Learner-Centered Assessment on College Campuses

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Shifting the Focus from Teaching to Learning

Mary E. Huba
Iowa State University

Jann E. Freed
Central College

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ASSESSMENT AND THE IMPROVEMENT
OF UNDERGRADUATE EDUCATION

In its report, *Making Quality Count in Undergraduate Education,* the Education Commission of the States proposed twelve quality attributes of good practice in delivering an undergraduate education (1995). "Extensive research on American college students reveals. . . that when colleges and universities systematically engage in these good practices, student performance and satisfaction will improve" (Education Commission of the States, 1996, p. 5). Shown in Figure 1-6, these attributes address aspects of an institution's organizational culture and values, its curriculum, and the type of instruction that takes place within it (Education Commission of the States, 1996).

One of the attributes is "assessment and prompt feedback," and it is included in the list as an intrinsic element of quality instruction. However, we believe that learner-centered assessment, as discussed in this hook, promotes or enhances all the attributes of quality that are listed in Figure 1–6. Assess-

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Quality begins with an organizational culture that values:

1. High expectations
2. Respect for diverse talents and learning styles
3. Emphasis on the early years of study

A quality curriculum requires:

4. Coherence in learning
5. Synthesizing experiences
6. Ongoing practice of learned skills
7. Integrating education and experience

Quality instruction builds in:

8. Active learning
9. Assessment and prompt feedback
10. Collaboration
11. Adequate time on task
12. Out-of-class contact with faculty

(Education Commission of the States, 1995, 1996)

FIGURE 1–6   Attributes **of** Quality Undergraduate Education: What the Research Says

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Making Connections   Continued

- What changes would you like to make in your teaching and assessing?
- How might these changes best be made?

What else do you know about learner-centered teaching and assessment?

What questions do you have about learner-centered teaching and assessment?

In this chapter, we will examine eight hallmarks of learner-centered teaching that derive from the field of continuous improvement and from the research of cognitive psychologists and educational researchers. We will see how they are related to some of the propositions for learning developed by the Joint Task Force on Student Learning appointed by the American Association for Higher Education (AAHE), the American College Personnel Association (ACPA), and the National Association of Student Personnel Administrators (Joint Task Force, 1998a, 1998b).

For each hallmark, we will review one or more examples, as well as some questions you can use to reflect on your own teaching. In the remainder of the book, the principles presented here will be translated into specific techniques to help make teaching more learner-centered.

Figure 2–1 summarizes the hallmarks of learner-centered teaching. Several hallmarks focus on learners, describing how they spend their time in ways that promote learning in a learner-centered environment. Other hallmarks focus on the professor, pointing out the viewpoints and activities that professors can employ in order to maximize student learning. The final hallmark indicates that, in learner-centered teaching, learning is viewed as an interpersonal activity. As theorists would put it, learning is "socially constructed." In learner-centered environments, all learners — students and professors — are respected and valued.

- Learners are actively involved and receive feedback.
- Learners apply knowledge to enduring and emerging issues and problems.
- Learners integrate discipline-based knowledge and general skills.
- Learners understand the characteristics of excellent work.
- Learners become increasingly sophisticated learners and knowers.
- Professors coach and facilitate, intertwining teaching and assessing.
- Professors reveal that they are learners, too.
- Learning is interpersonal, and all learners — students and professors — are respected and valued.

FIGURE 2–1   Hallmarks of Learner-Centered Teaching

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▶ 3

Applying Principles of Good Practice in Learner-Centered Assessment

Assessment is a process in which rich, usable, credible *feedback* from an act—of teaching or curriculum—comes to be *reflected* upon by an academic community, and then is *acted* on by that community—a department or college—within its commitment to get smarter and better at what it does. . . . Assessment . . . is a community effort or nothing, driven by a faculty's own commitment to reflect, judge, and improve (Marchese, 1997, p. 93).

