

6 *Despite the significant amount of research related to student persistence, institutions must develop and implement assessment practices that account for their unique mission and purpose. This chapter describes a framework for engaging in assessment activities to improve student success.*

## How Assessment Can Advance Efforts to Enhance Undergraduate Student Persistence

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One of the tenets of the American Association of Higher Education (AAHE)'s *Best Practices for Assessment* states that “assessment makes a difference when it begins with issues of use and illuminates questions that people really care about” (AAHE, 1992). Although higher education institutions serve multiple purposes and are responsible to various stakeholders, few would argue that one the primary goals of college and universities is to enroll, educate, and graduate students. At the institutional, state, and national level, providing opportunities for students to persist to graduation is paramount. With the United States lagging behind other countries in postsecondary degree attainment (OECD, 2011), coupled with stagnation in current retention and graduation rates, it appears that the goal of increasing student persistence will continue to remain at the forefront of institutional priorities.

This chapter examines how assessment efforts can be used to enhance undergraduate student persistence. It begins by discussing the importance of engaging in institutional assessment on student persistence as a way to supplement the large body of student retention research. The chapter continues by describing different types of assessments and how each can be used to enhance student persistence, and concludes by examining Seidman's (2012) formula of retention as a way to conceptualize retention and assessment efforts.

### **Using Assessment to Supplement Research on Student Persistence**

A significant amount of theoretical and practice-based research has been dedicated to understanding the factors related to student persistence

(Bresciani, Gardner, and Hickmott, 2009). Theories and models such as Tinto's (1993) theory of student departure, Astin's (1984) theory of involvement, and Seidman's (2012) retention formula have provided conceptual frameworks that have guided student persistence research. These theories and models have no doubt been valuable in contributing to our understanding of student persistence. A substantial body of research focusing on the impact and interaction of student and institutional factors on student persistence has evolved from these frameworks. Student demographic characteristics such as gender and ethnicity, student values and attitudes, student financial aid, campus culture, levels of engagement, institutional programs such as learning communities, orientation, and institutional expenditures are a few examples of the many topics of investigation for research related to student persistence. Given the abundance of research available on student persistence, why, then, is assessment on this topic needed?

One reason is that despite the amount of research on student persistence, retention and graduation rates have not significantly increased in the past decade (Bowen, Chingos, and McPherson, 2009). In other words, there is still work to be done to more fully understand the factors related to student retention. While research and assessment share similar characteristics, they are not identical. The purpose of research is to contribute new knowledge to a field of study or develop theories (Fitzpatrick, Sanders, and Worthen, 2010; Upcraft and Schuh, 1996). The intent is that the research results from one study can be replicated and applicable to other areas: Research seeks to be generalizable.

Assessment, in contrast, is less concerned about generalizability and more focused on a specific context (Upcraft and Schuh, 1996). Research is concerned with models and theories that have broad implications; assessment can also test these models and theories, whose implications may not extend beyond an individual program at one institution. Consequently, in looking for generalizability and broader implications, research may overlook some of the more nuanced or complex relationships. Good assessment, in turn, must consider the purpose, context, and outcomes that are being assessed (Schuh, 2009). The results of an assessment may be applicable to only one program, in one department, at one particular point in time. Although focused on research related to persistence in their book *Increasing Persistence: Research-Based Strategies for College Student Success* (2012), Habley, Bloom, and Robbins also acknowledged that institutional assessment is needed to "ensure that improvements are made to optimize student success" (p. 203).

The differences between research and assessment highlight both the interrelated and the distinctive contributions of research and assessment as they relate to undergraduate student persistence. Research results can provide institutions with information on which to develop programs to improve student persistence. Assessment can be used to

determine whether these programs did improve student persistence. For example, Tinto's (1993) theory of interaction and Upcraft and Gardner's (1989) work on the first-year student experience highlight the importance of orientation programs and first-year seminars in enhancing student persistence for newly enrolled students. This research contributed to the proliferation of first-year programming in colleges and universities. Institutional assessment efforts, however, are needed to confirm that these programs are successful on their campuses. The characteristics of incoming students at a Midwestern rural community college can be significantly different from the characteristics of incoming students at a Northeastern highly selective liberal arts college. Consequently, the role of programs such as orientation or first-year seminars may vary in their impact among the different subpopulations of students within their institutions.

Research has demonstrated that financial aid can play a role in student persistence (Cabrera, Nora, and Castaneda, 1992; Perna, 1998). The impact of family income, Pell grants, scholarships, tuition, and loans on student persistence has been studied. To understand the role of financial aid at a specific institution, this research helps to inform campus administrators where to look. But again, each institution varies in terms of its financial aid strategy and student characteristics, so institution-specific assessment needs to be conducted to see how these factors enhance student persistence.

