What does quality mean in the higher education setting? How should it be evaluated? How can it be improved?

Quality Issues in Higher Education

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There is much discussion these days about quality in higher education throughout all quarters of the higher education community and outside the community, as well. Government officials, employers, accrediting agencies, university administrators, institutional researchers, faculty, and faculty development specialists all have something to share concerning this topic. At the moment, however, we are experiencing more of a cacophony of speech rather than a conversation about quality.

To engage in meaningful conversation, we must first recognize what we mean when referring to quality. It is common for people to speak at cross-purposes on this subject when they are using different frameworks for defining quality. Broadly speaking, there are five popular ways to frame the issue of quality in higher education (and most other settings), as follows:

- *Quality as endurance.* European automakers often portray the endurance of their automobiles as the primary sign of quality. The same can be said in higher education. If an institution stands the test of time for over a century, we might equate that endurance with quality. We might view an institution with only a few decades under its belt as a newcomer, and if it has only a few years to its name, some people may suspect its ability to deliver quality.

- *Quality as luxury and prestige.* Objects that are luxurious, beautiful, or prestigious are often associated with great quality. This view of quality is certainly seen in higher education, where institutions invest in beautiful garden-like campuses, stately buildings, luxurious suites in athletic stadiums, and every convenience that students from affluent backgrounds are accustomed to at home. Quality as luxury extends to providing the most up-to-date research facilities, light teaching loads for faculty, deep pockets to support sabbaticals, and investment in scholarships to attract the most promising new students and push up rankings that imply prestige.

- *Quality as conformance to requirements.* This approach reduces quality to a set of specified attributes or characteristics to achieve. Most approaches to accreditation are based on this framework. The accrediting body specifies a set of requirements that a college, university, or specific academic program is required to meet, and then reviews performance to see if there is conformance to the requirements. Educational institutions can establish requirements for learning outcomes, support services, financial well-being, library resources, and even for demonstrating effective planning, assessment, and improvement. In authorizing accrediting agencies, the U.S. Department of Education establishes quality requirements that the accrediting agencies are likewise expected to meet in terms of how they accredit educational institutions.

- *Quality as continuous improvement.* Although American and Japanese quality leaders accepted the need for conformance to requirements, they also broadened their framework by focusing on the reduction of variation in repeatable processes that would lead to continuous improvement and encouraged innovation through applications of new technology. This concept has found its way into higher education as some believe that defined requirements can never keep pace with organizational learning and technology, so quality should mean achieving the fastest rate of innovation and improvement in all aspects of an

institution. From this perspective, conformance to requirements means that an institution passes muster based on quality expectations that may already be out of date.

- *Quality as value added.* As service organizations began contemplating quality in the 1980s, a perspective emerged that a process, such as education, should add value to the consumer or society. In education this perspective suggests that students should know more after they complete an academic program than before they started. Completing a college degree should mean some measurable improvement in student learning, social skills, social contacts, writing skills, reading skills, critical thinking, or other attributes that are consistent with the mission of an institution, such as the ability to dance, speak another language, or plan how to construct a building.

It is easy to see how conversations about quality in higher education can become nonproductive quickly if people approach the topic from fundamentally different frameworks. It is like having a conversation about the quality of a bridge, where one person thinks it has quality because it has stood for 200 years; another thinks it has quality because of the way it graces the skyline; another defines its quality based on the conformance to requirements for the grade of steel that was used; another thinks its quality is defined by the improved construction methods used when it was built; and another perceives its quality based on how it has improved overall flow of traffic in the region. If a participant in a conversation about quality in higher education refuses to consider all these perspectives, then the conversation becomes an argument about positions rather than an opportunity for dialogue and learning.

