



Measuring and Assessing Internationalization

By Madeleine F. Green

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Preface

The Context

In every nation, interest in evaluating the performance and quality of education has exploded during the past twenty years. Governments and policymakers are increasingly demanding that education institutions at every level demonstrate that they have a clear strategy, use their resources wisely, and are succeeding in educating students. Globalization and escalating competition have created a new sense of challenge and urgency to improve the U.S. education system. The poor performance in reading, mathematics, and scientific literacy of U.S. students compared to students in other nations, as documented by the Programme for International Student Assessment (PISA) has been a cause for national alarm. President Obama declared that "[a] worldclass education is the single most important factor in determining not just whether our kids can compete for the best jobs but whether America can outcompete countries around the world...." (www. whitehouse.gov/issues/education).

Higher education has hardly escaped public scrutiny or the insistence on evaluation. In 2005-06, a national commission launched by the Bush administration, called the Spellings Commission after the then secretary of education, blasted higher education for its overall lack of accountability and failure to document and assess student learning.

To the chagrin of many in higher education, national and international rankings have taken central stage in providing information to the public about institutional performance and have become a powerful influence on public perception and institutional behavior. In some nations, rankings have also provided a basis for public policy, with policymakers using them as a proxy for quality and basing decisions on them. The limitations of rankings are well-known and much discussed. They are generally biased toward research output, virtually ignoring teaching and learning; they favor well-resourced institutions; and their methodology is suspect. Global rankings involve only a few hundred research-intensive institutions and fail to consider differences in national context and resources. Although internationalization is not a key factor in

rankings, some institutions see internationalization as a means of rising in the rankings and enhancing institutional prestige and visibility.

It is not surprising that many higher education leaders are calling for institutions to take the lead in accountability, providing clear information to the public and policymakers about institutional performance and student success rather than waiting for the rules of the game to be established by others. The higher education community asserts that the most important work of measuring institutional performance has to be done by institutions themselves, based on their institutional missions and goals, and using multiple measures that are appropriate for the goals and the institution.

The issue of demonstrating student learning has gained enormous traction over the past two decades, in higher education as well as K-12. Books such as *Academically Adrift: Limited Learning on College Campuses* (Arum and Roksa 2011) have spurred public discussion as well as internal debate in the academy about how much students actually learn in college and what needs to be done to measure and improve learning (Smith 2012).

The road of student learning assessment in higher education has been a rocky one and progress uneven across institutions. For some institutions, teaching and learning is simply not the top priority. In others, many faculty members do not see assessment as adding value to their work, and indeed see it as busywork imposed by administrators. Objectors claim that faculty members have always been in the business of assessing student learning by grading papers, projects, and exams, and reject any suggestion that evaluating student learning is a science rather than an art. Another objection rests with the idea of learning as a shared responsibility between teacher and learner—that it is unfair and unrealistic to shift that responsibility solely to the teacher. Assessing student learning can be a complex undertaking, requiring faculty to work together and think differently about their teaching to improve pedagogy and curriculum. In comparison, deciding on a set of institutional performance indicators and gathering

appropriate data are a more straightforward exercise that can be accomplished with different levels of faculty input and cooperation.

Another challenge of student learning assessment is that it generally occurs one institution or program at a time; little work has been accomplished collaboratively among U.S. institutions (Lederman 2010).1 But change could be in the winds. During the past three years, the United States has looked outside its borders to the experiences of Europe and beyond to models that create a common definition of a degree at a national and/or regional level (called "qualifications frameworks") or specify the learning outcomes associated with different disciplines at different degree levels (known as the "tuning process"). In line with these initiatives, and with support from the Lumina Foundation, The Degree Qualifications Profile was drafted by a group of experts, providing a framework for describing knowledge and skills that students must acquire for each degree level. The framework includes five areas: broad, integrative knowledge; specialized knowledge; intellectual skills; applied learning; and civic learning. It would be interesting to imagine a set of global learning outcomes tucked into these categories as a broad definition of an educated U.S. college graduate.

Institutional Performance and Student Learning: Potentially Related but Different Frames

This essay looks at the results of internationalization in terms of two overlapping frameworks: the performance of institutions and their sub-units and student learning outcomes. When referring to student learning that is global, international, or intercultural, the term global student learning is used as shorthand.

Clearly, the institutional performance and the student learning perspectives can be related to each other, but one cannot assume causality in either direction. In other words, the presence and quality of a given set of institutional activities or the participation rates in various courses or programs do not tell institutions about what students are learning through these learning opportunities. Consider these examples. The availability of many education abroad opportunities

does not necessarily translate into high participation rates; a rising participation rate in education abroad may or may not relate to the program's quality or its impact on students. Similarly, the number of international studies majors or minors or the creation of new internationally focused courses or programs do not tell an institution about its success in producing interculturally competent students. It is not a given that the establishment of a campus abroad will contribute to the internationalization of the home campus. And indeed, students may acquire global learning through experiences other than the learning opportunities provided by the institution (de Wit 2011). Thus, a clear picture of the success of internationalization requires measuring both institutional performance and student learning outcomes against their respective goals and determining how they relate to each other.

Clarifying Language

Although any choice of terminology can be somewhat arbitrary when words have multiple meanings and varied uses, it is helpful to select a particular lexicon to be as clear and consistent as possible. This is particularly true in the area of internationalization, where terminology is often confusing. The terms international, intercultural, and global are sometimes used synonymously, in spite of their differences. In other cases, value judgments are ascribed to particular terms, such as globalization, causing people to avoid using the term. Conversely, some prefer globalization to internationalization, ascribing more sweep and currency to the former. (See Green and Olson 2003) for a discussion of this topic.)

On the measurement front, clear terms are also important. This essay uses different terminology for its different units of analysis, that is, *measurement* when referring institutional or programmatic performance and assessment when student learning is the central focus. When considering the achievement of goals at the institutional or program level, this essay uses terms such as *measuring*, *metrics*, and *indicators*, reserving *assessment* for the process of gathering information on how well students have achieved specified learning goals and using this information for improving programs and courses.

¹A multi-national effort to assess student learning through a series of standardized tests is under development by the Organisation for Economic Co-operation and Development (OECD). Known as AHELO (the Assessment of Higher Education Learning Outcomes), the initiative is currently in the feasibility stage, and consists of a test of "transversal skills," such as critical thinking, as well as disciplinary-based tests, such as engineering. Critics point to the methodological challenges of developing a reliable and valid test and its application across many nations.

