People do assessments to determine whether programs accomplish what they are intended to accomplish. Accordingly, the single most important thing one can do to successfully assess a program is to know what the program is meant to accomplish. While this sounds simple, we often encounter assessments that do not begin this way. Too many learning community coordinators scour the literature for ready-made assessment instruments, use already-available registrar-type data, or ask overly simple student satisfaction questions. Each of these types of data can be beneficial when assessing learning communities. But here’s the rub: what makes learning communities so powerful is exactly what makes them so difficult to assess.

Learning communities describe a set of educational processes more than they prescribe objectives. Generally, a learning community’s description outlines the nature of the experiences it offers students, but the description does not in itself define the underlying learning objectives of the experience. Articulating the program’s learning objectives is the responsibility of the learning community coordinators. Clearly defined learning objectives provide the foundation for a good assessment.

This chapter can be thought of as a primer on assessment combined with a personal essay on our experience doing learning community assessments. Our goal is to highlight the issues that we consider critical to consider in order to develop good assessments. We support Blimling’s (2001) view of student affairs and academic affairs as true partners in carrying out a university or college’s core academic mission.

We start with the assumption that the long-term success of any program—including learning communities—depends upon the degree to which its learning objectives support or enhance the institution’s core academic mission. The successful assessment of a learning community must begin with the specific learning objectives of the program, as they are understood collectively among all the leaders of the program, as well as an understanding of how students will change if these learning objectives are met. Practitioners must have a picture of what meeting the outcomes will actually look like. A well-designed
assessment effectively captures the factors that contribute to these student changes.

In this chapter, three aspects of learning community assessment will be briefly described: (1) identifying a program’s learning objectives; (2) operationalizing the learning objectives for study; and (3) designing assessments that effectively capture factors contributing to student change and success. For illustrative purposes, we will then spotlight the National Study of Living-Learning Programs, a comparison survey of 24,000 students. Half of the students in this study reside in living-learning program housing; the other half live in traditional residence halls. (Inkelas, Brower, and associates 2004).

Most of our own experiences are with developing and evaluating residential learning communities, or living-learning programs. Living-learning programs are residentially based, of course, which differentiates them from curricular-only learning communities. However, living-learning programs share the same overarching principles as all learning communities: to create integrated, coherent learning experiences for students, ones that blend in-class and out-of-class learning, are interdisciplinary, and treat students as active collaborators in the learning process who become engaged, critical thinkers (Brower and Dettinger 1998; Smith, MacGregor, Matthews, and Gabelnick 2004). We believe that the process we describe in this chapter will generalize to all types of learning communities.

Before we begin to talk about how to do an assessment, we do want to quickly raise two precursor steps that provide the context for the assessment: clarifying why it is being carried out and identifying the intended audience (Angelo and Cross 1993). For example, is the assessment intended to be formative, to assist in programmatic decision-making? Or is it intended to be summative, to document program and participant outcomes? Is the purpose of the assessment to evaluate a new program that needs acceptance and credibility; if so, for whom? Or is the purpose to evaluate an established program in order to expand or adapt it to new settings? Other possible reasons for a learning community assessment might include documentation of the program’s growth for historical or archival purposes, evaluation as part of an internal or external review, or to gather evidence to be used in fund raising efforts.

Another set of questions should be asked specifically about the assessment’s intended audience. Will the assessment be read primarily by central leadership for administrative or funding decisions? Will it be read by faculty for recruitment? Is the audience an accreditation
body external to the university? Or instead, will it be read by others in your department as part of an internal strategic planning exercise? Anticipating both the purpose and the audience for your assessment will greatly influence the design, data collection, analysis, and dissemination choices you make.

**Identifying the Program’s Learning Objectives**

Identifying and articulating a program’s learning objectives are as essential for assessment decisions as they are for decisions about programming, staffing, and budget (Brower and Dettinger 1998; Shapiro and Levine 1999). Using generic student development or academic outcomes will necessarily limit the value of the assessment. The more clearly you can define the program’s learning objectives, the easier it will be to identify outcome and process variables that illustrate the learning community’s effectiveness in facilitating those objectives.

Barbara Leigh Smith and her colleagues (2004) present a comprehensive hierarchy of learning community goals, categorizing these goals into outcomes for individual students, faculty and staff leaders, and the institution. This hierarchy provides an excellent and comprehensive list to consult as you begin the process of identifying your own program’s learning objectives. However, we strongly encourage planners to use this list as a springboard for their own brainstorming, because the most critical factor in a strong assessment plan is being able to articulate the specific goals and objectives for a particular learning community. Since learning community programs can have long lists of possible objectives, it’s also important for the learning community team to take time to discern which of the learning objectives most centrally support student learning, as well as noting which of the objectives are most congruent with the institution’s priorities.

