**Learning Outcomes Assessment Methods**

**What method should you use to assess a learning outcome?**

* Learning Outcomes - assess how a participant will think, feel, or act differently as a result of your program or service.
	+ Overall, your assessment method should be a reflection of the learning you are seeking to assess. Consider Bloom’s taxonomy: different levels of thinking require different methods to assess, with more advanced thinking necessitating more advanced assessment.
	+ For example, an assessment at the analysis and evaluation levels would be more in-depth and require more complex assessment methods such as rubrics, content analysis, or interviews/focus groups; compared to an assessment at the remembering or understanding levels, which would be less complex and can be assessed using methods such as surveys and quizzes.
	+ Consider the following **common methods for assessing learning outcomes**: survey/quiz, rubric, portfolio, and/or one-minute assessment.

**Do you need direct assessment or indirect assessment?**

* Direct Methods- any process employed to gather data which requires students to display their knowledge, behavior, or thought processes.
	+ E.g.: Where on campus would you go, or who would you consult with if you had questions about which courses to register for in the fall?
	+ Direct measures of learning are usually accomplished through assessment methods such as “quiz” type survey, rubric, document analysis, observation, portfolio, visual methods, one-minute assessment, and/or case study.
* Indirect Methods- any process employed to gather data which asks students to reflect upon their knowledge, behaviors, or thought processes (including feelings such as ‘satisfaction’).
	+ E.g.: I know where to go on campus if I have questions about which courses to register for in the fall. (strongly agree, moderately agree, neither agree nor disagree, moderately disagree, strongly disagree)
	+ Indirect measures of learning are usually accomplished through assessment methods such as survey, focus group, document analysis, and/or one-minute assessment.

**What are the advantages and disadvantages of the different assessment methods?**

|  |
| --- |
| **Survey:** Asking open and closed-ended questions on a questionnaire type format. A survey is a self-report of anything, including knowledge, opinions, actions, and observations. |
| **Strengths:*** Include large numbers
* Relatively fast and easy to collect data
* Lots of resources available
* Requires minimal resources
* Fast to analyze
* Good for surface level or basic data
 | **Challenges:*** Survey fatigue and response rates
* Non-response
* Limited in type of questions asked
* Lacks depth in data
* Designing questions carefully and analyzing data properly
 |
| Resources needed: * What is the best administration method (paper, web, mobile, etc.)?
* How will you draft and review the questions?
* Do you want to offer incentives for completing the survey?
* Do you have a data analysis plan? Do you need to use comparative tools?
 |

|  |
| --- |
| **Rubric:** A scorecard used to rate student learning either through observation or artifacts. Includes a scale, key dimensions, and descriptions of each dimension on the scale. |
| **Strengths:*** Clearly states standards and expectations
* Can be used for a learning and assessment tool
* Provides for consistency in rating/grading
* Participant can use rubric to gauge his/her own performance
* Provides both individual and program-level feedback
* Provides both numbers and descriptive information
 | **Challenges:*** Developing a rubric takes time
* Training of raters is needed
* Limited in use for just student learning outcomes
* Beware of inter-rater and intra-rater reliability
* Depending on technology resources, combining aggregate data can take time
 |
| Resources needed: * How will you design and test your rubric?
* How will you train raters?
* What learning opportunities do you have to observe? Or, what collection mechanism for artifacts?
 |

|  |
| --- |
| **Focus Groups or Interview:** Asking face to face open-ended questions in a group or one-on-one setting. Questions are meant to be a discussion. |
| **Strengths:*** Helps to understand perceptions, beliefs, thought processes
* Small number of participants
* Focus groups encourage group interaction and building upon ideas
* Responsive in nature
* Relatively low costs involved
 | **Challenges:*** Getting participants (think of time/places)
* Data collection and analysis takes time
* Data is as good as the facilitator
* Beware of bias in analysis reporting
* Meant to tell story, may not help if numbers are needed
* Data is not meant to be generalizable
 |
| Resources needed: * How will you develop questions and protocols?
* Who is the best facilitator of the interview or focus group? What level of objectivity does he/she need and what knowledge of the subject/situation?
* How will notes be taken? Do you have recording devices?
* What logistics do you need to consider as far as finding space, etc.?
* Do you need consent forms?
 |

|  |
| --- |
| **Portfolio:** A collection of artifacts or work that provide evidence of student learning or program improvement. |
| **Strengths:*** Shows progress over time
* Reflective in nature (encourages reflective learning)
* Provides deep examples
* Multidimensional (shows learning in different ways)
* Provides both individual and program-level feedback
* Provides both numbers and descriptive information
 | **Challenges:*** Requires planning ahead (pre-determined outcomes, criteria for meeting outcome, experiences to be included, type of reflection, rating tool)
* Takes time to implement and see progress
* Need trained evaluators
* Need system of collecting portfolios (electronic, print)
* Depending on technology resources, combining aggregate data can take time
 |
| Resources needed:* Do you have outcomes, criteria, learning experience, and reflection prompts prepared?
* Do you need to train evaluators?
* Do you have a system for collecting portfolio materials?
* Do you have time to look through portfolios and analyze evidence?
 |