Measuring and Assessing Internationalization

Performance indicators is a widely used term that has been defined as follows. "A policy-relevant statistic, number, or qualitative description that provides a measure of whether the university, some aspect of it, or the university system is performing as it should" [italics added] (Association of Universities and Colleges in Canada, cited by Paige 2005, 103). That definition assumes a clear understanding of "as it should," which can be a complex and contested concept. The United States Agency for International Development states that "[p]erformance indicators... define the data to be collected to measure progress and enable actual results achieved over time to be compared with planned results" (cited by Paige 2005, 103).

The term assessment has multiple meanings and can be very broad. Some use assessment interchangeably with evaluation² (see Hudzik and Stohl 2009); for others, assess and measure are synonymous (see de Wit 2010). However, in U.S. higher education assessment is most often used in connection with student learning. Ewell (2002, 9) defines assessment as follows: "The processes used to determine an individual's mastery of complex abilities, generally observed through performance." Suskie (2004) defines assessment as an ongoing process that aims to understand and improve student learning, consisting of a continuous loop with four components: 1) establishing clear and measurable learning goals; 2) providing learning opportunities; 3) gathering, analyzing, and interpreting evidence of student learning; and 4) using the

information gathered to improve student learning. Assessment can be used to improve a specific course (e.g. Introduction to International Relations), a program of study (e.g. the global studies major), or a learning opportunity (e.g. education abroad.)

Internationalization scholars and practitioners outside the United States are developing a growing body of work on measuring institutional performance in internationalization, creating audits, or mapping exercises, indicators, and benchmarking exercises. Although one may occasionally find the term assessment in these initiatives, they are more likely to use the terms measures, indicators, and evaluation. Beerkens et al. (2010, 9) follow this linguistic path in their project, *Indi*cators for Mapping and Profiling Internationalization, using measuring as the umbrella term for the institutional and programmatic perspective. The authors specify three components of measuring: "1. [k]nowing where your organization stands (mapping) in terms of internationalization; 2. [e]xamining the value of the internationalisation efforts (evaluating), and 3. [s]etting an organizational identity (profiling), showing both internal and external stakeholders the strengths and ambitions of your organization from an internationalisation perspective."

Finding workable terminology is not an exercise in determining the correct use of a given word; rather, it is an attempt to be as clear and consistent as possible in a discussion where the concepts are complex and the language potentially confusing.

² The term *evaluation* also has multiple meanings. According to assessment expert Linda Suskie (2004, 5), evaluation can be a part of the student learning assessment process (interpreting the evidence of student learning and using the results); or can refer to the match between intended learning outcomes and actual outcomes; or can be much broader to denote "judging the quality or worth of a program, project, or other entity" (other than student learning).

The Institutional Perspective—Measuring Internationalization

Why Measure Internationalization?

As internationalization becomes an increasingly important aspect of higher education and continues to move from the margins to the center of the academic enterprise, institutions need to judge not only the quantity of activity but also its quality and its contribution to overall institutional goals. Recent thinking in the field has moved the discussion away from internationalization as a goal unto itself. Rather, it is a means to an end, such as enhancing the quality of scholarship and discovery, alleviating poverty, or producing globally aware and competent graduates. There are many reasons to measure internationalization: as a component of overall institutional performance, to judge the effectiveness of an institution's internationalization strategy or its components, to benchmark with other institutions, and to improve internationalization programs and practices.

Improvement should be a key driver for any type of measurement and indeed, this paper focuses on this goal. As the following discussion outlines, when the major goal of measurement is improvement, the process involves a clear articulation of goals, careful choice of agreed-upon indicators, a sensible approach to selecting a relevant group and a manageable number of measures, development of an internationalization plan, and shared sense that the work will provide useful information as a basis for informed action.

As already noted, one cannot ignore the fact that internationalization has increasingly become an instrument of competition. The competitive environment requires institutions to differentiate themselves from the competition, and establish their brand or profile. Performance indicators such as graduation rates or having Nobel prize winners on the faculty (depending on the institution) are concrete markers of success. In the internationalization arena, institutions commonly point to the number of international students, the number of education abroad programs offered, or the proportion of students engaged in education abroad as indicators of success. They may also choose to use indicators to benchmark their performance to that of peer institutions, either as a tool for quality improvement or to point out their

comparative advantage. In an ideal world, increasing an institution's competitiveness or improving its brand is a by-product of quality improvement rather than a goal unto itself, and the following pages focus on this approach to internationalization.

The Starting Point: Vision and Rationale

We have already noted the importance of viewing internationalization as a strategy to achieving fundamental institutional goals. Indeed, some have observed that the drift toward internationalization as a goal in itself is a harmful development. As Brandenburg and de Wit (2010, 16) put it, "Gradually, the 'why and wherefore' have been taken over by the way internationalization has become the main objective: more exchange, more degree mobility, and more recruitment." They rightfully point out that more attention should be paid to the underlying rationales for internationalization and to its outcomes, shifting the focus from instrumentalities to ends.

Thus, before an institution sets out to develop specific goals that will guide measurement, it is vital to articulate the reason for undertaking a particular internationalization strategy and how it contributes to larger institutional or unit goals. This shift in the conception of internationalization from end to means positions internationalization as supporting institutional goals that are meaningful to a variety of stakeholders, not just to the internationalization advocates. Additionally, this view of internationalization pushes institutions to look at its impact rather than simply counting how much of it there is. Asking why students should go abroad should lead to a discussion of how students might acquire some of the same learning if they do not. Similarly, deciding whether to offer a program abroad or establish a campus in another country should also raise the question of how the institution will judge whether it enhances internationalization back home.

Creating Internationalization Goals and Indicators

Developing goals is challenging work. Hudzik and Stohl (2009) note that goals define intentions, provide a basis for accountability, and drive behav-

iors. Institutions articulate goals with very different levels of specificity. Some develop very broad goals and then narrow them with sub-goals or objectives; others begin with much more precise and measurable goals. A goal should express an ambition that goes beyond tactics—such as increasing the number of students who go abroad by 10 percent. At the same time, achievement of the goal must also be measurable. Expressing

a vision in measurable terms often involves articulating a broad goal, which is then elaborated with sub-goals (sometimes called objectives). Thus, "developing global citizens" is not a measurable goal until the concept is clearly defined and translated into a series of measurable indicators (such as numbers of students going abroad, numbers of students engaged in volunteer projects with a global focus, student gains in inventories of global-mindedness and attitudes). A goal can have many different dimensions, some of which are more easily measured than others. The process of developing agreed-upon indicators and definitions of success is an important one and requires stakeholder input to determine which ones are most appropriate for the goal and for the institution (Hudzik and Stohl 2009; Beerkens et al. 2010).

