



### **Assessment Methods**

The following draws from ideas presented in Chapter 4 (Starcke & Deloach, 2012) of *Learning is Not a Sprint* (K. M. Collins & D. M. Roberts, Eds.).

**Focus Groups** – Focus groups are typically small groups of individuals (ideally 8 to 10) who are invited to meet together with the expressed purpose of voicing their thoughts, ideas, or opinions around a topic of particular interest to a person or persons engaged in assessment, evaluation, or research. Unlike surveys, focus groups provide the opportunity to collect in-depth information. By asking a series of questions and recording participants' responses, the persons facilitating the focus group collect information that is later analyzed to enhance insight and understanding.

Focus groups can be structured, semi-structured, or unstructured. A structured focus group is one in which the facilitator closely follows a predetermined script. Whereas this method can provide uniformity across multiple groups, it may produce vague or incomplete information as facilitators are not at liberty to pose follow-up questions not identified in the script. An alternative to complete uniformity is represented by the semi-structured approach to focus groups. This approach provides initial guidelines for questioning and affords the facilitator leeway to address additional topics and pose additional or follow-up questions that become relevant over the course of discussion. Finally, unstructured focus groups can be characterized as free-flowing conversations that take shape around participants' thoughts and observations. (Schuh, 2009)

It is important to select focus group participants who have some knowledge or experience pertaining to the topic to be explored. For example, you would not want to select students who entered the University as first-year students to participate in a focus group designed to gather data on transfer students' experiences. In addition, hosting several focus groups is strongly recommended. Keeping with our previous example, transferring into the University is a common thread that defines the group. However, your participants may unintentionally all

identify as female, or all be transferring in from the state of New York. In either case, holding a single focus group would most likely produce markedly skewed data. Holding multiple focus groups dealing with the same topic also minimizes the likelihood that a single individual or group of individuals ends up driving the conversation. (Suskie, 2009)

**Interviews** – Interviews are similar to focus groups in many ways. Both provide a means of gathering information by asking participants to respond to questions that relate to a topic of interest. The primary difference being that interviews typically consist of a single participant voicing thoughts, ideas, or opinions related to the topic at hand. Like focus groups, interviews can be structured, semi-structured, or unstructured. Like focus groups, it is beneficial to conduct multiple interviews to capture multiple or a broader range of perspectives/experiences. The one to one format of an interview lends itself to pursuing highly detailed information about a single individual’s experiences and/or perceptions. The one to one format is also recommended in instances where the topic of interest is characterized as sensitive or precipitates the need for confidentiality. Interviews are also useful when one is seeking information from participants who may be identified as belonging to a group that is identified as somehow vulnerable.

**Electronic Portfolios** – Electronic portfolios commonly include artifacts that represent tangible exemplars of an individual’s work as well as student reflections. Within the context of higher education, electronic portfolios are increasingly recognized as a powerful tool for measuring student learning which in turn provides information to help gauge the effectiveness of courses or programs. Online portfolios offer easy access, the ability to store a variety of types of artifacts, and the organizational benefits of menus and hyperlinks. (Huba & Freed, 2000) In *Learning is Not a Sprint* (2012), Starcke and DeLouch highlight a number of critical ideas around using portfolios for assessment purposes. First, it takes a significant amount of staff time to properly evaluate student learning using portfolio review. Because of the time intensive nature of portfolio review, Suskie (2009) suggests that assessment through portfolio review is effectively applied to programs serving fewer students and those providing sustained, in-depth learning experiences. Next, clear learning goals for the program must be communicated and understood by students and staff. Precise and measurable learning outcomes, guide students in developing an effective portfolio and provide those who are involved in assessment with clear criteria that outline how

learning (e.g., cognitive growth, development) will be demonstrated. In addition, there should be clear expectations to guide students' engagement with the process of reflection. Self-reflections represent critical information for assessing self-awareness and learning (Suskie, 2009). The process of reflection can be structured by asking students to respond to a set of questions for each work/artifact included in the portfolio. Starcke and DeLouch (2012) suggest the use of questions to structure student self-assessment. Commonly used questions include:

- Why did you include the selected artifact?
- What did you learn from the project?
- How does what you have learned from this project apply to other aspects of your life?
- What was the most challenging part of the process?
- If you were starting over, what would you change or do differently to complete the project?