It may be helpful to think of research as the compass and assessment as the magnifying glass. Research can provide institutions with directions on how to enhance student persistence. Research can point to programs, variables, and characteristics that inform our understanding of student persistence. It provides a larger map overview. Assessment allows institutions to zoom in—to consider the unique institutional history and mission, student characteristics, program proponents, and campus culture. Just as a magnifying glass allows for a more in-depth look at a smaller area, so, too, does assessment allow institutions to focus more intensely on one component. Assessment can be very specific and not generalizable to other institutional types or, in some cases, not even to the broader university population. While others see that as a shortcoming, it is precisely why assessment is valuable.

Finally, assessment differs from research in that good assessment requires action. Whereas research can develop a theory or can confirm a conceptual framework, assessment must also ask the question, "So what?" As Upcraft and Schuh (1996) summarize, "assessment guides good practice" (p. 21). How can assessment results be used to improve student persistence? What changes need to be made based on these results? Through research, changes in policy and programs do occur; but assessment devoid of action—even if the action is to continue what has been done in the past—is little more than data collection.

## Types of Assessment

There are a variety of assessments that can be done to enhance undergraduate student persistence. Assessment efforts can range from a focus on individual student characteristics to the larger campus culture. They can focus on a leadership seminar sponsored through student activities or the effectiveness of academic advisers. Given the unlimited number of applicable assessment activities, this chapter does not attempt to provide an entire catalog of specific assessments. Rather, it describes common types of assessments used in student affairs and illustrates how they can be used to enhance student persistence.

**Needs Assessment.** Needs assessment can be used to enhance retention by providing a basis for understanding students and their expectations (Schuh, 2009). Changes in the makeup of campuses illustrate how students' needs have changed. Classrooms with desks bolted to the floor have been replaced with multifunctional rooms that allow for roundtable discussions, small group work, and the ability to interact via the Internet with students in classrooms across the world. Recycling bins, organic food options, and availability of wireless Internet—once nonexistent on college campuses—are now a part of students' expectations.

Student demographics are changing as well. As institutions see changes in their student populations—for example, an increase of students with mental health issues or increases in international student populations—support services need to be developed or adapted to meet the needs of these new students. Student needs also change as they progress through college. Academic advising in the first year can help students plan their college curriculum; academic advising in a student's fourth year may include how students can best articulate their learning as they interview for graduate schools or the workforce. Needs assessments can help institutions track students' needs and expectations. Most needs assessments are relatively easy to conduct. Campuswide surveys or program-specific surveys can be disseminated to obtain student input. Large-scale surveys such as the Higher Education Research Institute's Cooperative Institutional Research Program (CIRP) survey or the College Board's Admitted Student Questionnaire can also provide insight into students' expectations. Most institutions currently collect this data, but, as Habley and others (2012) point out, "many can be characterized as data rich and information poor" (p. 331). In other words, institutions must be intentional and spend the time to pull together data from various sources to develop a more comprehensive assessment of student needs.

**Utilization Assessment.** Needs assessment surveys can also incorporate utilization and satisfaction assessments (Bresciani and others, 2009; Schuh and others, 2009). Utilization assessments examine the use of services and programs. If, for example, students ask that the student activities provide online training on policies and procedures in addition to face-to-

face training, but assessment demonstrates that few students utilize the online sessions, the student activities director has data to support eliminating the online sessions. Utilization assessment can also look at who does or does not utilize the service or program. This, in turn, can lead to more assessment. For instance, a utilization assessment may find that only on-campus students are utilizing tutoring services. Tutoring is offered in one-hour sessions primarily in the evening. A needs assessment may uncover that off-campus students are available only in the morning prior to class and would prefer thirty-minute sessions.

Utilization assessment can be used to enhance student persistence by comparing those who use the services to those who do not. Programs such as orientation, learning communities, or academic success programs can conduct utilization assessments to gain insight on the impact they have on student persistence. Are students who participate in orientation more or less likely to be retained through their first semester? Do students who utilize Academic Success Center services persist at higher rates than similar students who do not utilize these services? Caution must be used not to attribute cause and effect, but this type of utilization assessment can provide insight into the effectiveness of these programs.

