purpose and design are at the heart of any noncredit educational offering. Unlike credit-based courses and programs that have specific standards set by accreditors and guided by higher education traditions, noncredit programs are afforded a flexibility that allows for purpose and design processes that cater specifically to student and employer needs. Noncredit program offerings are developed based on a set of decisions about content and delivery that can influence the eventual outcomes attained from those program offerings. These decisions cannot be understood without a full accounting of the credentials associated with nondegree programs.

All three of our partner states captured course/program names and aligned most, if not all, noncredit programs to CIP codes.[7] This step, which may be required for categorization and reporting in some states, allows for some level of uniform understanding of course/program content. Additionally, CIP codes can be crosswalked to Career Clusters for additional analysis.[8]

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7     https://nces.ed.gov/ipeds/cipcode/browse.aspx?y=55

8     Advance CTE. (2023). *Perkins IV Crosswalk Table 6: Cluster-Pathway-CIP-SOC-ONET* [*Occupations and Instructional Programs by Clusters/Pathways*]. Careertech.org. https://careertech.org/wp-content/uploads/sites/default/files/Perkins_IV_Crosswalk_Table_6_Clus-

Each state was able to categorize most or all of their noncredit offerings into one of the four noncredit types: open-enrollment occupational training, sponsored occupational (contract) training, pre-college, and personal interest.[9] This categorization enables states to take snapshots of the primary purposes to which noncredit education is being applied and allows cross-state comparisons. One type of noncredit course for which information has been less consistently collected is employer-sponsored occupational (contract) training.

We found greater variability in capturing data on the delivery format of noncredit education. Our partner states track contact hours for nearly all noncredit offerings, often to support state-level initiatives like Iowa's GAP tuition assistance program, which provides support for students enrolled in non-Pell eligible programs. All US states will have an interest in gathering these data if opportunities for short-term Pell grants come to fruition.[10] Partner states also have consistently captured how noncredit is offered (e.g., face-to-face, online), but delivery location (e.g., on campus or at an industry site) is captured less consistently. Since credential qualifications can potentially inform all aspects of the noncredit course or program design, they may be viewed as a crucial link between the purpose of noncredit education and the content and delivery of noncredit offerings.

States appear to be responsive to the need for richer data on noncredit programming. Partner states found that our taxonomical process for data collection and classification assisted them in discovering student service data elements that they had not previously identified. For example, Iowa added a data element to be able to distinguish between self-enrollment occupational training and contract training. It is worth noting here that very little data exist on the availability of student services for those enrolled in noncredit programs despite it being an area of interest.[11] It is possible that research interest will inspire an increase in data collection efforts on the topic in the future.

Data categories, elements, and operational definitions relevant to the purpose and design of noncredit offerings are listed in Table 1.

ter-Pathway-SOC-ONET-CIP.xls; Advance CTE. (2021). *Career Clusters*. Careertech.org. https://careertech.org/career-clusters; Advance CTE. (2023). *Perkins IV Crosswalk Table 1, CIP in Pathways* (*Revised August 2012*) [*Occupations and Instructional Programs by Clusters/Pathways*]. Careertech.org. https://careertech.org/wp-content/uploads/sites/default/files/Perkins_IV_Crosswalk_Table_1_CIP_in_Pathways.xls

9    D'Amico, 2017; D'Amico, M. M., Morgan, G. B., Robertson, S., & Houchins, C. (2014). An exploration of noncredit community college enrollment. *Journal of Continuing Higher Education, 62*(3), 152–62. https://doi.org/10.1080/07377363.2014.953438

10    Dembicki, M. (2023, March 21). Momentum behind short-term Pell. *Community College Daily*. https://www.ccdaily.com/2023/03/momentum-behind-short-term-pell/

11    For example, Education Strategy Group. (2020). *A more unified community college: Strategies and resources to align non-credit and credit programs.* https://edstrategy.org/resource/a-more-unified-community-college/