A college must satisfy five conditions, at least, to validly claim that it has been transformed into a Learning Paradigm-governed college. First it must have identified its intended learning outcomes in detail. Second, it must have developed a system for measuring the achievement of these outcomes at both the individual student level and the aggregate class, program, and institutional levels. Third, its curriculum must have been built backward from the intended outcomes and must be developmental. Fourth, it must provide a wide range of powerful options for achieving required learning outcomes. Fifth and finally, it must continually and systematically investigate alternative methods for empowering students to learn (Barr, 1998, pp. 19–20).

Making Connections

As you begin to read the chapter, think *about* the ideas and experiences you've already had that are related to principles *of* good practice in assessment . . .

- How would you characterize the attitudes of faculty at your institution regarding assessment?
- How have you been involved in assessment efforts at your institution? What have you learned?

- What do you know about effective assessment?
- How do administrators at your institution support effective assessment?

What else do you know about applying principles of good practice in assessment?

What other questions do you have about applying principles *of good* practice in assessment?

Chapter 1, we discussed the concept of assessment and the powerful role can play in helping us shift to a learner-centered'perspective. In Chapter 2, e examined a learner-centered environment, noting the many ways it is pported and nourished by assessment. In this chapter, we will discuss assment from the point of view of good practice, asking ourselves how we n carry out assessment so that it will make a difference in student learning.

RINCIPLES OF GOOD ASSESSMENT PRACTICE

rofessional assodations and accreditation agencies have developed lists of sessment principles or characteristics of successful assessment programs. wo are included in Figures 3-1 and 3-2. Figure 3-1 lists Principles of Good ractice for Assessing Student Learning developed by the American Association of Higher Education (AAHE) Assessment Forum (1992). Figure 3-2 lists allmarks of Successful Programs to Assess Student Academic Achievement cluded in the 1994-1996 *Handbook of Accreditation* of the Commission on Institutions of Higher Education of the North Central Association (NCA).

The two lists have several characteristics in common. For example, both cus on the importance of assessing for improvement and on the need to involve constituents across the institution in assessment. However, each list so provides unique insights into the assessment process. The AAHE Principles of Good Practice highlight the fact that assessment is most effective hen it is part of a larger set of conditions promoting change, whereas the

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1. The assessment of student learning begins with educational values.
2. Assessment is most effective when it reflects an understanding of learning as multidimensional, integrated, and revealed in performance over time.
3. Assessment works best when the programs it seeks to improve have clear, explicitly stated purposes.
4. Assessment requires attention to outcomes but also and equally to the experiences that lead to those outcomes.
5. Assessment works best when it is ongoing, not episodic.
6. Assessment fosters wider improvement when representatives from across the educational community are involved.
7. Assessment makes a difference when it begins with issues of use and illuminates questions people really care about.
8. Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change.
9. Through assessment, educators meet responsibilities to students and to the public.

(American Association of **Higher** Education (AAHE) Assessment Forum, 1992)

FIGURE 3–1   Principles of Good Practice for Assessing Student Learning

NCA's Hallmarks of Successful Programs remind us of the need to assess the assessment process itself.

The remainder of the chapter has been organized around questions that derive from the principles in Figures 3-1 and 3-2. In the questions, the principles have been combined and reordered to enhance the flow of ideas.

Successful assessment:

1. Flows from the institution's mission.
2. Has a conceptual framework.
3. Has faculty ownership/responsibility.
4. Has institution-wide support.
5. Uses multiple measures.
6. Provides feedback to students and the institution.
7. Is cost-effective.
8. Does not restrict or inhibit goals of access, equity, and diversity established by the institution.
9. Leads to improvement.
10. Includes a process for evaluating the assessment program.

(North Central Association—Commission on Institutions of Higher Education, 1994)

FIGURE 3–2   Hallmarks of Successful Programs to Assess Student Academic Achievement

EY QUESTIONS TO CONSIDER WHEN ;TABLISHING OR EVALUATING AN ;SESSMENT PROGRAM

oes assessment lead to improvement so at the faculty can fulfill their responsibilities students and to the public?

