Assessing Student Engagement

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Introduction

Higher education matters. But, it can be challenging to demonstrate the value of higher education to students, parents, community members, state legislatures, and other educational stakeholders. How can we prove students are learning what is intended and developing competencies to best prepare them for the workforce and post-college life? That is where assessment comes in. Assessment allows us to quantifiably prove the significance of what we do, which is educate and develop the capacities of students, in an effort to acquire funding, resources, and support necessary to continue to offer or enhance programs and experiences.

In this eBook, you will learn about:

- Key terms related to assessment
- The assessment cycle
- Direct and indirect assessment
- Measuring dimensions of learning and development
- Assessment methods
  - Tests
  - Reflections
  - Interviews
  - Demonstrations (rubrics)
  - Inventories
  - Feedback
  - Post Assessment
  - Pre/Post Assessment
  - Post, Then Pre Assessment
- Interpreting the data by individual or group
- Using engagement data for program evaluation
- Reporting assessment data

What is engagement?

Engagement is the quality of effort a student puts into “educationally purposeful activities that contribute directly to desired outcomes” (Astin, 1993; Pascarella & Terenzini, 1991 from Hu & Kuh, 2002, 555). Engagement is a mutual relationship between the student and the institution. A student must be engaged, but the institution must be engaged back by creating inclusive and affirming environments, student-faculty contact, active and collaborative learning opportunities, and clear expectations (Wolf-Wendel, Ward, & Kinzie, 2009).

We use this definition of engagement throughout our eBook series on engagement to maintain a consistent operational definition.

Check out our other eBooks on engagement!

Make sure to check out tips, campus best practices, and ideas.
Laying the Groundwork

What is Assessment?
Assessment is the systematic basis for making inferences about the learning and development of students. It is the process of defining, selecting, designing, collecting, analyzing, interpreting, and using information to increase students’ learning and development (Erwin, 1991).

Why Assess?
In order to best understand how to engage in assessment, it is important to understand two key terms related to assessment.

Instrument
An instrument is a tool to collect data.

Measurement
A measurement is a construct on an instrument capturing particular data.

To understand to what extent expectations for learning and development are being met.
- Are students learning what was intended?
- Are students developing intended competencies as a result of participating in the experience?

To reinforce existing infrastructures.
- If students are learning what was intended from the experience, should it continue to be offered?

To compare learning and development between two similarly situated experiences.
- What have we learned from assessing other experiences that could inform how we design or coordinate this experience?
- What does this experience offer that works well and should continue?

To make informed decisions and changes.
- What should be changed about this experience to enhance student learning and development?
Assessment Cycle

Assessment is a process-oriented endeavor and cyclical in nature. Assessment may have milestones, but the process is never quite done as long as the engagement experience continues to persist. Consider the following model as a guide for the cycle of assessment.

**TIP**

It is never too early to think about data collection and reporting. Assessment should be an ongoing effort. So, make sure to collect data often!
Getting Started

Figuring out what you want to measure (learning from a retreat, role, or workshop, for example) may seem easy. But, how do you design the assessment to provide the type of data you want?

Types of Assessment

Before determining any methodology for data collection, it is essential to determine if you are conducting direct or indirect assessment as they are both administered differently and have pros and cons associated with each.

Direct Assessment

Direct assessment occurs when someone other than the student evaluates the student’s learning or development. Direct assessment can include tests, demonstrations, or feedback to show that learning or development has occurred.

- **Pro:** Removes bias of student self-assessing
- **Con:** Can be more difficult to do with large groups of students you want to assess

Indirect Assessment

Indirect assessment includes a student’s own perception of personal learning or development. This process involves having students self-report what they believe they learned and/or the extent of their learning. Indirect assessment can include reflections, interviews, inventories, and self-assessment.

- **Pro:** Easy and can get a lot of feedback very quickly from a lot of participants
- **Con:** Students can under-inflate or over-inflate their proficiency level or what they believe they learned leading to biased data

What Do You Want to Measure?

Another factor to consider in deciding how to get the data you want is to select an appropriate measurement. In doing this, you must first identify the learning and development dimension you are assessing.

Dimensions (Adapted from Seemiller, 2013)

- Knowledge: Knowledge of a particular concept (Does the student know ...?)
- Value: Belief or attitude (Does the student believe that ... is important?)
- Ability: Motivation or skill (Can the student engage in ...?)
- Behavior: Engagement in a certain behavior (Does the student engage in ...?)

Select the Right Methodology

Selecting the right methodology is important in getting the data you want. After selecting the dimension you want to measure, consider a methodology that will help you collect appropriate data.