**Table 1**

*Noncredit Offering Purpose & Design: Data Elements and Definitions*

| Category | Subcategory | Operational Definitions |
|---|---|---|
| Field of Study | Course/Program Name | College- or state-level name for noncredit course |
| | CIP Code | 2, 4, or 6-digit CIP Codes |
| | SOC Code | Standard Occupation Code (SOC) |
| | Career Cluster | Course/program alignment with 16 Career Clusters |
| Noncredit Type[12] | Occupational Training | "Noncredit occupational training is geared toward individuals seeking to gain or improve job skills leading to initial or better employment. These courses are most often available through an open registration process, do not follow a typical semester schedule, and are paid for by individuals through either their own resources or through third-party funding for which they are eligible." |
| | Sponsored Occupational (Contract) Training | "similar to occupational training … arranged by special contract with organizations … can be specific training developed for an organization, or it can lead to some particular industry-based standard … delivered in a way most convenient for the contracting organization … responds directly to local area needs" |
| | Pre-College | "primary courses/programs delivered include ABE, ESL instruction, GED preparation, and even some aspects of developmental studies. These are typically offered at no charge to the student other than testing fees, supplies, etc." |
| | Personal Interest | "Common examples include ballroom dancing, cake decorating, and the like … are demand driven, because students likely self-pay, and often reflect the needs, interests, and priorities of local communities" |
| Program Length and Admission | Number of Courses if Multi-Course Program | Number of noncredit courses required to complete a noncredit program |
| | Total Contact (Clock) Hours | "A period of time consisting of (1) A 50- to 60-minute class, lecture, or recitation in a 60-minute period; (2) A 50- to 60-minute faculty-supervised laboratory, shop training, or internship in a 60-minute period; or (3) Sixty minutes of preparation in a correspondence course"[13]; required contact hours for each single-unit course/program and for multi-course programs |
| | Admission Requirements | Prerequisites, test scores, and/or age required for enrollment |

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12    D'Amico, 2017; D'Amico et al., 2014.

13    IPEDS Glossary 2021–22 for "Clock Hour." Available at https://nces.ed.gov/ipeds/use-the-data/survey-components-glossary/7

| | | |
|---|---|---|
| Delivery | Face-to-Face | Course/program offered face-to-face |
| | Face-to-Face Location | Location where course/program with face-to-face component is offered: on campus, industry site, or other off campus location |
| | Online | Course/program is offered online |
| | Blended | Course/program is offered in blended/hybrid format |
| | Competency-Based | Course/program is competency-based |
| | Work-Based Learning | Work-based learning required for course/program completion |
| | Student Service Availability | Availability of academic advising, career advising, or other nonacademic support for noncredit students enrolled in course/program |
| | Faculty Data | Course/program instructors: permanent faculty who teach both credit and noncredit, permanent faculty who teach noncredit only, adjunct faculty, and/or external/contract faculty |
| Nondegree Credentials Associated with Offerings | Industry Certification | Industry certifications are "awarded by industry certification bodies" and "awarded for third-party, independent competency assessment"[14] |
| | Occupational Licensure | Licenses are "awarded by government agencies" and "awarded for meeting requirements of an occupation"[15] |
| | College-Issued Certificate | Certificates are offered by many entities including education providers such as community colleges. Certificates can be awarded for participation, completion, or achievement, or by assessment.[16] |
| | Microcredentials | "Microcredentials verify, validate, and attest that specific skills and/or competencies have been achieved. They differ from traditional degrees and certificates in that they are generally offered in shorter or more flexible time spans and tend to be more narrowly focused."[17] |
| | Apprenticeship | Noncredit offering is part of the *related instruction* provided for a DOL-registered apprenticeship[18] |

14    Workcred. (2021). *How do credentials differ?* https://workcred.org/Documents/How-Do-Credentials-Differ.pdf

15    Ibid.

16    Ibid.

17    Educause. (2023). *Earn and display your microcredentials.* https://www.educause.edu/microcredentialing/earn-and-display-your-microcredentials

18    Apprenticeship USA. (2015). *A quick-start toolkit: Building registered apprenticeship programs.* US Department of Labor. https://apprenticeshipusa.workforcegps.org/resources/2015/04/20/10/20/A_Quick_Start_Toolkit_Building_Registered_Apprenticeship_Programs

# Outcomes

One of the perennial challenges with higher education data is tracking outcomes; this is particularly true in the case of noncredit education. We separate information on noncredit outcomes into three categories: The first includes academic outcomes related to completion and whether students transition to credit. The second consists of labor market outcomes such as students' employment status and earnings. The third is associated with the nondegree credentials earned by students as a result of the noncredit offering (see Table 2). Discussions of the quality of noncredit education are increasingly prevalent in scholarly and policy circles.[19] Measuring quality and the impacts of noncredit community college education requires information about both student-level outcomes and the nature of credentials awarded or earned and their association with noncredit offerings, which is why nondegree credentials appear in both the *Outcomes* as well as the *Purpose & Design* elements of the taxonomy.