Chapter 1, we pointed out that many legislatures and accrediting associa-
ms have required or urged institutions to engage in the assessment of stu-
nt learning. There are two aspects to this call for assessment, the need to
sess for accountability and the need to assess for improvement, and these
pects are in continual tension. Both reasons for assessment are important—
2 must improve what we do, and at the same time, we must be accountable
our students, to the public, and to those who fund us. The tension between
ese assessment purposes results from the fact that they lead to two funda-
entally different approaches to assessment.

On the one hand, when we assess to be accountable to external audi-
ices, our primary motivation is typically to "put our best foot forward." We
ish to showcase our successes and highlight the satisfaction of various
akeholder groups — students, parents, employers, alumni. Our assessment
dominated by the need to convince constituencies that funds are well spent,
id this leads us to gather the type of assessment data that supports the con-
ntion that no change is needed.

On the other hand, assessing for improvement implies a focus not only
i strengths, but also on areas in need of change. One assumption underly-
g an emphasis on improvement is that there are areas of programs and
iurses in which improvements can be made. Another assumption is that
iange, when needed, is desirable and should be embraced. For an improve-
ent environment to develop, administrators must create trust by assuring
culty that no internal or external reprisals will result when they engage in

assessment and identify areas in need of improvement. An atmosphere of
trust encourages faculty to feel comfortable rather than threatened by change,
and it provides a context within which faculty can feel free to identify weak-
nesses and address them. Trust allows faculty to apply a fundamental
principle of continuous improvement, that data should determine the im-
provements to be made and thus drive decision making (Freed & Klugman,
1997).

Assessment is most likely to be useful to faculty and students when we
resist the temptation to placate external audiences with glowing accounts of
success and develop instead a more balanced approach that reveals both our
strengths and weaknesses in helping students learn. Change is inevitable,
and assessment takes time and effort. Our investments in assessment will
have greater payback for us if the data help us determine what changes we
need to make and how we can make them effectively.

Ultimately, improved student learning should satisfy constituencies out-
side the institution, and therefore, the need to be accountable to external au-
diences can be folded into the improvement process. However, this means
that, in addition to collecting assessment data, we must complete the entire
assessment process and use the results of data collection to make changes
leading to better learning. Demonstrating that we are able to use assessment
results to continuously improve student learning should fulfill our account-
ability requirements. Assessing for improvement is a must.

Is assessment part of a larger set of conditions that promote change at the institution? Does it provide feedback to students and the institution?

To be effective, assessment should become integrated into existing processes
like planning and resource allocation, catalog revision, and program review.

his puts student learning at the heart of the processes through which the institution does business.

Planning and Resource Allocation

The results of assessment should be as important in institutional planning as student–faculty ratios, credit hours generated, and fluctuating revenue sources. Data about the success of a particular unit in bringing about student learning should be influential in any decisions about the program. When decisions are made to add personnel or restructure a program, data about student learning should play a central role in developing the rationale for such changes. It is essential that assessment results are used for better decision making, leading to program improvement.

Curricular Change and Catalog Revision

At most **U.S.** institutions, the curriculum is delivered primarily in a course format, but other experiences like independent studies, practica, and internships are included. The process of curricular revision is embedded in a continuing catalog change process, and we reveal the results of the process to the public every time we develop a new catalog.

Ideally, when we participate in assessment, we begin to view the curriculum as an interrelated system of experiences through which students achieve the intended learning outcomes of the program. As mentioned in Chapter 2, students are driven to make sense of their experiences. When they experience a particular pattern of courses, they either develop greater understanding of their discipline or they become confused because they are unable to understand the essential features of the discipline and the relationships among them.

It is not uncommon for students to complain that they don't understand why a particular course is required or how it will help them in their field. As faculty, we can design curricula so that students develop an increasingly clearer understanding of the concepts and skills needed in their field, or we can inadvertently obscure these features, making it difficult for students to make connections among them. In so doing, we prevent students from achieving essential knowledge and skills, and we may cause students to become discouraged from pursuing a course of study.

Assessment data about student learning can help us keep a learner-centered perspective during curriculum development and revision. A primary use of assessment data should be to inform the decisions we make about curriculum. When we discuss assessment results, we come to understand what our students learned well and in what areas they need to improve. This may lead us to question the order in which courses are sequenced or the appropriateness of prerequisites. Every time a course description is modified, or the number of course credits is changed, or prerequisites are added or deleted, two questions should be asked: (1) How will these changes help our students reach the intended learning outcomes of the program? (2) What assessment data support this change?