Some simple questions one might ask to assist in the identification of learning objectives include:

1. For student learning objectives: “What do I hope students will be like or be able to do after having participated in my program?”
2. For faculty/staff learning objectives: “What do I hope that faculty/staff will gain as a result of having participated in my program?”
3. For institutional learning objectives: “How do I hope the institution will change as a result of my program’s existence?”
Plausible answers to these questions—which then become versions of the articulated learning objectives—might include:

1. “Students will, as a result of participation in my program, become more integrative or critical thinkers.”
2. “Faculty/staff will, as a result of participation in my program, widen their scholarly interests and endeavors.”
3. “The institution will, as a result of my program’s influence, improve its campus climate.”

**Operationalizing the Program’s Learning Objectives for Assessment**

Once you have identified learning objectives for the learning community, you will operationalize these objectives. A traditional assessment might include measurements of students’ academic outcomes, such as their grade point averages, credits earned, persistence, graduation rates, etc. These variables are perfectly fine, but they only indirectly help determine whether the learning community has accomplished its specific objectives. In some cases, they may not provide any new information about whether these objectives have been met.

We suggest considering these types of questions when thinking about how to measure learning objectives: If the program is successful what changes will you see in students? What will the successful attainment of each objective actually look like? This process will not only help identify the types of measures that will be needed in the assessment; it is also a good way to uncover ambiguities in the program’s learning objectives. And, if the learning objectives are not articulated clearly, then measuring them will be extremely difficult to do.

Let us return to the learning objective examples we offered in the previous section. Envisioning how you will measure these constructs from the vantage point of your specific program’s objectives is critical for operationalization. For example:

1. What will you observe if students are exhibiting “integrative and critical thinking”?
2. What will you observe if faculty and staff are exhibiting “widened scholarly interests and efforts”?
3. Finally, what will you observe if your institution exhibits “an improved campus climate” as a result of this program?

And, based on your observations, how will you determine that the program successfully meets each of these learning objectives?
It can be helpful to imagine that one of the program’s students and a student who is not from the program (but matched on relevant characteristics) are both behind a screen. Consider whether you could identify one from the other by asking a series of questions or by giving them tasks to complete (Wright, et al. 1998).

Imagine that your living-learning community is a French House, with the specific learning objective of increasing students’ ability to communicate in French. We can imagine that the successful student behind the screen will exhibit more ease and expertise when speaking and writing in French. You could determine the outcomes through direct conversation with the student. You might also imagine that successful students will feel more confident and willing to put themselves in situations where they would have to rely on their French language skills. These attitudinal measures could be obtained through interviews or surveys with students. Perhaps another learning objective is that students will have a better appreciation of French culture. Students could be queried on their appreciation of French art, music, literature, even cuisine. The operationalization of the learning objectives—that is, the richness of what student success in the program will mean—will become clearer if you picture the successful student at the end of the year. By fleshing out the end-of-year picture, you can then begin to develop the questions that can capture the many dimensions of this rich picture.

Designing an Assessment That Captures the Factors That Contribute to Student Change and Success

It is well beyond the scope of this chapter to adequately address basic research methods and instrument design. But one can—and should—consult standard research methods texts. (We have our favorites—Babbe 1989; Creswell 2003; Cook and Campbell 1979.) What we wish to do instead is to highlight a few key features of research design that can help guide assessment work.

Please remember that perfect research designs only exist in textbooks; real world issues—budgets, logistical difficulties, time pressures, and ethical concerns—force us to make compromises. However, the extent to which one can conduct a rigorous study is largely based upon how well one anticipates and addresses some common vulnerabilities. Two such vulnerabilities in the assessment of learning communities are (1) lack of a comparison group to compare outcomes against, and (2) a failure to account for the inherent distinctiveness of learning community students, or self-selection bias.
Comparison Groups and Self-Selection Bias

Any assessment of an intervention’s effectiveness in facilitating an outcome must demonstrate that it was the intervention itself that influenced the outcome. If the only students in the study are those who participated in the program, then how does one demonstrate that those who did not participate in the program did not show the same outcomes?

Returning to the French House example, a logical question to ask would be: “How do we know that after one year all French students, regardless of whether or not they lived in French House, did not feel more confident about their French abilities, demonstrate better speaking and writing skills, and know more about French culture?” Answering this question requires comparing data from two samples—students who participated in the French House programs and courses and students in French classes who were not living in French House. In short, only with a comparison group can a statement be made about the relative performance of the program’s students.