Further complicating matters is the question of what indicators are measuring since measures can be applied to a variety of factors. Hudzik and Stohl (2009, 14) use a taxonomy of inputs, outputs, and outcomes, defined as follows:

- **Inputs:** resources (money, people, policies, etc.) available to support internationalization efforts
- Outputs: the amount of the various types of work or activity undertaken in support of internationalization efforts; and
- Outcomes: impacts or end results. It is these that are usually most closely associated with measuring achievement and the missions of institutions.

Deardorff, Thorndike Pysarchik, and Yun (2009) provide a similar but expanded framework with their logic model for assessment, which includes five components: inputs (human, financial, and other resources needed to achieve the goal); activities (activities that provide opportunities to achieve the learning

Institutions must make choices about what is important to know, how they will use that information, and what data can be realistically gathered. Enormous data collection exercises that do not get used waste precious time.

goal); outputs (generally, types and numbers of participants); outcomes (what participants know/think/and/ or feel as a result of participation in the learning activity); impact (longer term results.)

As the preceding definitions point out, outcomes provide the major evidence of achieving specified goals, which include student learning, the quality of education programs, benefits to students and

faculty, increased reputation (Beerkens et al. 2010, 16). Because measures of outcomes are the most challenging data to gather, institutions frequently measure their internationalization efforts by looking only at inputs and outputs. (See Figure 1 for a sample chart of goals, inputs, outputs, and outcomes.)

Brandenburg and Federkeil (2007) focus on inputs and outputs, outlining an approach where institutions can take a snapshot of their international activities—which they call measuring "internationality"—or they can look at progress over time, which they refer to as "measuring internationalization." They also stress the importance of setting goals and developing a strategy to achieve them as essential first steps in the process. In their work with German universities, they developed a total of 186 indicators, 170 of which can be tracked over time. While such a rich list of possible indicators is an enormous resource, institutions must make choices about what is important to know, how they will use that information, and what data can be realistically gathered. Enormous data collection exercises that do not get used waste precious time and reinforce the cynicism of those who believe that data collection and measurement are make-work.

Mapping Internationalization

Before answering the question "how are we doing," an institution must know what it is actually doing. Mapping the institutional landscape of international programs, policies, and strategies (generally inputs and outputs) is a very useful exercise for any institution. Even small institutions can learn a great deal through this process, and often discover individuals and units engaged in international work that is not widely known and that can ultimately be a source of learning and synergy with other efforts. Once

Goal	Sample Inputs	Sample Outputs	Sample Outcomes
Strengthen international and global dimensions of the curriculum	Number of courses with an international/global focus; Number and range of foreign language courses; Number and proportion of faculty with international experience or expertise; Number of joint or dual degree programs; Number of courses offered in cooperation with an international partner through technology.	Number and proportion of students enrolled in courses with international/global focus; Number and proportion of students enrolled in language courses at various levels; Number and proportion of students majoring in programs with an international/global focus.	Demonstrated specific student learning outcomes as evidenced by portfolios, intercultural competency inventories; Demonstrated language proficiency; Career choices or volunteer engagement of graduates.
Enhance the quality of research and increase knowledge production	 Number of faculty/researchers with international experience, expertise; Amount of funding for international cooperation in research; Amount of funding from international sponsors; Number of research projects with international partners. 	Number of publications per faculty co-authored with international partners; Number of international conference presentations per faculty members.	 Awards, prizes, recognition, rankings of institutional international activity; Growth in institution's income from commercial applications; Contribution to solving local o global problems.
Enhance the international competence and experience of faculty and staff	Number and proportion of faculty and staff with international experience and expertise; Number and proportion of faculty and staff educated outside the United States; Number and proportion of faculty who are multi-lingual.	Growth in number and proportion of faculty engaged in international cooperation for teaching and/or research; Growth in number and proportion of staff engaged with partner institutions Increase in number of courses with international/global focus.	Enhanced reputation and recognition for the institution's international character and work Increased student interest in international programs and activities as evidenced by course enrollment patterns, choices of majors.

(Based on Hudzik and Stohl (2009) and Brandenburg and Federkeil (2007).

the landscape is described, indicators can be more clearly applied to the array of inputs and outputs identified.

Many mapping tools exist and although there is a great deal of similarity among them, they have different emphases (see Figure 2 for a sampling). Mapping exercises frequently take the form of a quality review process, where the institution undertakes a self-study that maps or catalogs its activities, analyzes the trajectories and successes to date, and concludes with an overall judgment on strengths and weaknesses and recommendations on future directions. This self-study can be followed by a visit organized by the sponsoring association, which then

reviews the self-study and makes its own observations and recommendations.

The earliest mapping quality review initiative was the International Quality Review Process (IQRP), begun in the mid-1990's in Europe by the Institutional Management in Higher Education program (IMHE) with the Academic Cooperation Association (ACA) and the Conference of European Rectors (now the European University Association). The IQRP was a self-assessment tool to help institutions review their goals, assess the appropriateness of their strategies, and include internationalization as a key part of their overall quality assurance system (de Wit and Knight 1999). A few years later, the American Council

Figure 2. Institutional Indicators: A Sampling of Efforts Worldwide

Beerkens et al. (2010, 66) list 33 such efforts, which are a mixture of descriptive pieces, survey instruments, sets of indicators, mapping tools, and quality review guides. Here are but a few examples:

- The Indicators for Mapping and Profiling Internationalisation of higher education institutions (IMPI) project—supported by the European Union, co-sponsored by six European partners, and coordinated by CHE Consult—has developed a toolbox of indicators for institutions to measure their performance in internationalization (see www.impi-project.eu and www.impi-toolbox.eu). IMPI was launched in 2009 based on a German project that started in 2006 with four institutions to develop indicators.
- The Netherlands Organisation for International Cooperation in Higher Education (Nuffic) has published a checklist detailing different levels of internationalization for different aspects (e.g. leadership and strategy, mobility and exchange, faculty; see www.nuffic.nl/international-organizations/services/quality-assurance-and-internationalization). It has also developed a tool called Mapping Internationalization (MINT) that allows institutions or programs to map their internationalization activities; see www.nuffic.nl/mint.
- The German Academic Exchange Service (DAAD), the German Rector's Conference (HRK), and the Alexander von Humboldt Foundation (AvH) conducted a project with funding from the German Federal Ministry of Education and Research to collect data on the degree of internationality of German higher education institutions.
- The American Council on Education analyzed the data from two national surveys conducted in 2001 and 2006 to form indices of internationalization by institutional type. The resulting series of four publications is available at www.acenet.edu/Content/NavigationMenu/ProgramsServices/cii/pubs/ace/Measuring1.htm.
- The International Association of Universities and the American Council on Education have developed qualitative internationalization review instruments that provide the basis for an institutional self-study.