As we strive to develop a curriculum that is coherent to students, we may decide to share the intended learning outcomes of the program with them. This can be done by listing them in the introductory narrative for each program in the catalog. In fact, course descriptions may evolve into a listing of what students should know, understand, and be able to do at the end of the course, rather than simply a listing of content topics.

Learning outcomes can also be shared in other important institutional and program documents such as those used in recruiting and marketing to students. Publicly revealing the student learning goals of a program communicates to various groups — students, parents, citizens, members of boards of trustees, and so forth — the types of achievement that are expected of students in the program. A public statement reveals that we, as program faculty, are intentional about promoting learning and that the curriculum is designed to enable students to reach our learning outcomes. Knowing the goals of the program provides students with a sense of direction and helps them take ownership of their own learning.

Certainly both program and course outcomes should be shared in course syllabi. In this way, we inform students about what we expect them to know, understand, and be able to do at the end of their program. We also help them understand how each course assists them in reaching overall program outcomes. Furthermore, it is helpful if students know which intended outcomes are the focus of each class period. Occasionally within a course, we should ask students to review the intended course and program outcomes and reflect on how well they are achieving them.

Program Review

Another process that promotes change on college campuses is program review. Assessment of student learning in an academic program feeds into the larger process of academic program review by providing a mechanism to assess and evaluate one aspect of an academic program — the student learning component. We should encourage our faculty colleagues to view assessment as a component of academic program review, not as a separate initiative on campus. Through the program review process, students and other important constituencies within the institution can learn about the effectiveness of student learning in a program. When the results of program reviews are shared with audiences like alumni, taxpayers, or boards of trustees, we fulfill both the need to assess for improvement and the need to be accountable to external stakeholder groups.

Reflections

As you create your own meaning from the ideas in this section, begin to think about...

- How is assessment in my program part of a larger set of conditions that promote change at the institution?
- How is it or could it be part of planning and resource allocation?

- How is it or could it be part of curricular change and catalog revision?
- How is it or could it be part of program review?
- How does assessment in my program provide feedback to students and the institution?

Does assessment focus on using data to address questions that people in the program and at the institution really care about?

If assessment is ultimately about making changes leading to improvement, we need to identify the questions we have about student learning at the beginning of the process. What do we want to know about our students' learning? What do we think we already know? How can we verify what we think we know? How will we use the information we get to make changes? Focusing on questions that have compelling interest for us as a faculty will help keep the assessment process moving toward its ultimate goal—using data for improved learning in our programs.

Identification of the questions that we and our colleagues care about will result only through discussion. The final identification of questions to be pursued in assessment should probably result from a formal decision of the faculty, but the process of generating and prioritizing questions about learning can occur in informal settings, in committee meetings, or in faculty development groups.

Does assessment flow from the institution's mission and reflect the faculty's educational values?

The mission and educational values of the institution should drive the teaching function of the institution. They should shape the intended learning outcomes of all programs on campus, providing the framework that characterizes what is unique and special about graduates of the institution's programs. As discussed at greater length in Chapter 4, the faculty should then use the intended learning outcomes as a guide when they develop their approach to teaching and assessment.

For example, Babson College focuses on preparing students for the business world, and its mission is "to educate innovative leaders capable of anticipating, initiating, and managing change" (Babson College, 1998, p. **23**). In order to fulfill their mission, the Babson faculty have identified five areas in which students develop the skills they will need for career success and lifelong learning: rhetoric, numeracy, ethics and social responsibility, international and multicultural perspectives, and leadership/teamwork/creativity. Students' skills in the competency areas are developed throughout their program through coursework, field-based experiences, and continual assessment. In this way, various aspects of Babson's educational program, including assessment, flow from the institution's mission to prepare effective leaders. (The relationship between the institution's mission and its intended learning outcomes will be discussed at greater length in Chapter 4.)