Our discussion of nondegree credentials is informed by the Workcred credentials framework, which includes certificates, industry certifications, degrees, and licenses.[20] Across our three partner states, the availability of nondegree credential data varied widely. Industry certification and college certificate data were not available for all offerings in our partner states. We were able to find, however, that more than half of the occupational training offerings in Iowa and more than nine out of ten in Louisiana were connected with industry certifications, and more than three out of four in both states were associated with college-issued certificates. Meanwhile, industry-awarded certifications were tied to 100 percent of Virginia's FastFoward offerings, which is unsurprising because an industry-recognized credential was a central requirement of the Workforce Credential Grants (WCG) that funded the FastForward program.

Partnerships can be critical to building robust data systems. Oftentimes, data on nondegree credentials will be held by entities other than higher education institutions and agencies. Iowa, for example, partners with state agencies to obtain state licensure data for health care professions and commercial drivers. These data-sharing relationships are built deliberately and over time.

Student outcomes are also important, and, across states, course/program completion data were available for nearly all noncredit offerings, demonstrating institutions' success in collecting data on the outcomes under their direct control. Data on whether noncredit students continue into credit were less available. Investigating pathways between the two types of offerings—credit and noncredit—is critical to discussions of stackable credentials,[21] yet a divide between these "two systems" persists.[22] One of the barriers to tracking noncredit-to-credit transfer has been the use of separate data systems for noncredit and credit-based education, but some

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19    Van Noy et al., 2019; Cruse, L. R., Stiddard, J., Taylor, R., & LaPrad, J. (2023). *The non-degree credential quality imperative.* National Skills Coalition. https://nationalskillscoalition.org/resource/publications/the-non-degree-credential-quality-imperative/

20    Workcred, 2021.

21    Bahr et al., 2022.

22    Buckwalter, V., & Maag, T. (2019). *Closing the credit-noncredit divide: Bridging the gap in postsecondary education to expand opportunity for low-wage working adults.* Jobs for the Future. https://www.luminafoundation.org/wp-content/uploads/2019/11/closing-the-credit-noncredit-divide.pdf

states, Louisiana and Iowa for instance, have endeavored to integrate all of their data. Louisiana has done so through the use of a single student information system at their colleges, while Iowa has created a single state-level community college management information system managed by the Department of Education.

In addition, there is increased emphasis on labor market measures such as earnings and employment. Labor market outcome data historically have been difficult to obtain and match with higher education data, but the Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grants, released by the US Department of Labor in the aftermath of the Great Recession, strongly encouraged outcome measures that included earnings data.[23] Many states have grown their capacity to match data through these grants. Virginia was able to capture employment and earnings data for all of its noncredit offerings, but data were only available on less than one-in-ten occupational offerings in Louisiana. While Iowa had the capability to capture labor market outcome data on all noncredit offerings, they only collected these data on 43 percent of occupational offerings—just enough to satisfy their reporting needs.

Data categories, elements, and operational definitions relevant to noncredit outcomes are listed in Table 2.

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23    Mikelson, K. S., Eyster, L., Durham, C., & Cohen, E. (2017). *TAACCCT goals, design, and evaluation: The Trade Adjustment Assistance Community College and Career Training Grant Program* [*Brief 1*]. Urban Institute. https://www.urban.org/sites/default/files/publication/89321/2017.02.08_taaccct_brief_1_final_v2_1.pdf