Although the Europeans have been quite active in this area, likely as a result of the Bologna process, efforts have also been undertaken in Taiwan, Colombia, and New Zealand, among others.

on Education adapted the IQRP and has continued to use its instrument with dozens of institutions in its Internationalization Laboratory (see: www.acenet. edu/Content/NavigationMenu/ProgramsServices/ cii/current/networks/International_Lab.htm). Today, the International Association of Universities offers its Internationalization Strategies Advisory Service (ISAS) to institutions around the world, emphasizing the collaborative effort between IAU and the visiting team to help the institution clarify and achieve its goals (see www.iau-aiu.net/content/international- ization-strategies-advisory-service). The German Rectors conference offers an internationalization quality review program free to its member institutions (see www.hrk.de/eng/projekte_und_ initiativen/2410.php).

Although there is a global tendency to establish standards that serve as a basis for certification or accreditation, internationalization review processes have generally not gone in that direction. Exceptions are the Forum on Study Abroad's Quality Improvement Program for Education Abroad, which provides recognition for institutions that undergo the process and demonstrate

conformity to their Standards of Good Practice (see www.forumea.org/quip-index.cfm.) Additionally, the Netherlands Flemish Accrediting Association (NVAO) has established a certificate "distinguished feature for their internationalization" containing six standards (vision, learning outcomes, teaching and learning, staff, students, and overall assessment) as a basis for evaluating degree programs, with potential ratings in each category of unsatisfactory, satisfactory, good, or excellent (NVAO 2011) (see Figure 3). This evaluation on the program level instead of the institutional level requires a stronger focus on learning outcomes and teaching and learning.

Not surprisingly, the quality review initiatives look at largely the same dimensions of internationalization. They may include some or all of the following (see Paige 2005):

- Articulated commitment, goals, vision statement
- Teaching, curriculum
- Research
- Budget

Figure 3. NVAO Internationalisation Standards

Standard 1: Vision on internationalisation

Criterion 1a: Shared vision

The programme has a vision on internationalisation. This vision is supported by stakeholders within and outside the programme.

Criterion 1b: Verifiable objectives

The vision on internationalisation includes verifiable objectives.

Criterion 1c: Improvement-oriented evaluations

The vision on internationalisation is evaluated periodically and this evaluation forms the basis for improvement measures.

Standard 2: Learning outcomes

Criterion 2a: Intended learning outcomes

The intended international and intercultural learning outcomes defined by the programme are a clear reflection of its vision on internationalisation.

Criterion 2b: Student assessment

The methods that are used for the assessment of students are suitable for measuring the achievement of the intended international and intercultural learning outcomes.

Criterion 2c: Graduate achievement

The programme can demonstrate that the intended international and intercultural learning outcomes are achieved by its graduates.

Standard 3: Teaching and Learning

Criterion 3a: Curriculum

The content and structure of the curriculum enable the achievement of the intended international and intercultural learning outcomes.

Criterion 3b: Teaching methods

The teaching methods enable the achievement of the intended international and intercultural learning outcomes.

Criterion 3c: Learning environment

The learning environment is suitable for achieving the intended international and intercultural learning outcomes.

Standard 4: Staff

Criterion 4a: Staff composition

The composition of the staff (in quality and quantity) facilitates the achievement of the intended international and intercultural learning outcomes.

*Criterion 4b: International experience and competence*Staff members have sufficient international experience, intercultural competences, and language skills.

Criterion 4c: Services provided to staff

The services provided to the staff (e.g. training, facilities, staff exchanges) are in line with the staff composition and facilitate international experiences, intercultural competences, and language skills.

Standard 5: Students

Criterion 5a: Student group composition

The composition of the student group (diversity of national and cultural backgrounds) is in line with the programme's vision on internationalisation.

Criterion 5b: International experience

The international experience gained by students is adequate and in line with the programme's internationalisation vision.

Criterion 5c: Services provided to students

The services provided to the students (e.g. information provision, counseling, guidance, accommodation, diploma supplement) are adequate and in line with the composition of the student group. (NVAO 2011)

- · Cocurriculum, campus life
- Structures, leadership positions, staffing
- Education abroad, mobility
- International students
- Faculty participation in international activities
- Performance and quality assessment process

This section has reviewed the measurement of institutional and unit performance in internationalization

through the establishment of goals and the selection and application of performance indicators. It has also noted the importance of institutions' mapping the types of activities they are undertaking, and seeking to create coherence from what can be a disconnected set of initiatives. However, an institution that seeks to be comprehensively internationalized, infusing internationalization throughout its many programs and making it a way of accomplishing its central work, must also pay close attention to what students are learning.

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The Student Perspective: Assessing Global Learning

Context and Players

It is important to note at the outset two contextual factors that are fundamental to any assessment of global learning. The first factor is the institutional history with assessment in general. Although this section focuses only on global learning (defined as learning with international, global, and/or intercultural focus), it is only one part of a much larger institutional or programmatic initiative to understand how well students are learning and what that means for teaching and curriculum. Thus, global learning assessment will not be meaningful or accepted unless it is embedded in a larger institutional effort and a culture that values, or at least accepts, assessment. That is not to say that a language program, an international studies major or

an international studies major, or education abroad program could not undertake its own assessment initiative, but since global learning spans many departments and disciplines, it is difficult to undertake a more cross-cutting effort to assess global learning absent an institutional history or culture of assessment.³

The second factor is that student learning assessment is the domain of the faculty. While international education administrators can play a facilitating role, a successful assessment effort must be owned by the

faculty, with the support and engagement of institutional leaders, administrators, and governance structures. As Banta and Blaich point out (2010, 23-24), assessment is a "collective effort of the faculty [to] look at student work in the aggregate...to see where group strengths and weaknesses are occurring and using this evidence to guide improvements...." They note how important it is to have faculty development activities to help faculty navigate this "unfamiliar and time-consuming process." Assessment

requires a different set of skills than those needed for teaching and research; it also takes faculty time. The administrators who are driving assessment need to provide expert guidance and training as well as time for faculty to undertake high quality and sustained assessment.

Why Assess Global Learning?

The value of assessing student learning lies in its potential to improve practice.⁴ As Palomba and Banta (1999, 5) state: "Assessment enables educators to examine whether the curriculum makes sense in

its entirety and whether students, as a result of all their experiences, have the knowledge, skills, and values that graduates should possess." Although assessment has its supporters and opponents, there is widespread agreement that it is not a passing fad, and that if institutions do not seize the initiative, others will shape the discussion. More importantly, good practice in teaching and learning suggests that it is not sufficient to simply assert that more is better. Nor does it follow that offering more courses with global content, having more students going abroad, and more interna-

tional students will produce better global learning. Only being clear and consistent about what students have learned through these experiences and courses will demonstrate the extent to which a program or course is able to match outcomes with aspirations.

