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RESEARCH & PRACTICE IN ASSESSMENT

The goal of *Research & Practice in Assessment* is to serve the assessment community as an online journal focusing on higher education assessment. It is dedicated to the advancement of scholarly discussion amongst researchers and practitioners in this evolving field. The journal originated from the Board of the Virginia Assessment Group, one of the oldest continuing professional higher education assessment organizations in the United States. *Research & Practice in Assessment* is a peer-reviewed publication that uses a double-blind review process. Approximately forty percent of submissions are accepted for issues that are published twice annually. *Research & Practice in Assessment* is listed in Cabell's Directory and indexed by EBSCO, Gale, and ProQuest.



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FROM THE EDITOR

All About Perspective

A change of scenery, a change of pace or even a change of clothing can help alter one's perspective and bring a new point of view to an existing issue or problem. Faculty and staff assessing student learning and development sometimes find it difficult to get a new outlook on their work. Annual assessment cycles and the need to gather comparable, longitudinal data suitable for regulatory reporting can result in routinized assessment activities maximized for consistency and efficiency. Some individuals may lack the necessary resources to engage fully in assessment activities and may only utilize techniques that are familiar or easily replicable. Consequently, the desire or need to maintain consistency, comparability and efficiency can inhibit persons from examining alternative approaches. But what if we asked different questions? What if we examined existing data in a different way? Or better yet, what if we examined our assumptions of what we believe data should be? And what if we could do this and still meet stakeholders' expectations?

The contributions presented in this issue demonstrate that bold approaches to assessment are being taken, different questions are being asked, data are being examined differently, and expectations are being met, if not exceeded. Qualitative inquiry allows researchers to examine different questions than the ones customarily asked and by its very nature the process of conducting qualitative research has the potential to transform the researcher. This volume of RPA emphasizes qualitative research methods and seeks to challenge readers to consider alternative paradigms, particularly the focus on traditional assessment questions that are often answered using quantitative methods.

The Summer 2014 issue of RPA opens with a thought provoking special feature that posits readers should examine important professional assumptions by asking the question of "assessment for whom?" Here, the authors, Wall, Hursh, and Rodgers call for assessment to be an ethical and values-based social practice and argue that assessment methods, including qualitative approaches, should be used to complement this practice.

Five peer-reviewed articles that employ qualitative methods comprise most of this issue. Jonson, Guetterman, and Thompson call for a broader understanding of the ways in which assessment results are used for improvement. Danley-Scott and Scott provide a perspective on assessment from non-tenure track faculty through their analysis of survey comments from these faculty members. Ariovich and Walker conducted focus groups with faculty and students to examine how a redesigned developmental math course impacted not only student learning, but also student and faculty attitudes toward redesigned courses. Applying a qualitative framework to enhance the context of institutional data, Gustafson, Daniels and Smulski utilized multiple methods to examine how an institutional mission is being met. MacDonald, Williams, Lazowski, Horst, and Barron used a semi-structured interview approach to better understand the attitudes general education faculty have toward assessment.

In the reviews, Monaghan comments on the Gap Year: How Delaying College Changes People in Ways the World Needs a qualitative study of students who engage in an extended study abroad/ service learning experience service before entering college and how those experiences impact global perspectives. Kennedy-Phillips reviews Building a Culture of Evidence in Student Affairs, an edited volume designed to help student affairs leaders develop strong assessment efforts on campus. Martin reviews Paying for the Party: How Colleges Maintain Inequality, an interview study that examines the impact of social class on the experience of college women.

The Notes in Brief provided by Blaney, Filer, and Lyon offers an example of qualitative assessment of experiential learning using NVivo software. We also encourage you to consider your viewpoint, as well as the points of view of others, as you reflect upon the photographs showcased in Ruminare. The photographs by Qozop remind us that changing our outlook can begin simply by changing what we see. I hope your engagement with the contributions of this issue provides you with a welcome change.