If you coordinate a program for a limited number of students, and the program provides a sustained and in-depth learning experience, portfolios can represent the “gold star” of methods to assess student learning, growth, or development. They represent direct evidence of student learning overtime, and provide a means of understanding how students approach learning and make meaning from experiences (Starcke & DeLouch, 2012). In applying the use of portfolios to Student Affairs, purposefully structured reflections can assist students in making connections between academic coursework and co-curricular experiences which can ultimately enhance student success in fulfilling their responsibilities to academic mission of the University. In addition portfolios developed in the context of student employment or student leadership experiences can provide students with a means to communicate (to future employers, graduate or professional schools, etc.) relevant knowledge and skills.

**Observation** – Observation offers an accessible, naturalistic approach to gaining insight into student learning and the effectiveness of programs or services. As the name implies, this method involves a person or persons observing an individual (in the context of assessing individual learning) or a group of individuals (in the context of assessing unit or program effectiveness) performing a task or tasks to evaluate the extent to which the person or group has been successful at fulfilling the expectations associated with performance. Whereas qualitative researchers

often conduct open-ended observations taking extensive field notes to describe a particular environment or situation, observation for assessment purposes is most effectively achieved through systematic planning. The observation plan should include, but would not be limited to:

- the goal(s) of the observation
- a written description of observation protocols
- a written description of the evaluation criteria
- a structured evaluation instrument (e.g., rubric, checklist)

Observation can present challenges. For example, it can be time intensive and therefore costly in terms of staff involvement. Observation is subjective and there is always the chance that two persons will see the same circumstance differently. In addition, it can be challenging to use observation to assess student learning in an employment context as students may have difficulty recognizing the distinction between assessment of learning/development and assessment of job performance. Another challenge with observation relates to idea that the act of observing is likely to provoke changes in the behavior or performance of the person who being observed. Despite these challenges, when one has a well-defined plan for the process and an instrument to direct observation and evaluation , observation represents an effective directly measure of student learning or program functioning.

**Pre- and Post-Tests** – Pre- and post-tests are measures designed to collect the same information before and after an individual or group participates in a learning experience. In designing pre- and post-tests, the two versions should be equivalent. Any changes in wording and/or response categories (e.g., strongly agree, agree, etc.) on the post-test introduces a potential threat to the reliability and validity of the results. For example, adding an additional quantitative question to the post-test might cause an individual to think differently about other questions. Or in the case of posing open-ended questions, a slight change in the prompt could cause a participant to interpret and address the question differently.

Pre- and post-tests can reflect direct or indirect measures of student learning. Designs that require students to demonstrate knowledge or skills before and after a learning experience represent direct measures of student learning (e.g., draft a resume, create a risk-management plan, define important terms, etc.). In

contrast, asking students to rate their own knowledge, skills, behaviors, attitudes, or beliefs before and after a learning experience constitutes an indirect measure of learning because it is based on students' perceptions rather than a demonstration of what students know and/or can do. Although pre- and post-tests can provide valuable information, indirect measures of learning based on students' self-perceptions are commonly characterized as less accurate due to the propensity of individuals to over or underestimate their current level of knowledge, skill, behavior, etc. Pre- and post-test designs that draw on direct demonstrations of student learning represent a more reliable or effective means of demonstrating student growth and development over time. However, although thoughtfully designed and implemented pre- and post-tests utilizing direct measures may enhance reliability, it can be difficult to separate the effect of a single program from the effects of other and/or ongoing life experiences that might also contribute to learning or development. This is particularly true in the case of learning opportunities that unfold across longer durations of time (i.e., weeks, months, or years). Pre- and post-testing with direct measures are arguably most effective in the context of programs or learning opportunities that are delivered in a single session, or over the course of a few consecutive days. Under these circumstances, there is less of a chance that outside factors have influenced learning or development which makes it more plausible to assume that the specified learning opportunity provided was indeed the mechanism that promoted change or development. In spite of some of the challenges associated with pre- and post-test assessments, the approach can provide a means to highlight the value-added aspect of programming (Suskie, 2009).