As Sternberger, La Brack, and Whalen (2007) point out, assessment may have a political dimension—demonstrating effective results provides leverage for the competition for resources. Additionally,

³ For resources on assessment for international educators, see *Assessment and Evaluation for International Educators*. 2009 Teaching, Learning, and Scholarship Knowledge Community Task Force on Assessment and Evaluation. Washington, DC: NAFSA, www.nafsa.org/assessmentbasics; and see the Web site of the American Council on Education for a guide to Assessing International Learning Outcomes: http://www.acenet.edu/Content/NavigationMenu/ProgramsServices/cii/res/assess/index.htm.

⁴ Portions of this text are based and/or have appeared previously in Olson, Green, and Hill. 2006. *A Handbook for Advancing Comprehensive Internationalization: What Institutions Can Do and What Students Should Learn.* Washington DC: American Council on Education.

evidence of learning helps dispel the notion that some learning activities, especially education abroad, are frills or interludes in otherwise rigorous academic programs.

Developing an Assessment Process

Student learning assessment is an institutional commitment, requiring time, wide engagement, sufficient resources, and a variety of expertise. It needs to be a carefully planned and ongoing process that both includes relevant stakeholders and is facultyled. International education professionals may play a key role, however, especially in assessment of education abroad. Assuming that there is consensus on the need to proceed with assessment (or a requirement to do so), a first step, is to assemble the "right" group to lead the effort, usually a mixture of faculty (the majority of whom are engaged in internationalization), international education professionals, student life administrators, institutional researchers, and assessment experts. The latter may be institutional faculty or staff or external consultants. The "right" group will always vary by institution. Faculty and staff internationalization leaders and those with the potential to become more engaged in internationalization should be drawn from different units and departments. It may be crucial to involve a particular office, such as admissions, alumni, or development, and representatives of key committees such as general education or the curriculum committee. Institutional history, politics. and culture will influence how a team is assembled. The work of this group should be closely aligned with other campus assessment efforts.

The group's foundational work is to identify student learning outcomes to be assessed, elaborated below, and a process for assessing the extent to which students are achieving these outcomes. Although it can be an elaborate and time-consuming exercise, agreement on student learning outcomes is fundamental to assessment, as is crafting them so that they are measurable. Additionally, to make the process manageable, the group will want to decide on a few global student learning outcomes to assess at a time, or the ones that are most important for a specific program.

A next step is deciding on the learning opportunities that will serve as the sites for assessment, such as particular courses, programs, study abroad, or

cocurricular opportunities. Once these have been identified, the group will need to decide what tools to use or data to gather to assess student learning. Assessment tools must be both valid (an accurate measure of intended outcomes) and *reliable* (yielding consistent results among raters and over time). They can be quantitative or qualitative, and administered to an entire population of students or a sample. Additionally, assessment tools may be direct (e.g., embedded course assessments, portfolios, performances, tests, papers, or projects) or indirect (e.g. surveys, interviews, focus groups, selfassessments, data such as job placements) (see Deardorff and Deardoff, 2007; Olson, Green, and Hill 2006, 105-106, for a listing of assessment instruments). Although indirect measures are generally easier to implement, they do not capture student learning in the way that direct measures do. As Suskie (2004, 95) notes:

Direct evidence of student learning is tangible, visible, self-explanatory evidence of exactly what students have and haven't learned....Indirect evidence, on the other hand, provides signs that students are probably learning, but the evidence of exactly what they are learning is less clear and less convincing.

Assessment experts agree on the importance of multiple measures to assess any given outcome to provide a richer picture of the learning and to triangulate the insights provided by the different tools.

Once the assessment data has been gathered, it will be entered into a database (or will have been created in a database). This phase requires the expertise of computer and data people, statisticians, and psychometricians. The working group will need to identify the most important questions for data analysis since the cross-correlations and comparisons that a database can yield are voluminous.

Finally, the group will want to communicate its results to various stakeholders: administrators, faculty who will use these data for program improvement, and external groups such as accreditors. It bears repeating that using the results for program improvement is of paramount importance, and only through successive cycles of assessment will it become evident if the changes made have achieved the desired results. The steps in the assessment process are summarized in Figure 4.

Figure 4: Steps in the Student Learning Assessment Process

- Decision to proceed with assessment of student learning outcomes.
- 2. Determination of how the assessment of global student learning outcomes aligns with existing institutional assessment efforts.
- 3. Decisions on what questions to ask and why.
- 4. Identification of team to conduct/oversee the assessment.
- Identification of global student learning outcomes to be assessed.
- 6. Identification of the learning opportunities where students can achieve these outcomes.
- 7. Identification of assessment tools, including the following considerations:
 - a. existing data sources
 - existing methodologies that can be used or adapted
 - c. existing instruments
 - d. time, resources, expertise available.
- 8. Completion of necessary institutional human subject review.

- 9. Decisions on technical issues, including:
 - a. sample size
 - b. assessment tools, data sources to be used
 - c. development of a database
 - d. management of quantitative data
 - e. management of qualitative data, including content analysis and conversion to quantitative indicators
 - f. data entry and analysis
 - g. processes to gain informed consent and maintain confidentiality, if necessary.
- 10. Implementation of assessment and data collection.
- 11. Review of types of analyses to conduct to obtain information identified in question 3 above.
- 12. Interpretation of data.
- 13. Development of summary of results and report.
- 14. Development and implementation of communications plan.
- 15. Discussion of implications of results for program improvement.
- 16. Decision and action on program improvement.
- 17. Assessment of the assessment process; suggestions for improvement in the next cycle.

(Adapted from Sternberger, La Brack, and Whalen. 2007, 85-86.)

Crafting Learning Outcomes

"Learning outcomes" and "learning goals" are often used interchangeably; some find "goals" a more palatable term. Suskie (2004, 75) defines outcomes as "the knowledge, skills, attitudes, and habits of mind that students take with them from a learning experience." Broad learning outcomes can be developed for an entire institution or program, and then made more specific as they are interpreted and applied to a portion of the curriculum (e.g., general education or the major), or can start at a more specific level. Musil (2006) defines five levels of learning goals: 1) overarching institutional goals, 2) divisional and department goals, 3) general education goals, 4) individual course goals, and 5) campus life goals. Although these are not strictly hierarchical, they are a useful categorization. Any given goal or outcome can be mastered at different levels of proficiency and sophistication; measures for these levels are sometimes described as "rubrics." Bloom's taxonomy of learning outcomes (1956) is the standard reference and a useful guide to progressive levels of mastery (also see Anderson and Krathwohl 2000):

- Remember: retrieve relevant knowledge from longterm memory.
- Understand: construct meaning from instructional messages, including oral, written, and graphic communication.
- Apply: carry out or use a procedure in a given situation.
- Analyze: divide material into its constituent parts and determine how the parts relate to one another and to an overall structure or purpose.
- Evaluate: make judgments based on criteria and standards.