**Satisfaction Assessment.** “A satisfied student is more likely to persist” is the assumption underlying satisfaction assessment. This assessment can be done in response to needs and utilization assessments. For example, as a result of a needs assessment, the Women’s Center decided to collaborate with the Student Health Center to provide programming on related to women’s health issues, and the sessions were well attended. A satisfaction assessment could ask two basic questions: “What did you like best?” “What would you change?” This information is useful in allowing programs and services to understand what is working well and how they can improve, which ultimately can lead to increased student persistence.

**Outcomes-Based Assessment.** The previous types of assessment are necessary to better understand the student experience, which, in turn, can be used to enhance student persistence. Outcomes-based assessment methods are a more direct means for enhancing student persistence. As Bresciani and others (2009) describe, “outcomes-based assessment is designed as a systematic and critical process that yields information about what programs, services, or functions of a student affairs department or division positively contribute to students’ learning and success and which ones should be improved” (p. 16). Outcomes-based assessment is intentional; it relies on data, and is used to make decisions as to what is working well and what needs to be improved. For purposes of this chapter, the outcome is student persistence. But what data are needed?

For outcomes-based assessment, retention theories can serve as the compass pointing out areas of exploration. In general, most theories of retention (see, for example, Bean, 1983; Astin, 1984; Tinto, 1993) acknowledge that student persistence involves the interaction between the student

and the environment. Therefore, institutions interested in enhancing student persistence must undertake assessment activities that examine student attributes, the campus environment, and campus culture.

With such an array of possible assessments, where do institutions begin? Many institutions are already heavily involved in assessment, but how do they use these various assessments to inform them of the larger picture of student persistence? In other words, if assessment is a piece of the puzzle, how does one begin to put the puzzle pieces together? One potential answer may, ironically, come from another model of retention: Seidman's retention formula. This model, although originally developed for retention, may also serve as a framework for developing an assessment plan related to retention.

### Seidman's Retention Formula

In *College Student Retention*, Seidman (2012) illustrates his model for retention and student success:  $RET = E_{ID} + (E + IN + C)_{IV}$ . This formula views successful retention efforts as a combination of early identification ( $E_{ID}$ ) and interventions (IV) that are early (E), intensive (IN), and continuous (C); Seidman's model implies that there are strategies, programs, and services that, when provided to the student, should lead to student success.

The critical question is: "How will we know if these services and programs are successful?" The answer: assessment. While Seidman's formula is a model of retention, operationalization of this model requires assessment. In other words, it is difficult to know if early identification and interventions efforts lead to retention without assessment.

Seidman's formula assumes that there is one outcome: retention. But as Seidman (2012) notes, there are many different forms of retention—first-year retention, retention in an academic program, retention in a specific course, or a longer-term retention to graduation. Good assessment also requires defining retention or student persistence. What is the outcome or purpose of the assessment? As a director of residence, you may be concerned not only with how living in the residence halls has an effect on the retention of students at the university, but also with whether students are retained within the residence halls—are students choosing to live year after year in the residence halls? If you are on a campus that requires students to live in residence halls while they are enrolled, this second question may not be relevant, but instead you may want to look at the retention rates of students in various residence halls. Do students living in certain residence halls seem to be retained at higher or lower rates than those in other residence halls? Are all students retained at similar rates, or do they differ by some characteristics (gender, ethnicity, first-generation American, and so on).

Institutions commonly produce first-year retention and four-, five-, and six-year graduation rates. But perhaps this is not the correct measure-

ment. Community colleges may find, for instance, that retention rates from fall to spring are more critical than one year. Therefore, assessing factors that contribute to retention in the first semester may be more useful. Assessment efforts can be conducted to understand the current persistence rates.

What is your purpose for conducting assessment? What are you looking to measure? What do you hope to do with the results? Is there a specific population of students that is of interest? It is important to define student persistence and discuss these questions prior to engaging in assessment, as the answers will guide your assessment methods.

**Early Identification.** Seidman's (2012) model discusses early identification as "assessing of student skills levels" (p. 272). Helping students succeed requires an understanding of the skills they currently possess or, more importantly, what skills they need to acquire to be successful. Similarly, it is important for institutions to also do this early identification—to understand the current institutional context as related to student persistence. What programs, departments, services, or policies contribute positively to student persistence? What areas need improvement? Early identification may also focus on subpopulations of students—are there differences between male and female, students in science, technology, engineering, and math (STEM) versus non-STEM, students in vocationally based curricula or liberal arts curricula? For example, perhaps an institution wants to increase its four-year graduation rate from 65 percent to 68 percent. In reviewing the data, it notices that students who earn less than a 2.0 GPA in their first semester have a four-year graduation rate of only 55 percent. Thus, providing academic assistance for this group of students may be an effective approach to increasing overall graduation rates.