**Reflection** – Reflection represents a type of qualitative feedback that can be useful in measuring attitudes, values, skills, and knowledge (Starke & DeLoach, 2012). As an assessment tool, reflection provides students with structured opportunities to think about or analyze their knowledge and/or experiences. The act of thinking about one's own thinking supports learning, promotes insight into one's self as a learner, and provides a pathway to build on or modify existing knowledge, attitudes, or beliefs in response to new information. As a form of metacognition, reflection can be structured in a way that helps students make connections between prior experiences and/or knowledge and new experiences and knowledge. This increases the likelihood that knowledge and/or skills gained in one context will be understood and appropriately applied in other contexts. For example, asking a student to produce a written reflection detailing her or his

experience as the head of a club sports team that “never quite managed to get it together enough to compete” could help the student build the perspective and interpersonal skills needed to effectively organize and lead a study group for an Organic Chemistry course. Suskie (2009) and others identify a number of mechanisms for introducing reflection into the process of assessing student learning:

- assign minute papers or a short, timed responses to specified prompts
- include an open-ended question(s) to encourage reflection at the end of a survey or test
- have students keep a journal as part of participation in a course or program
- ask students to engage in the process of self-evaluation (rubric)
- have students set goals at the beginning of a learning experience and periodically assess the progress they have made and challenges they have encountered working toward their goals
- assign structured written reflections (e.g., What, So What, What Now)
- build reflection into the process of building and/or maintaining a portfolio

Reflection represents a way to encourage deeper processing of learning experiences which contributes to the development of metacognitive skills and the ability to integrate and synthesize knowledge and experiences. Whereas reflection has clear benefits in regards to student learning, data gathered from student reflections can help staff understand ways in which programs and services are effective, and to identify challenges and/or aspects of programs in need of further attention. Although reflection represents a source of information that can inform practice, it emanates from an individual’s experience and may be particularly difficult to grade, score, or evaluate (Suskie, 2009). Reflection represents an indirect measure of learning as it is based on students’ perceptions of their own performance. Suskie (2009) also points out the need to keep the reflection process short and manageable to encourage quality responses. A final consideration regarding the potential challenges of using reflection as an assessment tool is highlighted by Ash, Clayton, & Atkinson (2005) who suggest student reflections are easily swayed by perceived expectations and/or the desire to please or impress.

**Rubrics** – A rubric is a scoring tool that can be used to evaluate an individual’s level of skill, performance, or competency in a given area. They commonly take the form of a list, chart, or matrix detailing the dimensions or criteria that will be

used to determine the individual's level of performance (Stevens & Levi, 2005). Rubrics can be applied to evaluate a variety of forms or displays of skill or competence. For example, one might use a rubric to evaluate a student's:

- communication skills observed in the context of a class presentation
- interpersonal skills observed during a complex group problem-solving activity
- ability to manage job-related risk observed across a normal week's work activities
- capacity for leadership observed in the context of project management
- self-awareness observed through written reflections

In reality, a rubric can be designed and implemented in any context where direct measures will be used to evaluate knowledge or skills. Remember direct measures reflect **observable** displays of knowledge or skills rather than students' perceptions, reflections, or self-evaluations. Learning outcomes specify what we want students to know, and direct measures engage us in observing students' work or performance to determine whether our outcomes have been met. Rubrics structure the process of observation as open-ended or unstructured observations may not provide the information and consistency needed to produce meaningful results. A rubric focuses the observer's attention on pre-specified aspects of the skills or knowledge to be demonstrated. They provide clear and consistent criteria to determine where a student is in terms of competency development which increases the validity of the assessment process. Rubrics also increase reliability by setting criteria that can be applied consistently and objectively by one person conducting multiple observations, or by multiple people conducting a one or more observations.

Stevens and Levi (2005) describe four basic components characterizing rubrics:

- **Task Description** identifies the overall area of skill/competency being evaluated (e.g., Citizenship, Critical Thinking, Fairness and Respect for Others, etc.).
- **Task Dimensions** clearly identify the components of the skill/competency being evaluated (e.g., if the task being evaluated is Customer Service the Task Dimensions might include things like General Attitude, Approachability, Customer Questions, Responding to Difficult Customers).

- **Scale** describes the extent to which the Task Dimensions have been met or mastered or the level of proficiency the individual has achieved in regards to the Task Dimension under consideration (e.g., Beginner, Intermediate, Proficient, Advanced).
- **Descriptions of Dimensions** outline very specifically what each level of performance would look like for each Task Dimension (e.g., if the Task Dimension is Personal Values, a Beginner level might be described as “Unaware of own personal values”, an Intermediate level as “Can articulate personal values”, a Proficient level as “Considers and incorporates personal values”, and an Advanced level as “Considers and incorporates personal values and encourages others to do the same.”