• **Create:** put elements together to form a coherent or functional whole; reorganize elements into a new pattern or structure.

Learning outcomes are best expressed through an active verb that describes the particular ability or understanding the student exhibits. The more specific the verb, the easier it is to assess student learning. The following verbs are clustered, from simple to more complex levels of learning.

- **Remembering:** recognize; list, describe, identify, retrieve, name.
- **Understanding:** interpret, exemplify, summarize, infer, paraphrase, compare, explain.
- Applying: implement, carry out, use.
- Analyzing: compare, attribute, organize, deconstruct.
- **Evaluating:** check, critique, judge, hypothesize.
- Creating: design, construct, plan, produce.

Crafting good learning outcomes can be challenging, but the good news is that they need not be cast in stone. As an institution gains experience working with them, the outcomes can be revised and refined as necessary. One way to develop a list is to begin with a draft, drawing on existing sources, and ask different groups to rank them (See Olson, Green, and Hill, 2006; www.acenet.edu/Content/NavigationMenu/ ProgramsServices/cii/res/assess/index.htm. This exercise should produce consensus on a limited number of outcomes that are highly ranked by many. Or, a draft can be circulated to colleges or units for comment and refinement, eventually resulting in an agreed-upon list. Different units may want to adapt the master list to fit their own programs and learning outcomes. For sample learning goals and outcomes, see Figure 5, AAC&U-Sample Goals for Liberal Education and Global Citizenship, and Figure 6, American Council on Education-Global Learning Outcomes. See also AAC&U Shared Futures tools for educators for additional examples, www.aacu.org/SharedFutures/ Tools.cfm)

Michigan State University has aligned its global learning goals and specified outcomes (MSU uses the term competencies) with goals for liberal learning, a helpful way to ensure that global learning is integrated into the curriculum and its larger intended outcomes (see Figure 7).

Figure 5. American Association of Colleges and Universities—Sample Goals for Liberal Education and Global Citizenship

To generate new knowledge about global studies (Sample) Outcomes:

- Students have a deeper knowledge of the historical political, scientific, cultural, and socioeconomic interconnections between the United States and the rest of the world.
- Students can identify some of the processes through which civilizations nations, or people are defined historically and in the present.

To spur greater civic engagement and social responsibility

(Sample) outcomes:

- Students are able to identify some of the ethical and moral questions that underlie a given transaction between countries.
- Students can describe a social problem requiring collective remedies that transcend national borders.

To promote deeper knowledge of, debate about, and practice of democracy

(Sample) outcomes

- Students can compare features of democracy in the United States with features of democracy in another country.
- Students can discuss some of the tensions inherent in democratic principles.

To cultivate intercultural competence

(Sample) outcomes

- Students are able to function in multi-cultural teams.
- Students are able to articulate cultural differences and demonstrate an understanding of their impact.

(Musil 2006, 12-13)

Designing a Process to Develop Learning Outcomes

Because the development of clear and measurable learning outcomes is so central to the assessment process, it is important that the process be credible and take into account the views of many people. Developing global learning outcomes and procedures for assessing them often takes longer than the assessment team may project. Some institutions

Figure 6. American Council on Education—Global Learning Outcomes

A globally competent student from our institution gains: Knowledge

- Demonstrates knowledge of his culture within a global and comparative context (that is, the student recognizes that his culture is one of many diverse cultures and that alternate perceptions and behaviors may be based in cultural differences).
- Demonstrates knowledge of global issues, processes, trends, and systems (that is, economic and political interdependency among nations, environmental-cultural interaction, global governance bodies, and nongovernmental organizations).
- Demonstrates knowledge of other cultures (including beliefs, values, perspectives, practices, and products).

Skills

- Uses knowledge, diverse cultural frames of reference, and alternate perspectives to think critically and solve problems.
- Communicates and connects with people in other language communities in a range of settings for a variety of purposes, developing skills in each of the four modalities: speaking (productive), listening (receptive), reading (receptive), and writing (productive).
- Uses foreign language skills and/or knowledge of other cultures to extend his access to information, experiences, and understanding.

Attitudes

- Demonstrates a knowledge of the language, art, religion, philosophy, and material culture of different cultures and an understanding of cultural complexity and difference.
- Demonstrates an understanding of cultural differences and tolerance of cultural ambiguity.
- Demonstrates an ongoing willingness to seek out international or intercultural opportunities.

(Based on: American Council on Education. Assessing Global Learning: International Learning Outcomes. Available at www.acenet.edu/Content/NavigationMenu/ProgramsServices/cii/res/assess/intl_learn_Outcomes.htm.)

spend a full year developing a list of global learning outcomes because crafting them often requires confronting complicated issues related to the content of the outcomes—such as the inclusion of language proficiency for all graduates from the institution and the particular way to evaluate heritage speakers of a language other than English. Additionally, as the team engages a wider group of faculty, reaching consensus becomes more difficult. The time required and the difficulty of the task will depend on the groundwork that has already been laid, including the institutional experience in crafting and assessing learning outcomes and widespread thought on the international and global dimensions of the curriculum and cocurriculum.

One way to develop a list of outcomes is to begin with a draft drawn from various sources that is then ranked by various groups so that the top few emerge. (See the American Council on Education: Assessing International Learning Outcomes for a sample ranking instrument: www.acenet.edu/Content/NavigationMenu/ProgramsServices/cii/res/assess/index.htm.) This exercise should produce consensus on a limited number of outcomes that are highly ranked by many. Or, a draft can be circulated to colleges or units for comment and refinement, eventually resulting in an agreed-upon list. Different units may want to adapt the master list to fit their own programs and learning outcomes.