|  |
| --- |
| **Observation:** A systematic method of collecting data through unobtrusive visual means (e.g., watching people or places) in order to collect information. |
| **Strengths:*** Unobtrusive – does not require participant engagement
* Requires seeing beyond nature perspective
* Often effective with physical plant and watching for student trends
* Useful for gathering initial data to couple with survey or focus group
* Provides both numbers and descriptive information
 | **Challenges:*** Requires planning ahead (e.g., protocols, charts, journals)
* Non-responsive in nature
* Limited in the type of data it can collect
* Need trained observers
* Need system of collecting information
 |
| Resources needed:* Do you have a protocol?
* Do you need to train observers?
* What is your timeline?
 |

|  |
| --- |
| **Document Analysis:** A form of qualitative research in which documents are used to give voice, interpretation and meaning. Any document can be used, common documents may be: application materials, student newspaper or publications, marketing materials, meeting minutes, strategic planning documents, etc. |
| **Strengths:*** Documents are readily available
* Documents are already collected or easily collected
* Low costs
* Documents are a stable data source (they don’t change)
* Can be collected on a quick timeline
 | **Challenges:*** Non-responsive in nature
* Documents are context and language specific
* Documents are often disconnected from their creator
* All documents are written through a lens, need to be aware of lens in order to assess objectivity
* Data analysis takes time
 |
| Resources needed: * How do you gain access to the documents?
* Do you know how to set up a coding system?
 |

|  |
| --- |
| **One-Minute Assessment:** Very short assessments of what a participant is “taking away” from their experience. Should be targeted at a specific learning or program outcome. |
| **Strengths:*** Provides a quick summary of take away from student perspective
* Quickly identifies areas of weakness and strengths for formative assessment
* Can track changes over time (short-term)
* Non-verbal (provides classroom feedback from all students)
* Captures student voice
* Short time commitment
* Provides immediate feedback
 | **Challenges:*** Non-responsive
* Short (so you may lose specifics)
* Sometimes hard to interpret
* Need very specific prompts in order to get “good” data
* Plan logistics ahead of time and leave time during program/course
* May need to be collected over time
 |
| Resources needed: * Do you have a strong prompt?
* Have you reserved time to collect data?
* Do you have a system for collecting data in a non-rushed manner?
 |

|  |
| --- |
| **Visual Methods:** Captures images as a main form of data collection, usually also includes captions or a journal to accompany images. Most often used for photo journals, video projects, and visual art projects. |
| **Strengths:*** More detail and depth to data
* Visual aspect allows for depth in sharing results
* High levels of student investment
* Can use images captured for multiple uses
* Very descriptive in nature
 | **Challenges:*** Beware of threats to alterations of images (especially with technology)
* Usually smaller number of perspectives
* Time for implementation and follow-through
* Analysis takes time
* Resources may be needed in order to capture images
 |
| Resources needed: * How will your participants capture images (resources)?
* What prompt will you use to make sure participants have a clear direction?
* Do you have time to gather and process information in your timeline?
* Have you accounted for time for member checking?
 |

|  |
| --- |
| **Case Study:** A form of qualitative descriptive research, the case study looks intensely at an individual, culture, organization or event/incident. |
| **Strengths:*** More detail and depth to data
* Multiple perspectives are gathered
* Tells a story
* Very descriptive in nature
 | **Challenges:*** Takes significant time to gather information and analyze
* More perspectives = more time
* Narrow purpose as far as sharing data afterward
* Analysis takes time
* Resources may be needed in order to capture data
* Not meant to be generalizable but can be transferrable
 |
| Resources needed: * How will you capture data?
* Do you have a clear understanding what you are profiling and why?
* Do you have time to gather and process information?
* Have you allocated time for member checking?
 |

|  |
| --- |
| **Additional Tips for Choosing Methods:** |
| Keep it simple! Choose a method that is manageable so you can complete the project. |
| Start with the ideal design for your assessment and then work backwards to what is possible. There is always more than one source for collecting data, use what works best for you knowing that you can add on other sources later. |
| Start off small to get experience; don’t try to complete a “dissertation” sized project the first time around. |
| Ask if the data already exists somewhere else before choosing a different method that will use valuable resources. |
| Look for potential to collaborate with other departments and units. |
| Include culturally sensitive language and facilitators when using assessment methods. If you are not sure about language, seek assistance. |
| Include stakeholders from the beginning; this builds credibility in your methods and assessment results. |
| Reflect on the process/results of assessment and do not be afraid to change your method. Assessment is an ongoing process. |
| Contact your Division Assessment Consultant for support! (x2982) |

*For more information on assessing learning outcomes, watch the helpful training video at:* [*https://youtu.be/jKxivrJ3AOo*](https://youtu.be/jKxivrJ3AOo)