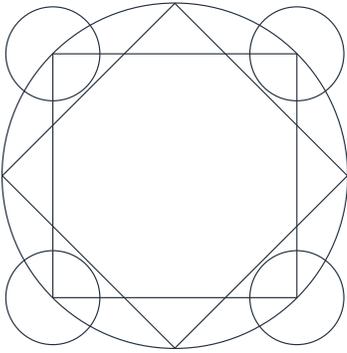
Regards,

Joshua Brown

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Abstract

It is often argued that as “consumers” of higher education, students, parents and leaders need objective, comparative information generated through systematized assessment. In response, we critique this trend toward reductionist, comparative, and ostensibly objective assessments in the United States. We describe how management has replaced democratic self-governance in higher education, and connect current managerial leadership with the use of assessment as a tool in furthering market based educational aims. Lastly, we provide an alternative view of assessment as an ethical, value concerned social practice that creates space for dialogue about how higher education contributes to learning toward the public good.

Assessment for Whom: Repositioning Higher Education Assessment as an Ethical and Value-Focused Social Practice

Since the 1980s, the emergence of assessment as a common institutional activity in United States higher education occurred without significant scrutiny of its underlying structure that framed its purposes and practice. Rather, the emphasis of scholarly writing on assessment has been on how to, with particular focus on instrumental and technical approaches to practice (Hursh & Wall, 2011). The emphasis on the technique of assessment is grounded in a pragmatic and largely unsubstantiated view that assessment practice and its associated outcomes are well-established. In this paper, we critique assessment in higher education by examining for whom this practice has been oriented. Consequently, we argue that assessment has become an element of a managerial administrative practice heavily influenced by neoliberal ideology. First, we use neoliberalism as an analytic tool to examine whose interests are served by current assessment practice. Second, we reposition assessment practice as a form of academic capital within an academic capitalist knowledge economy. Third, we reveal how assessment has become a tool of social control within managed professional culture, rather than as a component of shared governance. And fourth, we propose an alternative conceptualization of assessment as an ethical, value-based social practice for the public good.

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Our approach in this paper is a critical one for the purpose of illustrating how power is a component of assessment practice. We recognize that not everyone will agree with our analysis of power structures that we see acting to frame assessment practice in higher education. We respect that those practicing assessment have individual agency that allows individuals and institutions to build meaningful assessment practices in spite of the overarching structure of the higher education policy environment. However, we see increased attention to power, and questioning whom assessment is serving, as central to expanding the discussion of what type of practice should be engaged by the assessment community. Indeed, the question we ask here of “assessment for whom?” is a key question that needs to be continually engaged.

The Socio-Political Evolution of Assessment in Higher Education

There is no common definition for assessment in higher education. Rather, any definition grows out of social context. For some, assessment is about examining student learning, for others, examining programs, and still others, determining institutional effectiveness. In this paper we conceive of assessment broadly, as a set of activities that seeks to gather systematic evidence to determine the worth and value of things in higher education. These activities might examine learning, programs or the quality of institutional activities, and the purpose may be to judge (account), improve, or advance learning. What has been clearer is the chorus cry for increased assessment activities invariably linked to calls for accreditation and accountability of the performance of U.S. based higher education (Burke & Associates, 2005; Ewell, 2005, 2009; Zumeta, 2005). As Cronbach (1982) wrote, this movement's efforts were rooted in an effort "to assign praise or blame" and "as a sign of a pathology in the political system" (p. 4).

The emphasis on the technique of assessment is grounded in a pragmatic and largely unsubstantiated view that assessment practice and its associated outcomes are well-established.

It is not accidental that assessment in higher education emerged over a 25-year period in which a perceived educational crisis has undermined public trust, and displaced higher education's duty to serve learning for the public good with an increased emphasis on serving the needs of the market (Gumport, 2000; Rhoads & Rhoades, 2005; Tierney & Rhoads, 1995). Current U.S. assessment practices in higher education grew out of, and were in response to, national reports in the 1980s such as "Involvement in Learning" (National Institute of Education, 1984). They continue to be supported by more recent reports, such as "Charting the Future: A Test of Leadership" (U.S. Department of Education, 2006). These reports call for performance accountability in higher education aimed at quantifying its contribution to economic growth within the global capitalist market (Apple, 2000; Rhoads & Rhoades, 2005).

Higher education, in the U.S. and abroad, has been called upon to increase human and intellectual capital in the context of the new knowledge economy (Olssen & Peters, 2005). University research and student learning have been increasingly placed within national interests associated with economic development and global market competitiveness. Market management accountability approaches associated with meeting the needs of the market are replacing professional accountability (Burke, 2005). Market or consumer-oriented ends are replacing traditional purposes of higher education, such as providing a liberal education, developing intrinsically valuable knowledge, and serving society (Kezar, 2005). In this context, assessment has become a tool of managerial and market-based accountability that subverts traditional aims and instead plays a direct role in aligning institutions with external market-based performance pressures. Assessment serves an emerging market-focused university, without equal attention to questions associated with what Slaughter and Rhoades (2005) have called the teaching and learning, or public good, knowledge regime. A public good knowledge regime has been described as one that emphasizes higher education's contribution to the public good, or benefits accruing to everyone rather than individual consumers.

