Align Module 3: Uploading a Data Dictionary

This tutorial will explain how to upload a data dictionary to your map in the CEDS Align Tool. This feature requires that you have already created a map. If you need assistance creating a user account or a map, please view *Getting Started with the Tools* and *Align Module 1: Creating a Map in the Align Tool.*

There are two ways to add elements to your map. You can either upload your data dictionary or you can enter elements individually. This tutorial will explain the steps for uploading a data dictionary. If you would like to enter elements individually, please review *Align Module 4: Aligning Elements to CEDS*.

Downloading and Completing the Excel Template (Topic 1)

This topic will explain how to download the Excel template from the Align tool and complete it with your data dictionary's information.

To begin, log in to the CEDS Website and choose *Tools>Align* from the green menu bar at the top. You are taken to the Align main menu. Click *MANAGE Maps* to see a list of all maps you have created or to which you are assigned. Select the name of the map you want. To upload your data dictionary as a whole, select *Data Elements* then *Upload Data Dictionary* in the green menu on the left-hand side of the *Manage Maps* screen. You can upload your data dictionary as an Excel or .csv file. When formatting your file for upload, please make sure that the first row of your file contains the column names. All filtering must be turned off and formulas removed from the column headers. If you are uploading an Excel file, the worksheet (or tab) name cannot contain any spaces or hyphens. For your convenience, an Excel template, which includes instructions on how to format your data for upload, is provided.

To download the Excel template, simply click *Download Excel Template* in the middle of the screen and save the file to your computer. When you open the Excel Template, you will notice that it contains several tabs. The first tab contains detailed instructions for how to complete the template.

The second tab, labeled *Metadata*, is where you will actually enter information. The column headings highlighted in yellow are for entering information about your data dictionary; the column headings highlighted in green are where you can align your elements to CEDS. You should note that it is not necessary to align the elements in this template; you can upload your data dictionary and then complete the CEDS alignment directly in the web tool. However, you do have the option to align in the template if you choose.

To get started, enter as much information as you have available for each of your data elements. In this tutorial, we will use *Gender* as an example.

The first information to enter is the *System Name, Database Name, Table Name* and *Element Name*. Your data system may or may not have all of these. While the only required field is the *Element Name*, it is useful to enter one or more of the others as this will assist users in learning from your map. The *System, Database*, and *Table* names may be the common names used rather than the actual names. For

this example, the System Name might be Community Colleges. The Database Name is Student. The table is Demographics and the Element Name is Gender.

You can use the *Element ID* column to indicate a unique identifier you might use for this element. The *Element Definition* box is where you enter the definition of the element. *Data Type* is for specifying what type of data is collected. Some examples include varchar, date/time, alphanumeric and numeric. *Length* is the length of the data field.

If the element contains a code set, you will enter that information in the next two columns: the code itself goes in the *Valid Values/Option Set* column, while the code description or definition goes in the column *Option Description*. It is important to note that only one code may be entered per row. Our example element of *Gender* might have two codes, M for Male and F for Female. Therefore, we will enter M in the first column and *Male* in the second. Then in the next row, enter F in the first column and *Female* in the second. You must copy all of the other information about the element down from the first row for that element. Do this for each code the element contains. In our example, we will have two rows with repeated element information all the way up to code set. Then, we specify the two codes and their meanings. If you had an element with 15 codes, you would repeat the initial element information on fifteen different rows, once for each code. If an element has a very large number of codes, you might consider making a note in the *Valid Values* and *Code Description* columns indicating where the full code set may be found. In this case, you would only need one row for that element.

Note that the size, font, and color of the text you enter in the template do not matter; feel free to highlight certain rows as you work if needed. You may not, however, have any filters on any of the columns when you upload. The file will not import correctly if you do.

Align Elements in the Template (Topic 2)

This section will explain how to align your data elements to CEDS within the Excel template prior to uploading. If you do not wish to align your data dictionary in the template, you can save the completed template and upload it to the tool, as described in the next topic. However, if you want to align your elements to CEDS prior to uploading, you will use the last four columns on the *Metadata Tab*.

First, go to the tab labeled *CEDS_Element_Listing*. Here you will find a list of every element currently in CEDS, organized by domain, entity, and category. The first column lists the CEDS Element Data Model ID for each element. Find the relevant CEDS element and copy the data model ID to your clipboard. Now, return to the *Metadata* tab and paste the CEDS element ID in the column labeled *CEDS Element Data Model ID*. Use the next two columns to specify the nature of the alignment: the column labeled *Definitions Response ID* is where you indicate how your data element's definition aligns with the CEDS element definition, and the column labeled *Option Set Response ID* is where you can do the same thing for the elements' code sets, if applicable. These columns use drop-down menus containing codes one through six, each of which has a different meaning. You can find the meanings of these codes on the tab labeled *Alignment Codes*. Select the appropriate code in each menu. The final column is Element Not Found in CEDS. If your data dictionary has an element that you cannot locate in CEDS, put an X in this column. The X can be lower case or upper case. Be sure to save your work before proceeding.

Uploading the Completed Template (Topic 3)

We will now explain how to upload the completed template.

To upload the completed file, you will need to login to the CEDS website and select *Tools>Align* from the green menu bar at the top of the screen. Then click *Manage Maps* and find the map you are working on. Click on *Upload Data Dictionary* in the green menu bar on the left side of the screen. To upload the file, click *Upload a File*. You will then locate your file in your computer's directory. If your file has multiple worksheets, you will need to select the appropriate one. Since we entered all the information on the *Metadata* tab, we select that option. Now click *Select*. The system reads the file and displays all of the possible columns for import. You need to match the column headers in your file with the fields in the Align Tool. Notice that the tool has highlighted columns with matching names to make this process easier. As each column is matched, the column name is removed from the drop down list. If you do not have a corresponding column, skip to the next field. Once you have matched all of the columns, select *Import Data*. You will receive a pop-up box indicating how many rows were imported. This indicates that your file has now been uploaded to your map. Select *OK* and you will return to the *Manage Map* screen where you can manage and administer the map.

This completes *Align Module 3: Uploading a Data Dictionary*. For information on how to create a map, manage your maps, align elements to CEDS or create reports, please view the other Align tutorials available on the CEDS website.