Selecting Assessment Methods

As noted above, using multiple assessments is the most effective way to assess learning.⁵ Assessments can be direct (e.g. portfolios of student work, test scores, employer ratings of skills of graduates) or indirect (e.g., course grades, admission rates into graduate programs, student ratings of their knowledge and skills, student/alumni satisfaction data collected through surveys, exit interviews, focus groups), quantitative or qualitative. The assessment process can use embedded assessments—that is, course assignments that students would normally complete—or additional assessments that go beyond normal coursework. Some assessments, such as a portfolio, involve taking a second look at papers, projects, and reflections drawn from different courses and assembled over time. Institutions may have difficulty convincing

Figure 7. Liberal Learning and Global Competence at Michigan State University

Liberal Learning Goal

Analytical Thinking

The MSU graduate uses ways of knowing from mathematics, natural sciences, social sciences, humanities and arts to access information and critically analyzes complex material in order to evaluate evidence, construct reasoned arguments, and communicate inferences and conclusions.

Liberal Learning Outcome

- Acquires, analyzes, and evaluates information from multiple sources.
- Synthesizes and applies the information within and across disciplines.
- Identifies and applies, as appropriate, quantitative methods for defining and responding to problems.
- Identifies the credibility, use, and misuse of scientific, humanistic, and artistic methods.

Global Competency

- Understands the complexity and interconnectedness of global processes—such as environment, trade, and human health and is able to critically analyze them, as well as compare and contrast them across different cultures and contexts.
- Synthesizes knowledge and meaning from multiple sources to enhance decisionmaking in diverse contexts.
- Uses technology, human and natural capital, information resources, and diverse ways of knowing to solve problems.

Cultural Understanding

The MSU graduate comprehends global and cultural diversity within historical, artistic, and societal contexts.

- Reflects on experiences with diversity to demonstrate knowledge and sensitivity.
- Demonstrates awareness of how diversity emerges within and across cultures.
- Understands the influence of history, geography, religion, gender, race, ethnicity, and other factors on their identities and identities of others.
- Recognizes the commonalities and differences that exist among people and cultures and how these factors influence their relationships with others.
- Questions explicit and implicit forms of power, privilege, inequality, and inequity.
- Engages with and is open to people, ideas, and activities from other cultures as a means of personal and professional development.

students to participate in additional assessment processes unless there are program requirements.

Among the commonly used tools for assessing global learning are the following:

- Tests and inventories that provide information on students' openness to cross-cultural experiences, adaptability, and values and attitudes. Examples include the Intercultural Development Inventory (IDI), the Global Perspective Inventory (GPI), the Cross-Cultural Adaptability Inventory (CCAI), the Beliefs, Events, and Values Inventory (BEVI).
- Portfolios, collections of student work, can be used within courses or across courses to address program-level outcomes. Many open-source software packages are available for electronic portfolios.
- Interviews can be used to ask students to use what they have learned to analyze, synthesize, and apply information. Oral Proficiency Interviews, developed by the American Council on the Teaching of For-

eign Languages provide direct evidence of language learning (www.actfltraining.org/actfl
posting.cfm?recno=28).

 Surveys generally provide indirect evidence of student learning. They can measure student perception of learning, satisfaction, track students after graduation, and gather information from stakeholders.

Developing Rubrics

Rubrics are performance indicators or scoring guides that specify criteria for evaluating student work. The concept of rubrics is not new; faculty members have always used some form of rating scales and criteria, sometimes implicit, to evaluate student work. Rubrics provide a way of making grading criteria explicit for both grader and student. Good educational practice suggests that the more explicit grading criteria are, the more students will understand the faculty member's expectations and the more grades will be unbiased and consistent. There are different types

Outcome	Level 1	Level 2	Level 3	Level 4
Students will demon- strate the ability to perceive any given event from more than one cultural viewpoint.	Student describes a viewpoint different from his/her own.	Student discusses the advantages of a view-point different from his/her own, related to an issue in the discipline.	Student applies the concept of multiple perspectives to current issues locally, nationally, and internationally.	Student argues two points of view on a single world issue related to the discipline.
Students will show how the behavior of individuals, groups, and nations affect others, in terms of human rights and economic well-being.	Student identifies an issue of social justice from his/her personal perspective.	Student discusses an issue in the discipline from an interactive and interdependent perspective.	Student identifies the interactive impact of interdependent forces on real issues related to the local region, the nation, and the world.	Student analyzes how the interactive and interdependent forces affect an issue in the global community.

Source: California State University Stanislaus, cited by Olson, Green, and Hill 2006, 110.

Figure 9. Global Value Rubric—Roger Williams University				
Competency	Culmination	Advanced	Intermediate	Beginner
Knowledge of Global Inter-Connectedness	Brings understanding of interconnectedness of the globe to bear on other issues (such as environment and sustainability, social responsibility, the culture of culture, busi- ness ethics, etc.)	Is able to complete projects and assign- ments that reflect the interconnectedness of technologies, poli- tics, economies, and societies in a global context	Acknowledges the interconnectedness of technologies, politics, economies, and is able to give examples.	Recognizes the inter- connectedness of technologies, poli- tics, economics, and societies in a global context from the examples given.
Attitude of Open- Mindedness (nego- tiating cultural ambiguity; adapting and integrating new knowledge)	Demonstrates a sophisticated understanding of other cultures, communities, histories, values, and political systems, or suspends judgment when confronted with unfamiliar values and points of view; or is able to participate in an in-depth cultural dialogue in different contexts.	Asks complex questions about other cultures, communities, histories, values, and political systems, or shows skepticism toward stereotypical thinking; seeks out and articulates answers that recognize internal cultural differences and cultural change.	Solicits complex information about other cultures, communities, histories, values, and political systems, and demonstrates awareness of internal cultural differences and cultural change over time.	Asks simple questions about other cultures, communities, histories, values, and political systems and is receptive to information about internal cultural differences and cultural change over time.

of rubrics, ranging in complexity. A simple rubric is a checklist, indicating whether certain things are present that the grader is looking for, such as grammatical correctness, reference to external sources, or cogency of the argument. This simple form of assessment does not measure the level of competence that a student demonstrates. Next in complexity are rating scales, which are "checklists with a rating"

scale added to show the degree to which 'the things you're looking for' are present." (Suskie, 24)

A simple rating scale takes the form of a matrix, with the outcome listed on one axis and the degree to which it is present on the other. The rating scale is expressed in simple terms, such as on a numerical scale of one to five, or using terms from *poor*

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to excellent. The disadvantage of this approach is that the performance levels are vague and subject to inconsistent application. One faculty member's rating of good may be adequate to someone else. A rating scale does not provide solid information to students about the performance required at each designated level. Descriptive or detailed rubrics the most useful type of rubric provide descriptions of the performance associated with each possible rating. Each of the intersecting boxes contains descriptive information about what each of

these levels of performance would look like. They are the most effective way to assess learning that occurs across multiple learning opportunities and that involves many evaluators. These rubrics frame common performance standards for a number of outcomes and make the scores more consistent across evaluators. Given the effort of developing rubrics, an assessment team will want to be selective about how many global learning outcomes it presents and encourages the community to use (see Figures 8 and 9 for sample rubrics).