Assessment has become a tool of managerial and market-based accountability that subverts traditional aims and instead plays a direct role in aligning institutions with external market-based performance pressures.

The shift from a public service orientation to a market model has been marked by a managerialism that has been based upon industry logic (Gumport, 2000). This includes emphasizing knowledge production for commoditization, and increasing competition between higher education institutions for funding and students (Giroux, 2003; Slaughter & Rhoades, 2004). Consequently, as institutions compete with one another, they seek ways to distinguish themselves, including explicitly presenting themselves as a "brand," with a unique identity and market product. Assessment practices, evolving in and reflecting this market orientation, are too often employed by organizational leaders to cater to the bottom line associated with institutional success, as opposed to the public good.

Who Does Assessment Serve?

In order to critically examine who is served by current assessment practices, we first explore the way in which the term assessment has been framed by using neoliberal ideology as a conceptual lens. Neoliberalism descends from classical liberalism of the seventeenth and eighteenth centuries, in which liberal social philosophers, including Locke (1690/1960) and Hobbes (1651/1968), argued that the authority of the church and crown should be replaced by "the principles of civil rights, the rights to property, a limited conception of state power, and a broadly negative conception of freedom" (Olssen, Codd, & O'Neill, 2004, p. 80). Neoliberalism broadens classical liberal theory to argue that individuals and corporations work best when

markets and international trade are completely de-regulated, and taxes, and therefore social programs, are minimized (Harvey, 2005).

A discourse of crisis frames assessment as a practice of control in which increased scrutiny is the answer to perceived limitations to higher education performance (Tierney & Rhoads, 1995). The administrators and policy makers who framed higher education assessment practice are “also the ones who identified the crisis” (Tierney & Rhoads, 1995, p. 105). They have used the perceived crisis to call for examining educational expenditures and outcomes as part of an agenda to redefine the purpose of higher education toward serving the global marketplace. The social contract, or, the investiture in higher education for societal benefit, shifted toward a practice of establishing links between higher education and economic development (Ewell, 2005, 2009).

Political and social movements drove assessment practice as much, if not more, than changes in technology and methodology. Neoliberalism and the emphasis on accountability were the neoconservative and neoliberal response to the social movements of the 1960s and 1970s. During this period, neoconservatives and neoliberals asserted that universities had broken the public trust, and seldom served society. Therefore, those in power argued that higher education needed to be held accountable by government and business through measurement of performance. Assessment became the tool for promoting accountability, specifically for those distrustful of higher education.

In many ways, the emergence of assessment for accountability in higher education during the 1980s came about due to the rise in neoliberal informed public policy. Approaches to assessment responded to neoconservative cultural and neoliberal economic critiques of higher education’s societal purpose (Apple, 2000; Newfield, 2008; Robertson, 2007). The culture of increased scrutiny solidified the approach toward assessment during the 1990s. While states were cutting budgets, policy-makers took an even harder look at higher education expenditures (Trow, 1996; Zumeta, 2001). In the context of these shifting social, political, and economic drivers, the perception and values informing neoliberalism became the status quo. In this view, higher education had received a “free ride” for far too long.

A cynical public attitude toward the professed “good” of higher education increased skepticism that students were learning anything at all (Arum & Roska, 2011). Consequently, in order to reveal and identify higher education’s failings (be it for improvement), assessment initiatives aimed to quantify the learning process. Moreover, the emergence of state performance funding, and the firm entrenchment of national rankings, advanced the view that quantification of higher education performance was necessary and inevitable (Banta, Rudolph, van Dyke, & Fisher, 1996; McDonough, Antonio, Walpole, & Perez, 1998). Concurrently, alternative approaches to assessing the value of higher education are not a pre-eminent component of this assessment for accountability narrative; rather, there has been willful ignorance, even at times disdain, of alternative forms of assessment practice that eschew neoliberal concern for quantification of performance.

