

Checklist for Designing a Data Collection Instrument

If existing data are not available to answer the data collection questions, it may be necessary to design a data collection instrument. An effective design produces accurate and useful information, promotes timely and efficient data collection, and provides methods for resolving both expected and unexpected problems that may arise during data collection and analysis.

The following checklist provides best practices for the design of data collection instruments:

- ✓ Provide clear and sufficient instructions for completing the data collection instrument (for example, survey, data submission tool, or report). Provide detailed instructions for individual items when necessary.
- ✓ Make definitions of data elements consistent with standard definitions for those data elements, such as those provided by the Common Education Data Standards (CEDS), when possible.
- ✓ Provide definitions for any words in the data collection instrument whose meaning may be ambiguous.
- ✓ Examine each item in the data collection instrument to make sure that the information is needed for data collection.
- ✓ Make sure that the purpose of each item on the instrument is understandable to the data provider.
- ✓ Explain to data providers why questions are included that have no apparent connection to the topic of the data collection. (For example, background questions might be asked to identify connections between people's backgrounds and their views on teacher competency testing.)
- ✓ Ensure that the data providers can provide the requested information.
- ✓ Minimize the amount of time data providers will need to complete the data collection form.
- ✓ Wherever possible, use units of measurement that are familiar to the data providers.
- ✓ Use standard language, and avoid jargon and abbreviations. Make sure that the technical terms used are appropriate to the data providers. Review questions for clarity. Keep questions short and simple.
- ✓ Design the item sequence of the data collection instrument to increase the data provider's ability to complete the data collection. Keep topic-related questions together and provide transitions between topics. Ensure that the item sequence does not influence responses to later questions.
- ✓ Make sure that the items on the data collection instrument place the least possible burden on the data providers. Find out how data providers usually keep or process the information being requested.
- ✓ Make sure that items do not combine two separate ideas inappropriately (for example, double-barreled questions) and that they ask for a single response.

Common Education Data Standards (CEDS)

The CEDS initiative is a national collaborative effort to develop voluntary, common data standards for a key set of education data elements to streamline the exchange, comparison, and understanding of data within and across P-20W institutions and sectors. For more information, see <https://ceds.ed.gov>.

For more best practices and additional checklists on data collection and reporting, see the *Forum Guide to Strategies for Education Data Collection and Reporting (SEDCAR)* (https://nces.ed.gov/forum/pub_2021013.asp).