In finding the ideal comparison sample for your learning community, a related limitation may surface: Just what sample of students really is “comparable” to your program’s students? A common criticism of learning community and living-learning program research is that the profile of a learning community student is fundamentally different from the profile of the average student. Learning community students are, in general, more academically able and motivated to get involved with their college experiences than the typical college student. This “self-selection” bias among learning community students raises questions about whether the positive outcomes exhibited by these students are due to their inherent traits rather than the effect of the program.

Self-selection bias can be tackled in two different ways. If the program is over-enrolled, a very good comparison group can be created from those who applied to your program but who were not selected to enroll. This is sometimes called a “wait list control” group since these are often the students who make up the program’s waiting list. If the program’s applicants are randomly selected, the comparison group has the potential to be very close in characteristics to the program group; this is ideal for assessment purposes. If the selection process is first-come/first-served, the wait list is still valuable because it is safe to assume that the students on the waiting list have the same motivations to attend the program as those who actually enrolled.

If there is not a wait list for your program, then it is important to think carefully about how to create a comparison group of students
for the assessment who match the program’s students in relevant ways. Some of the key student characteristics might include their prior academic performance, their motivation to do well, and their prior relevant academic and social experiences. At minimum, try to match your program sample and comparison sample by background characteristics such as gender, race/ethnicity, year in college, major, and other facets that capture students’ motivation to do well in your program. Our analyses of the living-learning program students and the comparison samples in the National Study of Living-Learning Programs revealed that the two groups differed in their pre-college academic ability, as measured by both high school grade point averages and standardized test scores. Thus, high school ability measures are important variables to match when composing your program and comparison samples (Inkelas, Brower, and associates 2004).

Sources of Data

Again, it is beyond the scope of this essay to fully describe the various ways data can be collected, but we did want to point out a few issues to consider when making this set of decisions. Whatever type of data you use—self-reported survey data, interviews, transcripts, or external evaluators—will bring with it advantages and disadvantages. Some of these have been summarized in the table on the following page. Clearly, like all aspects of assessment, no single source provides perfect data.

An Assessment Example: The National Study of Living-Learning Programs (NSLLP)

Our study, the National Study of Living-Learning Programs (Inkelas, Brower, and associates 2004), offers an example of the assessment process we’ve described. The NSLLP consists of 24,000 students, half living in 268 living-learning programs at thirty-four colleges and universities around the country, with the other half living in traditional residence halls at these same thirty-four institutions. We recognize that the assessments most learning community assessors will undertake will not match the scope of the NSLLP; nevertheless, certain aspects of this study highlight how we made decisions about assessment design that are applicable to studies of any scale.

Identification of the program’s learning objectives: Because the NSLLP included 268 different programs with, potentially, 268 idiosyncratic learning objectives, we focused on objectives and other
### Major Sources of Data for Learning Community Assessment

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<thead>
<tr>
<th>Source</th>
<th>Advantages</th>
<th>Disadvantages</th>
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<tbody>
<tr>
<td><strong>Paper-and-pencil surveys</strong></td>
<td>• Cheap to create and produce</td>
<td>• May require separate data entry and coding operations</td>
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<td></td>
<td>• Familiar format</td>
<td>• Harder to manage non-respondents</td>
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<td></td>
<td>• Provides a permanent record</td>
<td>• Only captures what a student thinks of self, not actual behaviors</td>
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<td>• Captures what a student thinks of self</td>
<td>• Questions asked often lack “depth”</td>
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<td></td>
<td>• Generates quantitative results which some find compelling</td>
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<tr>
<td><strong>Web-based surveys</strong></td>
<td>• Increasingly familiar format</td>
<td>• Format fatigues some respondents</td>
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<td></td>
<td>• Novelty may be a built-in incentive to participate</td>
<td>• Requires programming expertise and expense</td>
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<tr>
<td></td>
<td>• Data entry/automatic coding</td>
<td>• Only captures what a student thinks of self, not actual behaviors</td>
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<td></td>
<td>• Easy to monitor non-respondents</td>
<td>• Questions asked often lack “depth”</td>
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<tr>
<td></td>
<td>• Produces a permanent record</td>
<td>• Not all students have ready access to computers; selection biases</td>
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<td></td>
<td>• Captures what a student thinks of self</td>
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<td></td>
<td>• Generates quantitative results which some find compelling</td>
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<td></td>
<td>• Allows for seamless skip patterns in questionnaire</td>
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<td><strong>Interviews (done either with those internal or external to program)</strong></td>
<td>• Can engage students “deeply” about their concepts, attitudes, and beliefs</td>
<td>• Time-intensive, for interviewer and interviewee</td>
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<td></td>
<td>• Can capture motivations and explanations for actions</td>
<td>• Difficult to code</td>
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<td></td>
<td>• Generates stories and quotes; useful for marketing</td>
<td>• May not generate quantitative results that some may need to see</td>
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<td></td>
<td>• Brings out information that can be particularly compelling</td>
<td>• May only be possible to interview a limited number of students, making it hard to generalize findings</td>
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<tr>
<td><strong>Institutional data (transcripts, etc.)</strong></td>
<td>• Data is readily available for comparison and planning</td>
<td>• Variables are limited to what the institution already collects</td>
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<tr>
<td></td>
<td>• Generates quantitative results</td>
<td>• Does not capture motivations</td>
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<td></td>
<td>• Institutional infrastructure is often already in place to analyze data</td>
<td>• May be difficult to get after-the-fact consent</td>
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|                               | • No danger of selection bias or response bias                             | • May be difficult to obtain consent that allows longitudinal analyses
student outcomes common to a wide range of living-learning programs. The objectives chosen included the transition to college, perceptions of intellectual growth, appreciation of multiculturalism and diversity, sense of civic engagement, and overall satisfaction with college.