The historical reasons assessment practices relied heavily on quantitative data and related methodology correctness are multiple and complex. On one level, it is driven by a need to produce something that is objective and quantifiable, which, in effect, creates the illusion that “to be rational is *not* to engage in moral or political speculation, critique, interpretation, dialogue, or judgment” (Schwandt, 1996). As campuses initiate internal assessment, counting, or quantifying, has been a place to start, a seemingly harmless position on its face. The press for quantitative data is also the press to compare peer institutions for national rankings, or for reporting to the Integrated Postsecondary Education Data System of the National Center for Educational Statistics, or as part of state accountability in the form of performance monitoring and funding.

The push for assessment for accountability promotes collecting comparable, and therefore quantifiable standardized data across institutions. Standardized evidence makes it possible for institutions to seek regional or national prestige via rankings, for legislators and funding agencies to efficiently compare organizations, and for the public, now positioned as consumers, to “objectively” compare institutions in the spirit of *Consumer Reports*. Quantitative data are valued in an increasingly managerial environment where efficiency,

They have used the perceived crisis to call for examining educational expenditures and outcomes as part of an agenda to redefine the purpose of higher education toward serving the global marketplace.

Because a neoliberal policy framework has driven assessment practice, select public investments, rather than the overall public good, prevail in policy-making. These efforts are packaged as necessary to ensure that students can compete in the global marketplace.

comparability, replicability, and external validity are tools in a managerial toolkit. Because a neoliberal policy framework has driven assessment practice, select public investments, rather than the overall public good, prevail in policy-making decisions (Apple, 2000). These efforts are packaged as necessary to ensure that students can compete in the global marketplace (Burbules & Torres, 2000; Torres & Rhoads, 2006).

In a neoliberal policy context, methods of assessment are tools policy makers use to hold institutions accountable to the tax-paying public by evaluating quantifiable institutional data.

Policy-makers have restructured and disabled revenue streams, as well as shifted blame for shortcomings of higher education from the governmental entities that fund them to the institutions themselves. This has been accomplished while simultaneously touting the benefits of the marketplace as an adjudicator of the distribution of funds. Higher education institutions pursue institutional self-interests oriented to the market, with a sincere nod toward more traditional social good aims. Institutions' focus on market-oriented self-interests send them down a slippery slope that requires them to continuously redefine their mission from primarily serving the public, to focus predominantly on competing, surviving, and striving to be mission-centered in the global marketplace (Fallis, 2007; Mortimer & Sathre, 2006; Zemsky, Wegner, & Massy, 2005).

In a neoliberal policy context, methods of assessment are tools policy makers use to hold institutions accountable to the tax-paying public by evaluating quantifiable institutional data. A value system in which data are used to prove an ideological point associated with neoliberal concerns for performance and cultivated in an environment motivated by a fear of the loss of rationality (Schwandt, 1996). Scrutiny for the public sector drives accountability mechanisms that chip away at, and eventually tear down, institutions in order to rebuild them based on a model that serves the interest of global capitalism, as opposed to the public welfare. For the past two decades, this neoliberal paradigm has controlled the methods, values, and use of assessment practice in higher education.

Assessment as a Form of Symbolic Capital

In a neoliberal policy environment, assessment processes, outputs, and outcomes have become a form of what Bourdieu and Wacquant (1992) describe as symbolic capital. Higher education engages in assessment practice not simply for discovery, critical reflection, or to ensure student learning (though it is essential to note that they do that), but also to develop symbolic "academic capital" for use in marketing materials, lobbying, and furthering institutional prestige. The value of the symbolic capital developed by assessment processes serves the interests of quantifying higher education toward what Slaughter and Rhoades (2004) have termed an academic capitalist knowledge regime, in which knowledge has value as a commodity.

Higher education engages in assessment practice not simply for discovery, critical reflection, or to ensure student learning (though it is essential to note that they do that), but also to develop symbolic "academic capital" for use in marketing materials, lobbying, and furthering institutional prestige.

In an academic capitalist knowledge regime, the function of the university became development of knowledge as a commodity that could be monetized in the global marketplace. This commoditization of knowledge translates research discoveries into applications that spurred economic development (Slaughter & Rhoades, 2004). The university moved from a location that freely exchanges knowledge, toward an institution that aims to monetize knowledge so that it may maximize institutional interests. The increased use of assessment shifted teaching and learning activities toward seeing learning by students as a form of symbolic "academic capital." Assessment becomes a way to quantify learning, a process that certainly serves the interests of advancing practices of teaching and learning, but also contorts these practices toward seeing learning and what is learned as a commodity. Thus, assessment for whom, and toward what ends, becomes a central question in identifying the purposes of assessment.

