**Guidelines for Linking Data**

Insights Gained from Linking Data: Certifications are an important pathway through which individuals can demonstrate their skills and competencies. Yet, we do not have a lot of research about the value of certifications. By linking the individual data of certified persons held by certification bodies, the educational attainment data from the National Student Clearinghouse (the Clearinghouse), and the aggregate labor-market outcomes from the U.S. Census Bureau (Census), we can gain insights about the return on investment for an individual who earns a certification and gain a better understanding of career and credential pathways.

Data Requirements: The ability to link data is dependent on having some common data elements that can be matched. This requires certification bodies to collect specific information about the certified person and the certification itself. The data elements are broken down into three categories: required minimum data, additional data that would increase the number of matches, and optional data that would provide the certification bodies with more robust reports from the Clearinghouse. The three data categories are defined in more detail below.

*Required Minimum Data:* This is the minimum data that certification bodies are required to collect in order to link their data with the data from the Clearinghouse and Census. For example, it is important that the first and last name field get as close to a legal or full name as possible. The Clearinghouse has the ability to effectively match data around common names and nicknames (e.g., Nick for Nicholas), but matching improves if full or legal names are collected by the certification body. In the type fields, the credentialing organization type would be filled in with credentialing body and the credential type would be listed as certification. The credential purpose field includes general education, career preparation, or preparation for further education or credentialing.

*Additional Data:* Date of birth is a critical data element for matching, and is recommended that certification bodies collect this as a required data element even though it is not included in that category. Another useful data element to increase the number of matches is institution name. Some certification bodies may track the name of the institution that the certification holder attended, especially if there is an education prerequisite to sit for the certification exam. If the institution name is collected, it helps the Clearinghouse match the certification data to the education record that is maintained by the Clearinghouse.

*Optional Data:* Gender, race/ethnicity, and military status are optional data elements that can provide additional insights for certification bodies. For example, if certification bodies collect these data elements, the certification bodies would receive reports with aggregate demographic information, such as average wages, average wages by credential pathway progression, and degree attainment. This data can help the certification community answer a critical national question, "Do certifications help close racial inequality in the labor market and aid economic mobility?”

The following chart can be used to help certification bodies determine what data they currently collect and what data would need to be collected in order to participate in these data-linking efforts.

|  |  |  |  |
| --- | --- | --- | --- |
| Required Minimum Data | Additional Data that Supports Finding More Matches | Optional Data that Provides Additional Insights on Reporting | Data Elements Collected by Your Certification Body  (check all that apply) |
| First Name |  |  |  |
| Last Name |  |  |  |
| Credential Organization Type |  |  |  |
| Credential Name |  |  |  |
| Credential Type |  |  |  |
| Credential Purpose |  |  |  |
| Credential Award Date |  |  |  |
| Credential Expiration Date |  |  |  |
|  | Date of Birth |  |  |
|  | Name of Educational Institution |  |  |
|  | Middle Name or Middle Initial |  |  |
|  | Previous First Name |  |  |
|  | Previous Last Name |  |  |
|  | Address |  |  |
|  | Zip Code |  |  |
|  | Cell Phone |  |  |
|  | Email Address |  |  |
|  |  | Race/Ethnicity |  |
|  |  | Gender |  |
|  |  | Military Status |  |