Dangerous Measures

Issues surrounding measurement further complicate the concept of quality in higher education. A general truism is, “what gets measured is what gets done,” demonstrates that measures play an important role quality. However, what people propose to measure in higher education is grounded in their definition of quality, so there are widely divergent views about measurement, and how organizations propose to conduct measurement activities can create many difficulties. It is not hard to measure the enduring age of an institution. Beauty contests are also possible—using professional evaluators and/or the satisfaction ratings of students, faculty, alumni, politicians, and others. Accrediting bodies demonstrate that it is possible to establish all manner of measures related to the conformance of quality requirements. It is likewise possible to assess improvement and innovation, and, if society is willing to invest the resources, to assess value added.

Is it possible, however, to establish a uniform set of quality measures that will work throughout the entire higher education community? At one level, the answer is probably yes, and at another level, the answer is probably no.

At the degree program level, it is possible to establish quality measures for use in any higher education setting, and that is exactly what specialized accreditation is all about. The very definition of a profession centers around a definable body of knowledge, making it possible for any profession to establish common requirements that all higher educational institutions will meet regarding student learning outcomes, methods of assessment and improvement, faculty credentials, and resources to support this specific aspect of higher education.[1] Professions, such as engineering, nursing, and education, are increasingly relying on common examinations that students in any type of higher education institution should have the ability to pass to demonstrate his or her qualifications to practice in a profession, regardless of the institution’s broader mission.

It’s important to note that it is the profession overall, that determines the body of knowledge. Faculty members teaching in professional degree programs are not independently deciding what they should teach, but are aligning their teaching with the body of knowledge to ensure students are competent in their field. Degree

programs are the common denominator in higher education, where it's possible to generate and assess comparative data, even though the mission of institutions that offer these degrees may vary significantly.

At any level broader than degree programs, however, the attempt to establish a common set of quality indicators across institutions immediately runs into a problem when institutions have very different missions—both stated and unstated. Some cater to the developmental needs of young people in the "traditional" 18 to 22 year-old age group from families in their region or in the nation. Some exist to meet the needs of young people whose economic situation required them to immediately enter the workforce from high school. Others focus on the educational needs of adult students. Some prepare people to function in the world from the perspective of a specific religious point of view, while others focus on preparing scientists, performing artists, or warriors. Some reject the notion that they are part of a supply chain preparing graduates for professions, but see the institution as a means to cultivate critical thinkers and life-long learners. The variety of missions among higher educational institutions is widely considered a strength of American higher education.

To further compound the issue, even higher educational institutions with similar missions within the same state may experience significant inequities in terms of funding formulas, policies regarding which academic programs will be offered where, and investments in facilities and faculty. Politics and the influence of alumni can certainly influence the higher education landscape and impact quality.

When selecting measures, great care is necessary. Some suggest using graduation rates as a comparative measure. Are graduation rates a valid measure of quality when well-funded institutions that select mainly students whose parents are college graduates and who come from well-funded high schools (who are most likely to achieve success in college) compete with marginally-funded institutions that serve students predominately from poorly-funded school systems, whose parents never attended college, and who must maintain a full-time job to stay in school?

Qualitative measures based on students' opinions and self-reported behaviors that are thought to infer something about student learning could have use as *internal* measures, but are problematic as meaningful *comparative* measures due to institutions' differing missions. Even questions about student satisfaction can be problematic. One might expect students whose educational experience included free time to socialize, private living accommodations, unlimited meal allowances, and every possible opportunity for tutoring and academic support to indicate a greater likeliness to select their institutions again, compared to those who have worked their way through school, taken night classes, and pinched pennies or gone in debt to earn their degree. Nevertheless, while many measures are problematic for comparative purposes, they may still offer great value for understanding longitudinal performance within a single institution and should no means be discounted.

Measurements are like engines on a train. Whatever engine is hooked up to an institution, it is going to start pulling that institution in a certain direction, so leaders should ensure it is a direction in which they really want to go. If external bodies, such as state legislatures, begin to dictate comparative measures, it is certain they will set changes in motion that will cause unanticipated and probably unwelcome adverse consequences.