Does the educational program have clear, explicitly stated purposes that can guide assessment in the program?

Faculty members at many institutions begin their assessment programs by trying to determine what measures they will use to assess learning, rather than by asking what it is that they want students to learn. As discussed in Chapter 1, the foundation for any assessment program is the faculty's statement of student learning outcomes describing what graduates are expected to know, understand, and be able to do at the end of the academic program. *When we are clear about what we intend students to learn, we know what we must assess.* Collecting data without a clear idea of what should be measured is likely to be inefficient because we will find it difficult to know how to use the information. We may find that we have measured the wrong thing, that the assessment data do not address the questions about student learning that we really care about. (Chapter 4 focuses exclusively on the important topic of developing intended learning outcomes.)

In addition, at the institutional and academic program levels, we should develop learning outcomes that target only the most important goals of the program. Addressing a small number of well-focused outcomes enhances the cost effectiveness of the assessment program. Taking on a burdensome, overly detailed and ambitious assessment program requires too much time and effort on our part—we are already busy people. Assessments at the program level should be as focused as possible on important aspects of learning in order to yield useful information without wasted effort. The process should "start small" in order to maintain realistic faculty commitment (Wehlburg, 1999).

Reflections

As you create your own meaning from the ideas in the previous sections, begin to think about. . .

- What questions about student learning do people in my program and at the institution really care about?
- How does assessment focus on using data to address these questions?
- What educational values of the faculty are represented in my institution's mission and other documents?

- How does assessment in my program flow from these educational values?
- Does my academic program have clear, explicitly stated purposes that can guide assessment in the program?
- If not, how can my colleagues and I develop these purposes or intended learning outcomes?

Is assessment based on a conceptual framework that explains relationships among teaching, curriculum, learning, and assessment at the institution?

The assessment process works best when faculty have a shared sense of how learning takes place and when their view of learning reflects the learner-centered perspective outlined in Chapter 2. This allows them to maintain a focus on what is most important, a perspective Deming (1986) refers to as constancy of purpose.

For example, at the University of Illinois at Springfield, the faculty work from a common set of learning goals: "(1) a solid foundation for lifelong learning, (2) a keen appreciation of intellectual and aesthetic achievements, (3) an enhanced capacity for critical thinking and oral as well as written communication, (4) a practical preparation for pursuing fulfilling careers, (5) a sound basis for informed and concerned citizenship, and (6) a productive commitment to improving their world" (University of Illinois at Springfield, 1996, p. 7).

In order to achieve these goals, faculty at the University of Illinois at Springfield are committed to the idea that students learn best through experience, both in formal courses and in the community. Classes are small, the faculty use a variety of teaching techniques, and student participation is viewed as central to learning. A public affairs perspective pervades every program. The curriculum includes Liberal Studies Colloquia, Public Affairs Colloquia, and Applied Study Terms (University of Illinois at Springfield, 1999).

At Alverno College, the faculty have developed a conceptual framework based on an ability-based approach to learning. They believe that "students

should be able to do something with what they know" (Alverno College Faculty, 1994, 1996). Their ultimate goal is that each student will develop into an educated adult with "a sense of responsibility for her own learning and the ability and desire to continue learning independently, self-knowledge and the ability to assess her own performance critically and accurately, and an understanding of how to apply her knowledge and abilities in many different contexts" (Alverno College Faculty, 1996, p. 1).

In order to reach these ends, the faculty have identified eight specific abilities that they require students to develop in the context of their disciplines throughout students' undergraduate program (Alverno College Faculty, 1992, 1996):

- communication
- analysis
  problem solving
- valuing in decision making
- social interaction
- global perspectives
- effective citizenship, and
- aesthetic responsiveness.

Within each of these ability areas, the Alverno faculty (1996) have formulated a series of subgoals or levels to be pursued developmentally as the student progresses through the general education curriculum and into the major discipline. For example, the levels in the area of analytical capabilities are as follows:

In general education

- Level 1: Show observational skills
- Level 2: Draw reasonable inferences from observations
- Level **3:** Perceive and make relationships
- Level 4: Analyze structure and organization

In majors and areas of specialization

- Level **5:** Establish ability to employ frameworks from area of concentration or support area discipline in order to analyze
- Level 6: Master ability to employ independently the frameworks from area of concentration or support area discipline in order to analyze (p. 2).