Descriptive or detailed rubrics—the most useful type of rubric—provide descriptions of the performance associated with each possible rating. . . . They are the most effective way to assess learning that occurs across multiple learning opportunities and that involves many evaluators.

Figure 9, describing two of four competencies and the levels of performance, was developed by the faculty over a two-year period. It serves as a framework for faculty-led study abroad programs and cocurricular program development.

Using Assessment for Program Improvement

If assessment is to be used to improve student learning, the most important part is the faculty discussion of what the data tell them. As Banta and Blaich (2010, 24) put it:

In many ways, a good discussion about assessment data resembles a good seminar discussion about a book. People cite the text, in this case the data, and then dig in, push back, consider their own experience, and try to find broad themes.

They assert that an effective assessment program should spend more time and money on using the data than on gathering it.

INSTITUTIONAL APPROACHES, Florida International University (FIU)

FIU, a public university enrolling more than 48,000 students, has developed an institution-wide initiative, *Global Learning for Global Citizenship,* which provides students with multiple opportunities to develop the knowledge, skills, and attitudes of global citizenship. Undergraduates are required to take a minimum of two courses that incorporate the three student learning outcomes (see below). Faculty developed these outcomes through a two-year process. Of the nearly 100 global learning courses now available, students must take one course as part of their general education sequence, and the second must be a discipline-specific course, as part of their major program of study. A key strategy has been offering workshops for faculty on integrating these outcomes into their courses.

Student Learning Outcomes

- Global Awareness: Knowledge of the interrelatedness of local, global, international, and intercultural issues, trends and systems.
- **Global Perspective:** The ability to conduct a multiperspective analysis of local, global, international, and intercultural problems.
- Global Engagement: A willingness to engage in local, global, international, and intercultural problem solving.

Assessment Practices

To measure two of the Global Learning (GL) Student Learning Outcomes (SLOs) directly, FIU conducts an institutionally developed pre-test/post-test Case Response Assessment (CRA) that is delivered annually to 10 percent samples of incoming freshmen, transfers, and graduating seniors. The CRA prompts students to read one of two complex, interdisciplinary case studies and respond to two essay prompts corresponding to the two global learning outcomes, **global awareness** and **global perspective.** Trained faculty raters evaluate each student essay on a scale from 0 to 4, using FIU-developed rubrics—one for assessing students' global awareness and another for assessing their global perspective. The five levels (0 to 4) of the holistic rubrics align with Bloom's (1956) Taxonomy of Cognitive Development. FIU defined the minimum criterion for success as a rubric score of "3," which represents the cognitive level of analysis on Bloom's taxonomy. An analysis of pre-test to post-test gains will provide evidence of the level of success of our initiative in helping students achieve the GL SLOs and will provide avenues for program improvement.

To measure the achievement of all three GL SLOs indirectly, FIU uses the same pre-test/post-test model as above, with the **Web-based Global Perspectives Inventory (GPI)**, an instrument that measures respondents' perspectives and experiences by asking respondents to rank about sixty survey statements on a five-point Likert scale (Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree) (Braskamp, Braskamp, and Merrill 2010). **Global awareness** corresponds indirectly to the **cognitive** domain of the GPI; **global perspective** corresponds indirectly to the **intrapersonal** domain of the GPI; **global engagement** corresponds indirectly to the **interpersonal** domain of the GLI. The minimum criteria for success for each of the three GL SLOs are based on GPI-established national norms for seniors in public doctoral universities. FIU will adjust these criteria as national norms and institutional trends evolve.

For further information see http://goglobal.fiu.edu/default.aspx, and "Global Learning for Global Citizenship at Florida International University." AAC&U News, December 2011. www.aacu.org/aacu_news/aacunews11/december11/feature.cfm.

INSTITUTIONAL PRACTICE, Georgia Institute of Technology

Georgia Tech University, a public institution with 21,000 students, is the largest engineering program in the United States. Inaugurated in 2005, its international plan is designed to "increase the number of undergraduate students who graduate with global competence in their major." Students completing the program receive the degree designation "International Plan" on their transcripts and diplomas to signify their achievement of global competence in their major. The IP is built around four skills, abilities, and attitudes (see below) that are integrated within programs of study. It includes at least six months abroad (study, work, or research), coursework, and second-language proficiency. By 2010, there were 1,150 students enrolled in the IP.

Student Learning Outcomes

Intercultural Assimilation

- Readily use second-language skills and/or knowledge of other cultures to extend access to information, experiences, and understanding.
- Convey an appreciation for different cultures in terms of language, art, history, and customs, to name a few.
- Interact comfortably with persons in a different cultural environment and be able to seek out further international or intercultural opportunities.

Global Disciplinary Practice

- Use cultural frames of reference and alternative perspectives to think critically and solve problems within the discipline in the context of at least one other culture, nation, or region.
- Collaborate professionally with persons of different cultures and function effectively in multicultural work environments.
- Accept cultural differences and tolerate cultural ambiguity.
- · Comfortably assimilate within other cultures.

Assessment Tools

- Intercultural Development Inventory.
- Pre-/post-test surveys for work and study abroad participants.
- Global knowledge Inventory.
- · ACTFL-oral proficiency interview.
- · Focus groups of students and employers.
- · Graduation and alumni survey.
- · Actuarial measures—enrollment, progression, completion, and career placement of students.
- Student demographic information—gender, ethnicity, major, GPA, etc.
- · Longitudinal survey research—CIRP freshman survey; graduation and alumni surveys.

The Fifth Year Interim Report on the impact of the Quality Enhancement Plan analyzes the results of the assessment instruments above. These preliminary findings on the first several cohorts of the IP program have raised issues about various strategies and have already led to some program adjustments.

Putting It All Together

The focus of this paper has been on two distinct but complementary frameworks for evaluating the results of internationalization: institutional performance and student learning. Institutions can and should work on these simultaneously and use them to inform each other. Defining institutional success in internationalization will depend on the goals identified; some metrics will be more important than others. Whatever the array of goals selected, enhancing student learning should feature prominently as one of them. There is no doubt that assessing student learning is the more challenging of the two measurement frameworks and the least rewarded in terms of

prestige and rankings, but that does not negate their importance as a measure of institutional quality.

Measuring and assessing internationalization outcomes and impact will take on greater importance as they continue to become more central to the definition of quality in teaching, research, and engagement. The challenge is for institutions to create a manageable and meaningful approach that looks at multiple dimensions, using multiple measures and assessment tools to reflect the contributions of internationalization in all its richness and complexity.

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