Arguments Over Assessment

Further confusion awaits those who think quality in higher education should focus solely on student learning outcomes. Probably the best approach combines components of the three competing perspectives listed below:

- *Summative assessment.* Measures taken at the end of the educational experience enable educators to have a global perspective of what the educational process produced. This approach uses direct

measures of student learning through national examinations in professions, major field tests in disciplines, and tests such as the Measure of Academic Proficiency and Progress and the College Assessment of Academic Proficiency to provide summative data concerning student learning. These measures can provide useful understanding of student learning in both content mastery (through major field tests) and performance of skills such as reading and critical thinking. This approach also includes some indirect measures, such as surveying employers to understand their perceptions about the new graduates' abilities to function effectively in the workplace. Faculty can use these data, often through the auspices of a curriculum committee, to redesign an academic program or to identify specific deficiencies in the teaching of a subject. An advantage of this assessment approach is the ability to produce data for comparative purposes across institutions, although some may view this as a potential disadvantage. And, if an institution had the resources and was willing to invest in longitudinal data collection among first-year students and seniors, it could provide data regarding the value added in terms of student learning.

- *Formative assessments.* In this approach, direct student learning measures in specific classrooms are used. This approach requires faculty to not just teach a subject, but to engage in critical reflection on how they are teaching their subject by observing how well their students are learning.[2] This view extends beyond the routine use of tests and exams, requiring faculty to develop rubrics to explicitly show how their formerly implicit evaluation of student performance happens. This assessment approach enables faculty to quickly identify problems and make more immediate improvements. A disadvantage is that it does not provide data for comparative use because the observations are wedded to the individual faculty member. The formative assessment focus is faculty-centered, requiring faculty to invest in learning how to assess what they decide to teach. This is useful in settings where curriculum is designed to align with an established body of knowledge (such as in professional programs) and where faculty members have complete autonomy to teach whatever they wish in their class.

- *Assessments of activities that imply student learning.* These activities include the time spent doing homework, completing service learning projects, attending performing art events, and a host of other activities.[3] While proponents of direct measures of student learning outcomes may be somewhat skeptical that time invested in these activities necessarily translates into measurable student learning, research suggests a potential cause and effect relationship between student behaviors and learning outcomes.

Universities offering programs in the professions, such as business, engineering, nursing, and education, are finding that specialized accreditation reviews are increasingly advocating a combination of all three assessment approaches. The emerging view is that a robust academic program includes summative assessment (using both direct and indirect measurement), active faculty engagement in formative assessment, as well as assessment of behaviors thought to promote student learning.

Common Quality Principles

The discussion of quality in any field, whether it is education, healthcare, manufacturing, government, or service industry, is both challenging and routine. Regardless of the field, there are some common principles identified in the past 60 years that are applicable to understanding quality and that can inform our decisions about measurement and action.

Systems Comprised of Interacting Parts

All organizations (including universities) are systems made up of interacting parts. This realization led Kaoru Ishikawa, the Japanese quality expert, to develop the famous fishbone diagram that illustrates how parts of a system affect quality and also leads to the use of interrelationship diagrams to understand how one component

of the system affects other components.[4] The quality of student learning clearly depends on activities that are within the control of a faculty member and on system components outside the control of faculty, as well as attributes and abilities of the student who is also part of the system. Regional accreditation programs are increasingly expanding their review scope to consider institutions as entire systems with unique missions. The programs attempt to use quality assurance principles to ensure that all major sub-systems in a college or university are functioning at an acceptable level.

Leadership as a Vital Component

The leader's perspective about quality and the attention that he or she gives this issue will drive everything that happens in the organization. Change in leadership is one of the most clearly understood factors in both the decline and improvement of quality, and in how an organization decides to focus on quality in all sectors.[5] W. Edwards Deming noted that the organization's leaders are responsible for 85% of what happens within the organizational system and there is no reason to discount this observation when it comes to quality in higher education.[6] Leadership, in the context of higher education, includes presidents, provosts, chancellors, the board of trustees, and in the public setting includes state legislators and governors who make critical funding decisions that will impact quality, regardless of how it is defined. Many accrediting programs are relatively silent on the issue of leadership, simply requiring that the governing board is not too involved in operational issues and that the chief executive receives a periodic performance review.

