# Activity 4: Data Collection Tools

| Tool | Description | Pros | Cons |
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| Interviews | • Oral question and answer session between an evaluator and a single individual<br>• Can flow naturally from spontaneous questions (unstructured), follow a rigid set of questions (structured), or include a combination (semi-structured)<br>• Can be in person, over the phone, or by video conference | • Can yield detailed, in-depth information<br>• Allows evaluator to ask clarifying questions<br>• Allows evaluator to explore new topics as they come up | • Self-reported<br>• Difficult to collect data from a large number of people<br>• Time consuming to collect and analyze<br>• Expensive |
| Focus groups | • Group interview between an evaluator(s) and a group of people<br>• Can be semi-structured or unstructured<br>• Can be in person, over the phone, or by video conference | • Shows interactions among individuals<br>• Could make some participants more comfortable than individual interviews<br>• Allows evaluator to explore new topics as they come up<br>• Efficient<br>• Relatively cost effective | • Can't ensure confidentiality for focus group participants<br>• Group dynamics can negatively influence information that is shared<br>• Difficult over the phone or by video<br>• Difficult to transcribe<br>• Self-reported |
| Observations | • Evaluator(s) observe a particular setting, including what is happening between people, how people interact with materials in the setting, etc.<br>• Can be unstructured (e.g., a running record), semi-structured, or structured by a formal protocol or validated observation tool | • Shows how people behave and interact with others, how they apply new knowledge or skills, how they respond to an activity or curriculum, etc. | • May require extensive evaluator training and certifications<br>• May require multiple evaluators and thus becomes expensive<br>• May require a lot of |

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| | • Can be live and in-person, or from video or audio recordings | • Minimizes "asks" of evaluation participants | time to analyze and interpret data<br>• Unclear how well observations capture what usually happens in the setting |
| Surveys | • Written questionnaire with open- and/or close-ended items<br>• Often one-shot (cross-sectional) but can also be longitudinal (given to the same people two or more times)<br>• For maximum efficiency, can be done online or using scannable forms | • Participants can be anonymous<br>• Efficient way to gather the same information from many people<br>• Relatively easy to get quantitative data by using response scales (e.g., the Likert Strongly Agree to Strongly Disagree Scale)<br>• Efficient way to get pre/post-comparisons or change over time | • Difficult to design questions that are easily understood but not leading<br>• Sometimes difficult to get surveys to the right people<br>• Challenging to persuade people to complete surveys<br>• May be hard for people with low levels of literacy or formal schooling to complete<br>• Online may not be accessible to everyone<br>• Self-reported |
| Tests | • Formal, systematic procedures for collecting information about people's characteristics, such as their cognitive or emotional states<br>• Can be given online, via computer, or with paper and pencil<br>• Can use standardized items to make comparisons across huge numbers of people | • Can show how people apply new knowledge or skills<br>• Participants can be anonymous<br>• Efficient way to gather the same information | • Very difficult to design reliable and valid tests<br>• Very difficult to find tests that work for non-academic things<br>• Can be expensive<br>• Can be especially |

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| | • Can use different versions of the same test over time (e.g., different test questions about the same concept for a pre/post-test) | from many people<br>• Efficient way to get pre/post-comparisons | stressful for participants |
| Rubrics or protocols for reviewing documents or artifacts | • Formal, systematic procedures for reviewing and interpreting data that aren't standardized (e.g., essays, journal entries, photographs)<br>• Can be repeated over time with new artifacts | • Can show how people apply new knowledge or skills<br>• Participants can be anonymous<br>• Can show pre/post-comparisons or change over time | • May require extensive evaluator training and certifications<br>• May require multiple evaluators<br>• May require a lot of time to analyze and interpret |
| Extant data | • Any data that already exist out in the world and are accessible for use<br>• Includes public records, government data sets, etc.<br>• Can include cross-sectional or longitudinal data | • Easy to access<br>• Usually free<br>• Usually efficient for evaluators to work with<br>• Can show pre/post-comparisons or change over time<br>• Participants are usually anonymous | • Data collected may or may not be a good fit for your evaluation questions<br>• May not be possible to match extant data to specific people, such as program participants<br>• May be self-reported |

Adapted from:

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: SAGE.

Gay, L. R., Mills, G. E., & Airasian, P. (2009). *Educational research: Competencies for analysis and applications* (9th ed.). Upper Saddle River, NJ: Merrill.