**Table 2**
*Noncredit Outcome Data Elements and Definition*

| Category | Subcategory | Operational Definitions |
|---|---|---|
| Academic Outcomes | Noncredit-to-Credit | Data to determine if noncredit students enroll in credit courses/programs |
| | Completion Data | Course/program completion data and type of available data (pass/fail, grades, complete/not complete, credential earned) |
| Labor Market Outcomes | Pre-Enrollment Employment | Pre-enrollment employment |
| | Post-Enrollment Employment | Post-enrollment employment |
| | Pre-Enrollment Salary/Wage | Pre-enrollment salary/wage |
| | Post-Employment Salary/Wage | Post-enrollment salary/wage |
| Nondegree Credential Outcomes | Industry Certification | Data to determine if noncredit students attain industry certifications "awarded by industry certification bodies" and "awarded for third-party, independent competency assessment"[24] |
| | Occupational Licensure | Data to determine if noncredit students attain licenses "awarded by government agencies" and "awarded for meeting requirements of an occupation"[25] |
| | College-Issued Certificate | Data to determine if noncredit students attain certificates offered by many entities including education providers such as community colleges. Certificates can be awarded for participation, completion, achievement, or by assessment.[26] |
| | Microcredentials | Data to determine if noncredit students attain "microcredentials verify, validate, and attest that specific skills and/or competencies have been achieved. They differ from traditional degrees and certificates in that they are generally offered in shorter or more flexible time spans and tend to be more narrowly focused."[27] |
| | Apprenticeship | Data to determine if noncredit students attain DOL-registered apprenticeship credential[28] |

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24    Workcred, 2021.

25    Ibid.

26    Ibid.

27    Educause, 2023.

28    Apprenticeship USA, 2015.

# Demographics and Enrollment

One of the potential drivers of noncredit data is to ensure that the entire mission of noncredit education can be explained more completely, and part of that explanatory process involves recognizing that noncredit students are, indeed, students.

Student-level data are foundational for noncredit datasets, and each data element has a particular purpose. Duplicated headcount, for example, shows total course/program enrollments. Unduplicated headcount, on the other hand, shows the number of unique individuals served, but it is more difficult to collect because it requires verifiable student identifiers to be accurate. Demographic and identity data (age, sex/gender, race/ethnicity) can undergird analyses of differential access and outcomes across noncredit offerings and noncredit types. Social Security Number (SSN) is another key data element, one that typically is necessary to match with Unemployment Insurance (UI) data for earnings and employment data. Finally, names and birthdates are important not only for institutional tracking but also because they can be used to understand students' trajectories through matches with the National Student Clearinghouse.[29]

These data permit the exploration of questions such as the following: Who has access to noncredit offerings connected with credentials and licensure? Who enrolls in pre-college offerings? Who enrolls in contract training paid for by employers? Who experiences the greatest labor market gains among noncredit enrollees?

If the recent proposal by Integrated Postsecondary Education Data System (IPEDS) to collect noncredit data were to have been enacted,[30] enrollment and demographic data likely would be among the first data elements to be required for eligible noncredit students. For now, however, collecting noncredit demographic/identity information and SSNs remain a challenge because unless this information is mandated by state or federal reporting (with all necessary opportunities for students to decline to answer), colleges may not ask for it. In addition, training for employers may occur through a contract arrangement, and there may be questions as to why a college would need to receive an employee's SSN. As an alternative, some institutions may assign institutional identifiers to students that can vary by course. When multiple identifiers are assigned to a single student, the difficult process of seeking unduplicated headcount figures becomes even more complicated.

Our three partner states regularly collected student identifiers for many, if not all, of their noncredit offerings. However, lessons learned from each state revealed that individual-level student data are often incomplete. For example, we found that "unknown/not specified" was the largest race/ethnicity category for occupational offerings in all three states.

29    National Student Clearinghouse. (2022). *StudentTracker*® for colleges & universities user manual. https://www.studentclearinghouse.org/colleges/studenttracker/faqs/

30    National Center for Education Statistics. (2022). Integrated postsecondary education data system (IPEDS) 2022–2023 through 2024–2025: Supporting statement part A (OMB No. 1850-0582 v.30). https://downloads.regulations.gov/ED-2022-SCC-0026-0002/attachment_1.pdf

**Table 3**

*Noncredit Student and Enrollment Data Elements and Definitions*

| Category | Subcategory | Operational Definitions |
|---|---|---|
| Enrollment and Identifiers | Headcount | Duplicated and unduplicated enrollment by course/program |
| | Race/Ethnicity | Student race/ethnicity |
| | Age | Student age |
| | Sex/Gender | Student sex/gender |
| | Social Security Number | SSNs of enrolled students |
| | Institutional Identification Number | Institutional IDs assigned to enrolled students |
| | Names | Student names |
| | Birth Dates | Student birth dates |