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Value</th>
<th>Ability</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests (Direct)</td>
<td>Reflections (Indirect)</td>
<td>Demonstrations (Direct)</td>
<td>Feedback (Direct)</td>
</tr>
<tr>
<td>Interviews (Indirect)</td>
<td>Inventories (Direct)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IDEA

Consider building assessment into student leader roles in which each executive officer must complete a learning assessment related to their experience in their roles. This can help you articulate the value of student engagement while also getting feedback on how to best construct learning environments for future student leaders.
Measuring Knowledge

Tests

The thought of administering a test outside of a classroom might seem a little unconventional. But, to find out if a student learned new knowledge, a test might be the best way to find out. The key with using tests is they must measure knowledge and not an opinion or idea. If you want your students to know the stages of group development or steps for effective communication, a test might help you figure out quickly who knows the concepts in question. Finding out what students do and do not know can help in addressing learning gaps both individually and with an entire group of students.

Examples of Measurements on Tests

- Open-ended responses
- Multiple choice
- Matching
- True/false
- Fill in the blank

Reasons to Use Tests

- To find out if students know relevant and necessary content related to a role or task (like student employees knowing confidentiality rules or an organization treasurer knowing budgeting protocol).
- To ensure students have a conceptual foundation of information before moving to more difficult content.
- To understand if students have learned knowledge presented during an educational experience.

IDEA

Include test questions in an application or registration to get a snapshot of what students know before an engagement experience. Then, put the same questions in the event evaluation and compare the results.
Measuring Value

Reflections

Some of the best learning comes from reflecting on an experience. Through thinking about an experience after the fact, people can often figure out what worked, what didn’t, what they learned, and what they would do differently or the same if they were to have the experience again. And the thoughts derived from reflection can impact a person’s thoughts, opinions, beliefs, attitudes, and values. Reflection, though, becomes assessment when the answers to those questions are shared with the person collecting the data. And, that data can be very robust and full of great information.

Examples of Reflection Prompts

  - What happened?
  - So what does it mean?
  - Now what am I going to do?
- Plus/Delta
  - What were the pluses or good aspects of this scenario?
  - What would I change for next time?
- Highs and Lows
  - What were the high points of this experience?
  - What were the low points?

Reasons to Use Reflections

- To find out in students’ own words their thoughts, opinions, and attitudes.
- To gather stories to support other assessment findings.
- To gather assessment data in an interesting way for students, increasing their commitment to providing thorough responses.

Interviews

Interviews can sometimes seem like formal processes associated with getting a job. But, interviewing can be a great way to collect data around developing and shifting attitudes and beliefs. Being able to hear directly from students in their own words (especially with tone and inflection coupled with nonverbal cues), can give you a true picture of their learning.

Examples of Interview Questions

- What was your perspective of _____________ before this experience? What is it now?
- If your opinion has changed, what was most influential in changing it?
- Pre: What do you believe about _____________? Post: What do you believe about _____________?

Reasons to Use Interviews

- To find out in students’ own words their thoughts, opinions, and attitudes.
- To gather stories to support other assessment findings.
- To get the whole picture of a student’s response, including verbal and nonverbal cues.
- To prompt a student beyond the initial question.
Measuring Ability

Demonstrations

One way to find out if students know how to do something is to have them demonstrate it. Rather than self-reporting their ability level, they prove it to an evaluator. This method can be helpful because students might not have the most exact view of their ability level and provide inaccurate data using self-reporting methods. But, external evaluators can remove the self-reporting bias and simply report as they see it.

Rubrics

Rubrics are scoring tools laying out criteria along a continuum of proficiency. They provide detailed information for both the evaluator and person being evaluated to explicitly understand the performance criteria. In addition, by having the criteria clearly laid out, it is easy to provide consistency in evaluation.

Although rubrics can be used to evaluate the knowledge dimension as is often seen in classroom settings, rubrics are one of the best ways to evaluate learning through demonstration. A student can demonstrate a skill or ability and an evaluator can use the rubric to determine the proficiency level of that student’s demonstration. Rubrics can also be used as pre/post measurements to evaluate the student’s ability before and after some type of educational intervention (training, class, feedback session, etc.). Below is an example of a rubric for meeting facilitation.