Before using an existing rubric, a modified rubric, or a rubric you have created from scratch, you need to consider the following:

- Does the rubric relate to the outcome(s) that you want to measure?
- Does it emphasize criteria that are important or meaningful?
- Are the task dimensions, scales, and levels of performance well defined?
- Is the rubric specific and clear enough to be implemented consistently across scorers?

There are a number of resources that may be helpful in getting started with designing and implementing rubrics. Some of our favorites are:

- Campus Labs Examples & Rubric Tool
- *Introduction to Rubrics* by Stevens & Levi
- *Assessing Student Learning and Development: A Handbook for Practitioners* by Bresciani, Zelna, & Anderson
- Association of American Colleges and Universities  
<http://www.aacu.org/value/rubrics/>
- Cornell University Center for Teaching Excellence  
<http://www.cte.cornell.edu/teaching-ideas/assessing-student-learning/using-rubrics.html>

**Surveys** – Surveys are the most common (although not always the most effective) means of gathering information for assessment purposes. Survey methodology reflects an indirect form of measurement (based on participants’ perceptions

rather than observable demonstrations of knowledge or skill). Whereas tests and quizzes (direct measures) require students to demonstrate knowledge or skills, surveys require students to self-report. As such, survey questions are based on the respondents own perceptions; and individual perceptions regarding satisfaction, attitudes, or needs are reasonable measures of the way a person experiences or assigns meaning to a particular situation. However, self-concept is a highly complex construct influenced by numerous psychological and social factors. As a result, self-reports of ability, knowledge, and/or skills may reflect greater degrees of over and underestimation. There are many reasons why self-reporting on ability may be prone to increased response bias. For example, participants may feel the need to project a certain type of image in order to maintain perceived status. They may lack sufficient experience to make an informed judgment. They may be embedded in a context characterized by very high or low achievement profiles therefore comparison may result in skewed perceptions. Or they may experience a notably high or low degree of social support which can influence self-concept of ability. Lived identities such as gender, race, or economic history may be associated with stereotyped messages regarding intelligence or ability which can also affect self-evaluations. For these and other reasons, survey methodology may not represent the most appropriate tool for measuring outcomes emphasizing the development or achievement of knowledge, skills, or abilities.

In contrast, surveys can be an effective and convenient assessment method when outcomes focus on understanding students' attitudes, beliefs, values, or needs. For example, a well-crafted survey could easily be used to gather accurate information on students' satisfaction with the quality of food provided by campus vendors. A survey would also represent an appropriate means of understanding the career-related beliefs and/or attitudes of a group of Carolina students at a given point in time or students' perceptions of needs in terms of available housing options. Surveys can reach a large number of people in a short amount of time and many produce data that is relatively easy to analyze (quantitative or numeric data). Even so there are a number of important factors to consider.

- How will you sample or identify and recruit a group of participants who are representative of the population you are interested in?
- How will you maximize the amount and quality of information you receive? (e.g., new or existing, simplicity of design, clarity of directions, question & response types, length, costs, timing, reminders, etc.)

- How will you determine whether your survey instrument is reliable (measures consistently) and valid (measures what it is supposed to measure)?
- How will the data be analyzed, reported, and ultimately how will the information be used?

Surveys can provide invaluable information regarding programs and services. However, the quality of the data generated by a survey reflects the quality of the survey itself. There are nuances to planning, formatting, and distributing surveys and additional pitfalls associated with collecting, processing, and analyzing data. Whether you see the process as relatively straightforward or somewhat challenging, if you are new to survey design and implementation, consider consulting with an experienced colleague or attending a short-course, workshop, or webinar on survey methodology.

**Concluding Remarks** – The aforementioned list of assessment methods or tools is by no means all inclusive. The methods that are highlighted here were selected because they represent some of the most common and effective means of conducting assessment within the context of the programs and services provided by Student Affairs. Whereas the descriptions of methods highlighted here provide a starting place, they are not intended to provide the full range of information you may need to enact high quality assessment practices. If you are interested in initiating an assessment project and are unsure of how you might most effectively measure the learning, program, or operational outcomes that characterize the project, please feel free to request a consultation through contacting a member of our Student Affairs Assessment Council or the Director for Assessment & Strategic Planning in the Office of the Vice Chancellor for Student Affairs.