## Finance

Prior literature has shown that the collection of noncredit data is closely associated with state-level funding.[31] Our work with the three partner states confirmed that funding, or the promise of funding, is a key driver of noncredit data collection; however, data on noncredit funding by course/program were not always collected, nor were they consistent across states. For example, state formula funding was far more prevalent in Iowa than in other states; nearly all of their occupational training (99%) and most of their pre-college offerings (87%) received funding, whereas less than 1 percent of those in Louisiana were funded. Virginia made significant funding available for noncredit workforce training leading to an industry-recognized credential in a high demand field defined by the state through a program called FastForward.[32] The state funding, named the Workforce Credential Grant, is a pay-for-performance arrangement whereby the specific amount of funding received by a student or by an institution depends on student program completion and credential attainment. Virginia's funding also includes a lump-sum appropriation to support operational costs. In short, available data on noncredit courses/programs and the students who enroll in them are, to some extent, dependent on noncredit funding mechanisms; thus, data are not typically available on offerings that receive no state support.

The items included in Table 4, which are based on our findings from three states, are intended to cover a variety of potential data elements. While state reimbursement is often thought to be the gold standard for nonprofit funding, other funding streams included the US Department of Labor Workforce Innovation and Opportunity Act, economic development incentives, and special state and federal grants. We found varied information on tuition figures maintained at the state level, with Iowa having no data, Louisiana having data on most of their offerings, and Virginia having data on all of their noncredit course and programs.

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31    D'Amico, M. M., Morgan, G. B., Katsinas, S. G., Adair, J. L., & Miller, M. T. (2017). A national analysis of noncredit community college education: Enrollment, funding, accountability, and contextual issues. *Community College Journal of Research and Practice, 41*(4-5), 288-302. doi:10.1080/10668926.2016.1251349; Van Noy, M., Jacobs, J., Korey, S., Bailey, T., & Hughes, K. L. (2008). *Noncredit enrollment in workforce education: State policies and community college practices.* AACC. http://www.aacc.nche.edu

32    FastForward. *In-person and online training programs to kick-start your career.* Virginia's Community Colleges. https://fastforwardva.org/

**Table 4**

*Noncredit Finance Data Elements and Definitions*

| Category | Subcategory | Operational Definitions |
|---|---|---|
| Finance | Course/Program Tuition | Tuition for each course/program |
| | State Reimbursement | Course/program eligible for state funding through formula, enrollment, or similar funding |
| | WIOA-Eligible Training Provider by Course/Program | Course/program eligible for Workforce Innovation and Opportunity Act (WIOA) program funding. WIOA is a federally funded program "designed to help job seekers access employment, education, training, and support services to succeed in the labor market and to match employers with the skilled workers they need to compete in a global economy"[33] |
| | Economic Development Incentive | Course/program offered as an economic development incentive for new and/or expanding businesses |
| | Other Federal Funds | Course/program eligible for federal funding |
| | Other State Funds | Course/program eligible for other state funding |

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[33]  US Department of Labor. (n.d.). *Workforce* Innovation and Opportunity Act. https://www.dol.gov/agencies/eta/wioa

# Engaging in the Noncredit Data Journey
## (How Institutions and States Should Proceed)

## Harnessing Motivations for Using Noncredit Data

Engaging in robust noncredit data collection takes significant resources and commitment at all levels to execute well. To that end, identifying and harnessing the motivation for having noncredit data is important for driving support. Based on our three partner states as well as other states around the country engaged in our learning community, we observed several important motivations for the use of noncredit data:

- **Mandatory Reporting** – Prior research has shown that noncredit data reporting is not a universal experience across states,[34] and there is a strong relationship between mandated reporting and funding at the state level. Hence, mandatory reporting has been and continues to be a key driver of noncredit data collection.

- **Pell Grant Implications** – As congressional committees consider proposals to create short-term Pell grants that will allow the funding to be used for noncredit programs with as few as 150 contact hours, having high-quality data is critical to both documenting outcomes of such programs to encourage passage of such provisions as well as preparing for required reporting if/when new guidelines are implemented.

- **Making the Case** – Partner states in our project have conveyed repeatedly how critical noncredit outcome data are in their efforts to advocate for the resources that make occupational programs readily available to meet students' needs while also satisfying employers' needs for a ready workforce. Additionally, high-quality data are helpful when communicating with business and industry about the value to be gained by partnering with colleges to meet training needs.