<table>
<thead>
<tr>
<th>Competency</th>
<th>Novice</th>
<th>Intermediate</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not consistent &amp; effective</td>
<td>Somewhat consistent &amp; effective</td>
<td>Consistent &amp; effective</td>
</tr>
<tr>
<td>Verbal</td>
<td>Does not communicate with clarity; listeners do not understand what is being communicated.</td>
<td>Communicates in a somewhat clear manner but needs to clarify or reword communication at some points for understanding.</td>
<td>Communicates clearly; listeners understand what is being communicated.</td>
</tr>
<tr>
<td>Communication</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilitation</td>
<td>Does not solicit and support contributions from the group.</td>
<td>Solicits and supports contributions from the group on some occasions.</td>
<td>Solicits and supports contributions from the group.</td>
</tr>
<tr>
<td>Listening</td>
<td>Does not pay attention to those speaking.</td>
<td>Pays attention to those speaking but is occasionally inattentive.</td>
<td>Pays attention to those speaking.</td>
</tr>
<tr>
<td>Synthesis</td>
<td>Does not make connections between ideas to summarize thoughts from the group.</td>
<td>Sometimes makes connections between ideas to summarize thoughts for the group.</td>
<td>Makes connections between ideas to summarize thoughts for the group.</td>
</tr>
</tbody>
</table>

(Seemiller, 2014)
Examples of Rubric Scales

Rubrics should include scales with three to five options. Each option on the scale can have a different categorical label. For example:

- Beginner, intermediate, and advanced
- Novice, apprentice, and master
- Needs development, emerging, competent, expert
- Inadequate, developing, proficient, skilled, exceptional
- Never, rarely, sometimes, often, always

To make scoring easier, each category can be assigned a point value that increases as the proficiency level increases. This numerical system makes it easy to quantify both a proficiency level in the moment and the difference in scores between two rubrics showing growth of a student over time. And, remember, in order for your students to understand expectations, it is important to explain each option on your rubric scale and give examples of what a score in each option entails.

Reasons to Use Rubrics

- To quantifiably measure a student’s ability level in a task.
- To compare ability levels between two or more students.
- To measure growth in ability between two different times a student completed the same task.

Inventories

Another method to measure ability is through the use of inventories/personal assessments. To measure learning, inventories are best used as pre/post in which the scores from the first inventory are compared to the scores from the second. Consider the following leadership inventories that can provide insight both to students who take them and the administrators who use them for evaluation.

1. Student Leadership Practices Inventory: This inventory measures the extent to which a student exhibits the five practices associated with effective leadership (Kouzes and Posner, 2012).
2. The Emotionally Intelligent Leadership Inventory: This inventory measures the student’s proficiency level across 19 leadership capacities (Shankman, Allen, and Haber-Curran, 2015).
3. The Student Leadership Competencies Inventory: This inventory measures the student’s ability level for 60 leadership competencies (Seemiller, 2013).

Reasons to Use Inventories

- To use a standardized, tested measurement.
- To collect data while at the same time providing students results from the inventories.
- To use the same measurement as a pre/post assessment over a period of time.

TIP

Have students help develop rubrics so they have ownership in the assessment process and can clearly see what they will be evaluated on.

BEST PRACTICES

There are a number of rubric examples online. For example, AAC&U offers free rubrics that connect directly to student engagement.

Click to see them.
Measuring Behavior

Feedback

Feedback is letting the learner know the accuracy of a response to an expectation (Mory, 2003). Feedback usually occurs when someone who oversees a student in a role or task provides information to the student to enhance performance. Feedback can provide the student a perspective change, validate performance, and build a trusting and respectful relationship with the student. Feedback should:

- Include clear expectations with specific measurable outcomes.
- Have set timelines or milestones for these outcomes.
- Be behavior focused and include only those competencies/capacities that can be learned and developed.
- Be given in a timely manner.
- Be ongoing and incorporated into annual evaluations, weekly meetings, and daily review time.
- Include both positive and critical feedback.

Examples of Feedback Prompts

When giving students feedback, consider using the following prompts to help guide the conversation (if the feedback is verbal) or in compiling a performance review (if the feedback is in writing). This will ensure the feedback is specific and includes positive and critical feedback.

- What should the student keep doing?
- What should the student stop doing?
- What should the student start doing?

Reasons to Use Feedback

- To measure the growth in student performance over a period of time.
- To engage in a developmental process involving coaching and sharing opportunities for improvement.

IDEA

Consider 360-degree feedback in which the supervisor, peers, and subordinates all give feedback to the student to provide a comprehensive picture of performance. For example, feedback for a peer mentor could include evaluations from the supervisor, other peer mentors, and the students who the peer mentor oversaw.

TIP

Keep records of feedback, even informal feedback, you have given to each student. Then, analyze the feedback over a period of time to assess for growth and development. You can also do this with multiple students to see what the largest growth areas are for students as a whole.
Measuring Any Dimension

Self-assessments are a great way to measure any dimension of student growth. Consider these three common self-assessment designs.