Operationalization of learning objectives for assessment: In order to assess the chosen outcomes, we constructed and pilot-tested a series of survey questions targeted at students’ perceptions and behaviors regarding their college experiences. For example, in assessing students’ opinions of their intellectual growth, we surveyed students on the types of behaviors they engaged in with their academic pursuits, such as taking the devil’s advocate position on a controversial issue or questioning something in their reading materials or course lectures. In addition, we queried students on their perceptions regarding intellectual pursuits as well, such as their level of agreement with statements like “enjoying the challenge of learning complicated new material.”

Research design addressing comparison groups and self-selection bias: The NSLLP attempts to capture self-selection bias in two ways. First, we obtained matched comparison groups for each of the institutions we collected data from, and second, we used Astin’s (1993) Inputs-Environments-Outcomes (I-E-O) model to help us identify student inputs and college environments that might influence outcomes in addition to the living-learning program’s effectiveness.

We were interested in collecting data from a wide range of living-learning programs across the country, so we did not make selections based on their student-selection criteria. We were not able, therefore, to use wait list control group comparisons. Instead, we asked program administrators to select a matched sample from their non-living-learning students based on gender, race/ethnicity, year in school, and residence hall occupancy. We also used Astin’s I-E-O model to help us identify and define college environmental factors and students’ background characteristics that we believed would contribute to our selected outcomes. An important lesson to learn from Astin is that any study attempting to assess the impact of any one program (say, a learning community) on students’ outcomes will fall short of its goals if it does not also assess the relative impact of students’ incoming characteristics (their “inputs”) and other possible collegiate influences (their “environments”) in the same study. Thus, in addition to studying the relationship between living-learning program participation and our chosen outcomes, we also studied how a variety of other factors—such as students’ demographic characteristics, prior high school achievement, involvement in a variety of college experiences in addition to living-
learning program participation, general faculty and peer interactions, co-curricular involvements, and time spent on leisure activities — were related to living-learning program outcomes.

Sources of data: We chose to use the web for our data collection; ease of coding and monitoring response rates across the country were important factors for us. We intentionally used a very broad definition of living-learning programs in the invitation to institutions to participate—inviting any that wanted to participate to do so, and including any living-learning program as long as it involved students living together in a residence hall and participating in special academic and social programming designed especially for them, and as long as the program had dedicated staff and resources. We also obtained a second dataset of variables describing the living-learning programs from the administrator responsible for the program.

Note the choices we made. We were heavily focused on quantitative data; we were interested in the potential for longitudinal analyses and so were careful to obtain consent on the front end from individuals; and we had the resources to create a sophisticated web-based survey. One last point to highlight from this study: to keep our survey from taking hours to complete (and therefore guaranteeing that no one would complete it!), we spent many hours discussing how to severely prune back the number of variables we were including. We made these decisions based on our judgments about which variables contained our absolute core assessment of learning community objectives, within the context of what the literature could and could not already tell us about living-learning program outcomes. But ultimately, we simply had to let go of many variables of interest in order to keep our survey within a reasonable length. A good rule of thumb for any web or paper-and-pencil survey is that twenty minutes is about as long as the typical student will spend on your survey.

We conclude this chapter where we started—the reason one engages in assessment is to determine whether one’s program is accomplishing what it is intended to accomplish. Always begin your assessment work by first identifying your program’s specific learning objectives. It is not that the rest of the assessment process is easy, but without clear objectives, an assessment will never be successful.

For more information about the NSLLP, we invite you to visit our website at www.livelearnstudy.net.
References


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