- **Noncredit-to-Credit Transitions** – While noncredit-to-credit transitions can and do occur, prior research[35] has not shown compelling evidence of noncredit serving as a systematic feeder to credit education.[36] However, insufficient collection of unique student identifiers such as SSNs have hindered efforts to match noncredit completers with credit enrollee data. Thus, any institution or state system that aims to improve noncredit-to-credit articulation, portability of credentials earned through noncredit education, and stackable credential opportunities should consider the collection of student identification data to be a fundamental step toward that end.

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34  D'Amico et al., 2017; Milam, J. (2005). The role of noncredit courses in serving nontraditional learners. *New Directions for Higher Education, 129*, 55–68.; Office of Career, Technical, and Adult Education. (2014). *Availability of data on noncredit education and post-secondary certifications: An analysis of selected state-level data systems.* US Department of Education. https://files.eric.ed.gov/fulltext/ED555237.pdf; Van Noy et al., 2008.

35  Xu, D., & Ran, F. X. (2020). Noncredit education in community college: Students, course enrollments, and academic outcomes. *Community College Review, 48*(1), 77–101. https://journals.sagepub.com/doi/pdf/10.1177/0091552119876039

36  Bahr et al., 2022.

- **Measuring Quality** – The case for noncredit education hinges on the ability to demonstrate quality. Capturing good data on credential design, competencies, and outcomes of value, as recommended by the EERC,[37] is an essential part of the discourse on the quality of noncredit education, which is why a focus on high-quality educational programs can be a driver for noncredit data collection.

## Promoting Data Interconnectivity

To bring together this wide range of data elements requires work over time to build interconnected systems and the partnerships that support them. At the core of effective data management lies the commitment of individual institutions to collect complete data on noncredit offerings, outcomes, students, and funding. We should not discount, however, the pivotal role of state systems and state-level coordination of noncredit data collection across their various institutions. Often, it is at the state level where decisions are made regarding which data elements are collected and the operational definitions that guide that data collection. As we observed among our three state partners in this project, when noncredit data collection is not mandatory or highly encouraged, those data often are not collected at all or are collected incompletely.

External data partnerships are essential to the measurement of outcomes by postsecondary systems and institutions. These partnerships may occur with state departments of workforce or commerce to match enrollment/completion data with labor market outcomes, or with state agencies holding licensure data in areas like health care. We describe in more detail the partnerships that supported the work of our three states in our cross-state report. A key lesson is that partnerships are built over time as one part of the noncredit data journey outlined in the final section of this report.

The data applications we have outlined in this report requires us to recognize the interconnectivity of noncredit data, which includes institutional commitment, state structure and prioritization, willing partners, and, eventually, federal efforts. Just as state mandates can be a driver of high-quality data collection, the potential for noncredit data collection at the federal level through IPEDS could help to ensure consistent data collection nationwide. Noncredit data from institutions, guided by states and the many entities involved in compiling these data, provide an important building block toward the prospect of national data collection.

## Proceeding Step by Step: The Noncredit Data Journey

By synthesizing the lessons learned from our research, it is possible to create a roadmap for how to move forward with building a noncredit infrastructure. The journey to enhance noncredit data in institutions and states commences with a dedicated commitment to its improvement. Where such commitment exists, it is possible to move forward in this journey guided by the following key principles:

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37   Van Noy et al., 2019; Van Noy, M., Hughes, K., & Bjorn, G. (2023). *Its own standard: Approaches to quality in community college noncredit workforce education.* Rutgers Education and Employment Research Center. https://smlr.rutgers.edu/sites/default/files/Documents/Centers/EERC/Its%20Own%20Standard%20-%20Approaches%20to%20Quality%20Final%20Formatted%206.14.23.pdf

*Step 1: Take an inventory of current noncredit data elements and the data being collected.*

States and institutions that have not yet systematically collected noncredit data should proceed directly to Step 2. If your state has already begun to collect some noncredit data, however, begin by comparing the data elements you currently collect with the taxonomy that we presented earlier. Then, examine your data to see whether they are complete or if there are significant gaps. Additionally, determine if operational definitions are in place to ensure consistent data collection at the institutional and program levels.