**Post Assessment**

After participating in an engagement experience, ask students to self-report if they learned new knowledge, had a value change, enhanced an ability, or performed a behavior as a result of participating in that experience. This will indicate their self-reported growth in the measured dimension.

- **Pro:** Easy to collect data; can use same measurements to benchmark across programs, time, and student groups
- **Con:** Self-reporting bias might lead to an inaccurate interpretation of growth.

**Pre/Post Assessment**

A pre/post assessment involves measuring students’ knowledge, values, abilities, or behaviors before an experience and then using the same measurement after an experience to determine if the experience contributed to growth in a particular dimension. This method should ideally be used in a controlled environment in which no other variables might interfere with the results of the post assessment. For example, a pre/post assessment used with a retreat will yield far more accurate results than one used at the beginning and end of a semester of an engagement experience given all the other factors outside of the engagement experience that could influence the post assessment results.

- **Pro:** Can give you data before an engagement experience to understand “where students are at.”
- **Con:** Can be time consuming to give two assessments; some students’ scores on their post assessments go down as a result of realizing they did not know as much as they thought they did when they took the pre assessment. This can be challenging in trying to measure growth.

**Post, Then Pre Assessment**

This method of assessment involves asking students to rate their current knowledge, value, ability, or behavior after having participated in an experience and then asking them to reflect back and rate those same dimensions before participating in the engagement experience.

- **Pro:** After having participated in the engagement experience, students may have a more accurate perspective of what their knowledge, value, ability, and behavior levels were prior to the experience; only involves one assessment, thus taking less time to administer.
- **Con:** Depending how long the engagement experience was, it may be difficult for students to recall their competency levels prior to participation, leading to inaccurate reporting.

**IDEA**

Ask students what they are interested in learning through the engagement experience and design a learning contract with them. Have students identify:

1. The goals they have for their personal development through participating in the engagement experience
2. The outcomes they would like to achieve in terms of competency development
3. Their proposed learning method to achieve their goals and outcomes
4. How they intend to measure their progress toward goals and achievement of outcomes

Then, help mentor and guide the students to fulfill their own learning contract!
Interpreting the Data

There are three main ways to look at data once you have collected it.

1. Look at each individual and assess for learning and development. (What did Susie learn?)

   Being able to understand what individual students have learned can be valuable in a mentoring, advising, or supervision situation to ensure that students are being provided the appropriate resources and support to develop the competencies they need.

2. Look at the data by groupings. (To what extent did first year students develop an appreciation of diversity compared to seniors?)

   Showcasing the nuanced learning by specific populations allows you to see if, and to what extent, different aspects of the program are developmental for particular populations. Just when you think the engagement experience leads to an enhancement in social responsibility, after dividing out the data, you may find that only holds true for education majors but not business majors or those who are already involved in an organization rather than those who are not. Consider looking at these groupings:

   - Race
   - Year in school
   - Gender identity
   - Major
   - Religious affiliation
   - Sexual orientation
   - Socio-economic status
   - Hometown
   - Co-curricular involvement
   - GPA
   - Repeat participant
   - Housing status
   - Employment status
   - Duration of participation

3. Look at the entire data set and assess what the group learned as a whole. (What competency had the highest growth rate across all students?)

   There are certainly advantages to interpreting data as a whole as it can provide great insight on the learning and development of an entire population of students who participate in a particular engagement experience. This can help in articulating the value of the engagement experience for funding, marketing, and resource allocation as well as provide feedback to help improve the program.
Using the Data

Program Evaluation

In addition to better understanding student learning and development, assessment data can provide useful feedback in evaluating overall program effectiveness. This feedback can be influential in making decisions about program structure, curriculum, policies, and processes. And by using the same measurements from year to year, you can see if a change you made to increase a particular competency that students are intended to develop through participation actually came to fruition.

Reporting

Some departments and programs do a great job of collecting assessment data and even deriving meaning from it, but by the time the assessment process is done, it might feel like too much to take the last step of writing up the findings. Here are a few strategies to help make the reporting a lot easier.

1. Write up the data on an ongoing basis. Do not wait until the end of the year to draft findings from a program or experience that happened six months prior. If you stay on top of the writing, during annual report time or when a grant is due with short notice, the data is written up and available to compile into a larger report.

2. Keep an assessment template so all the data is written up the same way from program to program and year to year. This makes it easy to write as well as easy to compare.

3. Make sure to keep track of any new programs and experiences, thematic or structural changes to existing programs and experiences, and major factors that could influence data. In the template, include information that may have impacted the data collected. For example, a big storm the week of registration for a service trip might deter sign-ups. Make sure to include all factors so you can keep track of influences for future experiences.