**Interventions.** The second component of Seidman's model includes the summation of three types of interventions: early, intensive, and continuous. Just as retention efforts can have varying levels and degrees of intensity, so can assessment efforts. Early intervention assessments are the low-hanging fruit. What assessment activities can be done relatively easily and quickly but still produce useful information? Intensive interventions focus on those activities that have more depth, take more time, but ultimately should have the greatest impact. Continuous interventions assume that efforts need to be maintained throughout the student's time in college.

*Early Intervention.* Seidman (2012) conceptualizes early intervention as the activities that begin soon after identification. Introducing study skills techniques early in a students' program gives them experience and helps them build off what they know. Similarly, early assessment efforts provide an idea of getting feedback about a program immediately, and determining what seems to be working and/or what needs to be changed. As mentioned earlier, these early assessment efforts may include needs assessment (What do students need?), utilization assessment (Are students using the



services?), or satisfaction assessment (Do students like the services?). This early assessment can be primarily formative—gathering evidence as the program, class, or service is being delivered. Early assessment allows you to determine what is working or not working, and to make necessary changes.

*Intensive Intervention.* Intensive interventions are those activities that are more powerful in creating change (Seidman, 2012). Intensive assessment efforts get at the important questions. Early identification may uncover that a certain student population is less likely to graduate than others. Early assessment suggests that they are unsatisfied with their living arrangements or struggling with homesickness or class expectations. The next questions are “Why?” “What is going on?” These questions require differing assessment methods. Whereas needs and utilizations assessment can be done through a survey, qualitative methods can best answer questions as to “why.” Focus groups and individual interviews can replace online surveys to answer “why” questions. Examining the student experience through campus audits (Kuh, Schuh, Whitt, and others, 1991) and an assessment of campus environments (Strange and Banning, 2001; Whitt, 1996) are also important “to take a look at their collective perceptions of campus environments and student cultures within which they conduct their day-to-day lives” (Upcraft and Schuh, 1996, p. 29).

*Continuous Intervention.* Successful retention requires continuous intervention until change occurs (Seidman, 2012). Good assessment is continuous assessment. As Maki’s (2004) systematic cycle of assessment illustrates, assessment should arise from the goals and mission of the institution. Assessment begins with stated intended outcomes. Evidence is gathered and interpreted, and changes are implemented based on this evidence. This process is then repeated to assess whether changes were effective. Enhancing student persistence also requires ongoing, sustainable assessment activities that are done with the purpose of improvement. This form of “positive restlessness” (Kuh, Kinzie, Schuh, and Whitt, 2010) is necessary for institutions to continue to understand and improve their student success efforts.

Seidman’s (2012) formula for retention can also serve as a framework from which to develop an effective assessment plan to enhance student persistence. This formula can also be adapted at the institutional, divisional, and departmental levels. Consider the following scenarios:

- The president of your institutions has set a goal of increasing university retention efforts by 3 percent over three years.
- The vice president of student affairs has asked you, the director of Greek affairs, to improve four-year graduation rates of fraternity and sorority members.
- As a coordinator of a residential living building, the director of residence has asked you to improve fall-to-spring persistence of first-year students in your building.



The definition of student persistence may vary in each of these scenarios, but to assess and improve student persistence requires similar approaches: understanding the current situation (that is, early identification); conducting needs, satisfaction, and utilization assessment (early intervention); in-depth assessments that focus on “why” and examine the student experience from the student and environment perspectives (intensive intervention); and continually assessing and using the results of the assessment to inform and improve the student experience (continuous intervention).

Although Seidman’s (2012) formula views identification and interventions as distinct and separate, assessment efforts may be interrelated and effective assessments often investigate many outcomes simultaneously. Assessments used to understand students’ experience in a leadership class can simultaneously assess their needs, satisfaction, and the impact of their experience on persistence. Nevertheless, Seidman’s formula is useful in helping institutions to see the complexity of assessing student persistence as well as providing a map off which to work.

## Summary

This chapter has sought to examine how assessment can be used to enhance student persistence. Through this exploration it has attempted to answer another question: “How can student persistence be enhanced without assessment?” Institutions looking to enhance their undergraduate student persistence can be informed by research and theory. However, assessment activities that consider the unique mission and institutional context are also required. Needs-, utilization-, satisfaction-, and outcomes-based assessments, when used together and acted upon, can assist institutions in understanding and enhancing student persistence at their institution. Seidman’s formula for retention can be adopted and adapted as an assessment plan—what is the current situation, what can we find out relatively easily, what will take more time, and how can this be sustained? Assessment efforts enhance student persistence by providing data, results, and action focused on student success.

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