*Step 2: Begin with essentials and build over time.*

Recognizing that data elements can be incrementally added over time, determine key priorities for noncredit data collection and begin with high-priority data elements. We encourage you to consider the following:

- The proposed noncredit data taxonomy can help you determine which data elements aligned with *Purpose & Design, Outcomes, Demographics & Enrollment,* and *Finance* fulfill your reporting requirements (if any) and will help you evaluate the success of students and programs.
- If IPEDS ultimately decides to collect noncredit data, it is likely that headcount enrollments with demographic information (e.g., age, sex/gender, race/ethnicity) will be a central piece of that data collection. In addition, demographics are helpful for understanding equitable access and student outcomes.
- Contact hours per noncredit offering will be important to determine if courses and programs meet thresholds for different types of state and (possibly) federal funding in the future.
- Course/program names, whether they follow unique institutional standards or state-level standards, are important for tracking student and labor market outcomes. Ideally, courses/programs will be aligned with the widely recognized CIP codes.

*Step 3:  Ensure that your mission or multiple missions are captured and differentiated.*

Each state and, often, each institution within them leverage noncredit offerings to meet the particular needs of state and local service areas. Thus, we have found that the mix of noncredit offerings varies significantly across states. It may be beneficial to categorize all noncredit offerings by noncredit types (e.g., open-enrollment occupational, personal interest, contract training) to differentiate and track contributions to the multiple missions served through noncredit education.

*Step 4: Choose a data platform that allows for interconnectivity.*

Noncredit data platforms vary across institutions and across states. Some are as informal as spreadsheets of enrollments, and others are formally integrated into a single, unified credit-and-noncredit student information system, such as we see in Louisiana. Consistent systems across colleges in a state will greatly aid uniformity and ease of reporting, and systems that integrate credit and noncredit students will allow more seamless and more complete analyses of how students navigate higher education.

*Step 5: Build partnerships over time for credentials and labor market outcomes.*

Students' noncredit outcomes, such as hours enrolled, completions, and college certificates, can be captured within institutions and reported to the state. Additional data on industry-recognized credentials, licensure, and labor market outcomes, however, are typically secured through data-sharing partnerships with external entities. To obtain these data, higher education systems must partner with state agencies that hold labor market information and state licensure information, as well as industry groups that award industry credentials. When in doubt, leverage existing relationships to begin exploring the potential to match and obtain the necessary data.

*Step 6: Develop organizational systems that allow for growth and refinement.*

We call this process the *noncredit data journey* because it is not finished in a month or in a year. Our first three partner states with robust noncredit data (Iowa, Louisiana, and Virginia) are continuing to invest time and effort into improving their data, informed in part by the cross-state meetings we have held throughout this project. Our hope is that the taxonomy and this guide will help institutions and systems set a multi-year agenda toward building a high-quality noncredit data infrastructure that is both broad and complete enough to respond to current funding and research interests and flexible enough to respond to the needs of the future.

# About

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Rutgers' Education and Employment Research Center (EERC) is housed within the School of Management and Labor Relations. EERC conducts research and evaluation on programs and policies at the intersection of education and employment. Our work strives to improve policy and practice so that institutions may provide educational programs and pathways that ensure individuals obtain the education needed for success in the workplace, and employers have a skilled workforce to meet their human resource needs. For more information on our mission and current research, visit smlr.rutgers.edu/eerc.

**EERC Areas of Focus**

| Community College Innovation | Student Choices and Pathways | STEM and Technician Education | Noncredit Education and Non-Degree Credentials | Education and Labor Market Connections |

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Rutgers' School of Management and Labor Relations (SMLR) is the leading source of expertise on the world of work, building effective and sustainable organizations, and the changing employment relationship. The school is comprised of two departments—one focused on all aspects of strategic human resource management and the other dedicated to the social science specialties related to labor studies and employment relations. In addition, SMLR provides many continuing education and certificate programs taught by world-class researchers and expert practitioners. For more information, visit smlr.rutgers.edu.

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The U.S. National Science Foundation (NSF) is an independent federal agency that supports fundamental research and education across all fields of science and engineering. In Fiscal Year 2022, its budget is $8.8 billion. NSF funds research in all 50 states through grants to nearly 2,000 colleges, universities and other institutions. Each year, NSF receives more than 50,000 competitive proposals for funding and makes about 12,000 new funding awards. The National Center for Science and Engineering Statistics (NCSES) is a principal statistical agency located within the National Science Foundation (NSF). NCSES was re-authorized from the original mandate in the National Science Foundation Act of 1950 by Section 505 of the America COMPETES Reauthorization Act of 2010.

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