The curriculum is designed so that students have ongoing opportunities to develop their abilities. Each course in the curriculum targets certain abilities, and knowing this, professors teaching the courses intentionally offer opportunities for students to develop them.

Assessment of abilities—at the level of both the individual student and the program or institution—is central to the Alverno faculty's view of learning. Students assess themselves throughout the program, a process that begins as soon as they arrive at Alverno. Faculty working with students assess and coach students in the eight ability areas throughout their program (Loacker, Cromwell, & O'Brien, 1986).

At Alverno College, the faculty collectively embrace a conceptual framework about learning and all aspects of their program reflect it. Assessment will be more useful to those of us at other institutions when we and our colleagues develop our own conceptual framework for student learning. A conceptual framework ties together and gives shape to all the elements in the educational process--curriculum, teaching, learning, and assessment—allowing them to function as a continuous system of interrelated parts.

Reflections

As you create your own meaning from the ideas in this section, begin to think about...

- What conceptual framework, if any, do my colleagues and I espouse that explains the links between teaching, curriculum, learning, and assessment at the institution?
- What is the role of assessment in our framework?
- How could our conceptual framework be improved?

Do the faculty feel a sense of ownership and responsibility for assessment?

The curriculum has typically been viewed as our prerogative as faculty in institutions of higher education. Because of this, assessing the success of the curriculum should be our prerogative as well: Assessment is carried out to improve student learning, as well as the curriculum and the teaching that takes place within it. As faculty members, we must decide on the intended learning outcomes of the curriculum and the measures that are used to assess them. We must use assessment data to make changes that are needed to strengthen and improve the curriculum. We also need to ask about the effectiveness of our teaching strategies—should we continue to lecture, use small group discussions, assign projects, give tests? What are the best methods to enhance student learning?

When we assess for improvement in this way, we begin conversations about student learning. This assertion has several intriguing elements. First, it suggests that assessment is a *beginning*. For many of us, this will come as a surprise. A traditional view of assessment is that it is a culminating or concluding activity rather than a beginning.

A perhaps even more intriguing element of the assertion is that assessment is the beginning of *conversations.* Assessment is usually perceived to be a private activity conducted by each of us in the "castle" of our classroom, and it rarely leads to communication with colleagues. Data are gathered and may take the form of grades to be submitted or statistics for reports. There is typically scant reference to the importance of conversation or dialogue about assessment results. However, talking about results should be built into the assessment process. Conversation and dialogue lead to enhanced understanding that is collectively derived by participants.

The final intriguing element of the assertion above is that assessment is the beginning of conversations about *learning.* This implies a close and intrinsic connection between learning and assessment, a connection that has been emphasized elsewhere in this book. However, this connection has not always been obvious. In the culture of higher education, assessment typically takes place within courses, following instruction. Grades are posted for students to see, and they are submitted to the administration to fulfill bureaucratic requirements. Students receive surnmative feedback rather than feedback that can guide their performance. Assessment rarely leads to enhanced understanding of learning, on the part of either students or faculty.

Assessment at all levels should generate conversations among faculty that will lead to deeper, collective understandings about the learning that students are experiencing in the program. These conversations should in turn lead to reasoned change and improvement.

Reflections

As you create your own meaning from the ideas in this section, begin to think about...

- Do faculty in my program (or at my institution) feel a sense of ownership and responsibility for assessment?
- If not, how could we develop a sense of ownership?
- How could conversations take place that would lead us to a better understanding of student learning?

Do the faculty focus on experiences leading to outcomes as well as on the outcomes themselves?

As indicated above, in the learner-centered paradigm, the curriculum is viewed as the vehicle for helping students reach our intended learning outcomes. Through the assessment results we obtain at the program level, we learn whether or not the curriculum has been effective.

The way students perform in program assessments reflects the experiences students have during their program. For example, students whose