4. When writing up the consolidated report of all programs and experiences, it is a great idea to include an executive summary. This highlights the most important findings of your data in a quick and easy-to-read way.

Assessment data can be interesting, helpful, and informative. So, consider an engaging style to report on your data. In addition to the traditional report document, public-facing reports, infographics, videos, and interactive web pages can make reading reports more appealing to the reader.

Public-Facing Reports

These reports are written for the non-technical reader in a style similar to a magazine. Include plenty of pictures and make sure to call out numbers, quotes, and statistics in a big font so they catch the reader’s attention. Save the report as a PDF and then upload to a site like issuu.com for the public to see.
Infographics

Infographics are print or digital posters that include graphic depictions of content alongside captions of statistical highlights or interesting findings. These are quite fun to read and can present what seems like dry data in an engaging and unique way for people to read. You can make your own infographics for free on sites like piktochart.com.

Videos

Nearly everyone likes to watch videos. So, put together a short, yet engaging, video that highlights testimonials and findings from your data. It can be recorded with actors such as students who present information or act it out. Or, you can do a slide presentation with a voice over using a program like Jing or Screenflow for narration. Once you have your video, upload it to social media, post it on your website, and share with others. And, don’t forget videos you create to highlight assessment findings can also make great marketing tools!

Interactive Web Page

Make a web page that has all of your data on it in a fun and readable manner. You could include graphics, call out boxes, testimonials, and links to other sites that go more in depth about a specific program or experience. Web pages make it easy to update data and reduce printing costs. And, all you have to do is share the URL to share your data.

Conclusion

Many higher education professionals hear the word, assessment, and become overwhelmed or intimidated. But, designing and conducting assessment along with writing up the findings can be easy and often does not include major instrument design and intense assessment protocol. And, assessment can be useful in understanding student learning and development as well as in gathering feedback for program evaluation. So, start small and branch out with your assessment efforts and if you did not already love assessment, you just might!
References


Resources

**Free Training**
The following are free training resources on assessment.

**Coursera**
Coursera offers a course on getting and cleaning data at www.coursera.org/course/getdata

**Google**
Google offers a course on making sense of data at datasense.withgoogle.com/course

**Lynda**
Lynda offers tutorials and courses on graphic design at lynda.com (some free resources and some paid)

For more specific information on assessment, check out the Learn Forward Assessment Series.
Learn Forward Engagement Series

Throughout the 2014 academic year, we have provided webinars focused on research and practical application, ebooks on strategies and best practices, and interactive blog posts to give you knowledge and tools to enhance the valuable work you do. Below are the topics that will be covered:

September | Engagement and Student Success
- Strategies for Engaging First Year Students
- Events and Calendars as Engagement Tools
- Fostering Student Success Through Meaningful Engagement Opportunities
- Bridging the Gap: Integrating OrgSync to Enhance Student Engagement

October | Engagement as an Intentional Process
- Not Just Another Campus Program: Intentional Student Engagement
- Reaching the Other 80%: Helping All Students Find Their Fit
- Give’em the Goods! Making OrgSync Worthwhile
- Using Attendance Tracking to Support Engagement Initiatives

November | Engagement and Employability
- Engaging Students through Professional Exploration, Preparation, and Experience
- Minding the Gap: Increasing the Employability of International Students
- Engagement to Employability: Helping Students Build the Skills Employers Crave
- Showcasing Engagement with the ePortfolio

January | Creating Meaningful Online Engagement Opportunities
- Updating Your Community’s Relationship Status
- Intentional Online Interactions - The Importance of Purposeful Engagement with the Virtual Student
- Your Digital H.U.B.
- Engagement on the Go: Engagement Using Mobile Devices

February | Engagement as Service Learning
- Building the Foundation for Civic Engagement
- Digital Tools for Academic Service-Learning
- Creating a Campus Culture of Service: Linking Campus to Community
- Five Essential Vertebrae of Your Community Engagement Backbone
- Using the Service Management System to Expand Experiential Learning on Campus

March | Making Meaning of Engagement Experiences through Reflection
- The art of Reflection: When, Why, and How to Use it Effectively with Student Engagement
- In Their Own Words: Reflection as a Powerful Pedagogy
- Creating Meaningful Co-Curricular Transcripts for Students

April | Assessing Student Engagement
- Assessing Student Learning Outside the Classroom
- Evaluating Leadership Development with the Student Leadership Competencies
- Coming Full Circle with Feedback as an Assessment Measure
- Making Data Make Sense: Strategies for Creating Powerful End of Year Reports

For more information about the Learn Forward Engagement Series visit:
www.orgsync.com/learnforward