A Systematic Approach

Organizations must have a systemic approach to assessing their environment, developing strategic plans, taking actions, and assessing their results. Deming identified this need and the education community adapted it as the Plan, Do, Study, Act (PDSA) cycle.[7] Accrediting organizations expect institutions to show a macro-level approach to assessment, planning, and improvement and to demonstrate how this cycle is actualized in both academic and non-academic parts of the organization.

Focus on Stakeholders and Processes for Listening to Them

Higher education organizations must remain mindful of stakeholders' needs and opinions and should ensure systematic processes to define stakeholders and engage them so that their voices are heard in the macro-level assessment and planning cycle. This includes listening to and understanding the perspectives of students, faculty, staff, parents, employers, and neighbors. Accrediting bodies tend to overlook this area in preparing the quality attributes that they will require institutions to demonstrate.

Data Collection

It's important to invest in data collection that provides feedback to faculty and administrators to help them understand their longitudinal performance and how their performance compares to similar institutions. Along with this, an institution needs to embrace the concept of knowledge management, understanding what knowledge is necessary to effectively execute all work processes that keep the institution going. Few accrediting bodies are looking seriously at this knowledge management component. There is no national consensus on the minimal requirements for collecting data and disseminating performance information throughout institutions, other than the requirements to report some data to a federal information system. Data warehousing, for example, is perhaps considered a best practice, but is generally not a requirement for accreditation.

Workforce Development

Faculty qualifications remain a long-standing quality assurance component among accrediting agencies. Newer challenges that accrediting bodies are beginning to address relate to proficiency with information

technology among faculty and staff, faculty development in terms of teaching and assessment, and inclusion of adjunct faculty as a significant part of the workforce that can impact quality.

Process Improvement

All higher education activities, whether academic or non-academic, are processes to define, study, and improve. Improvements, however, happen project by project, and in no other way, requiring a conscious effort to define, study, and improve the system.[8] Whether an institution engages in academic program reviews (beautifully defined as "academic quality work" by William Massy), organizes a task force, or utilizes a standing committee structure, leadership must make a conscious effort to encourage and support improvement.[9] Leadership must set the expectation of studying processes, empowering faculty or staff with time and resources to analyze their processes, and working to implement proposed improvements. Institutions could enhance the effectiveness of these efforts by using well-established guidelines and methods such as flow charting, basic data collection, cause-and-effect diagrams, and methods that promote innovation through creative thinking, such as synectics[10] and TRIZ.[11]

Key Indicators

Based on its mission, each higher educational institution should utilize key performance indicators that enable leaders, faculty, staff, students, and all other stakeholders to understand what the institution is working to achieve. The types of indicators selected will certainly depend on how the institution defines quality and should link to the desired outcomes of the strategic plan as well as indicators of operational activities that reflect the organization's relative health.

Anyone who has spent time studying quality as a discipline will recognize that the quality characteristics defined here are aligned with the seven categories of the Malcolm Baldrige National Quality Award, which is the gold standard for understanding quality in all sectors.[12] Several specialized and regional accrediting organizations have significantly improved their accreditation models by studying the Baldrige criteria.[13]

Every System Changes

Like any other system, higher education changes in response to internal and external conditions. Changes in technology have radically altered the manner in which faculty teach, conduct research, and even enter grades. The decline of agrarian and manufacturing economies and the growth of the knowledge economy have significantly advanced the emphasis on higher education's role in preparing people for the professions and has set the stage for rudimentary comparative analysis of institutional performance. The growing conversation and increasing awareness of how we define quality, and how we adopt quality principles and methods, will likewise affect the higher education culture as more leaders and stakeholders recognize and embrace these principles. In the words of Brent Ruben, from Rutgers University: *"*How we think about excellence has fundamental implications for illuminating and reconciling differences in perspective and priority within the academy."[14]

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