In a review of the purpose of assessment, Ewell (2002, 2009) suggests that assessment in higher education can serve both the interests of accountability and improvement purposes. Ewell roots the advent of the assessment movement in "a combination of curriculum reform reports that called for greater curricular coherence, the use of powerful pedagogies known to be associated with high learning gains, and knowledge about student outcomes and experiences" (Ewell, 2009, p. 5). While Ewell's portrayal is appealing, it under-appreciates the symbolic academic capital that politicizes assessment activities in a neoliberal political environment. Assessment is not simply a balancing act between accountability and improvement, or what Harlen (2005) describes as "assessment of learning" and "assessment for learning," but has

been rooted in a neoliberal political context that defines both purposes. Assessment for improvement and accountability serve a market rationale associated with the universities creating workers and knowledge for economic development, rather than primarily serving more abstract educational purposes associated with developing human beings, advancing democracy, or creating a just world.

The politicized culture of accountability and improvement purposes of assessment are illustrated by examining how *U.S. News and World Report* (USN&WR) rankings of higher education have created symbolic academic capital oriented to market benefit (Ehrenberg, 2002; Ewell, 2005, 2009; Monks & Ehrenberg, 1999; Pike, 2004). There is limited evidence that the USN&WR rankings and their underlying metrics attend to desirable institutional behavior beyond the quest of institutional self-betterment and prestige. Rather, the rankings point toward a view of prestige that values educational inputs (as an example ACT/ SAT test scores, teacher to student ratios), rather than activities fostering improved educational practices (Pike, 2004). What the rankings do accomplish is the development of a culture of assessment as highly valued symbolic academic capital, a capital that is operationalized in the market of higher education as institutions enroll students, hire faculty, and advance prestige goals. Rhoades and Sporn (2002) describe how the development of assessment ranking systems push institutions toward similarity of function and purpose, or isomorphism, rather than toward diversity to serve a global society's diverse post-secondary educational populations and needs (DiMaggio & Powell, 1983).

Assessment for improvement and accountability serve a market rationale associated with the universities creating workers and knowledge for economic development, rather than primarily serving more abstract educational purposes associated with developing human beings, advancing democracy, or creating a just world.

Assessment as Social Control in a Managed Professional Environment

Assessment and related symbolic capital exist as a component of managed professional, or market managed culture of efficiency, revenue and prestige goals (Burke, 2005; Rhoades, 1998). This does not deny that assessment has been a tool to advance learning, in fact it has, but the challenge is in identifying which assessment purpose has dominated. In such a context, assessment risks becoming the servant of a culture that Rhoades (1998) termed “managed professional,” where administrators have used assessment as a tool of significant control over faculty. Lechuga (2008) provides a specific example of this phenomenon in his study of for-profit universities, in which he describes using assessment as a tool of social control over the teaching and learning enterprise, with the purported aim of ensuring quality and efficiency. Classroom assessments became mechanisms of ensuring student consumer satisfaction, thereby providing evidence of quality and supporting staffing and curriculum decisions (Lechuga, 2008). Mentkowski and Associates (2000) offer a counter example where assessment served as a tool to transform campus culture and enhance learning with faculty support at Alverno College, offering an example of the potential of assessment beyond social control.

Assessment as a means of social control is not evident simply in for-profit university environments; rather, the process of assessment in multiple institutional contexts has vestiges of subtle social control as well. What is measured has value, or becomes valued as it is measured (Hursh, 2008; Patton, 1997). Administrators, in measuring what has value, control the assessment resource allocations, thus holding power over what has enough value to be measured. Too often faculty see assessment as another task that pulls them away from the research for which they were trained, and are more highly rewarded. Assessment is instigated and advanced by administrators, and either sold to, or imposed upon faculty through necessary accreditation processes, rather than becoming a component of shared governance and an integrated component of faculty teaching and learning responsibilities (though many advance a view of integrated assessment into teaching and learning as desirable, see Angelo & Cross, 1993; Ewell, 2009; Shulman, 2007). Increasingly assessment has been tasked to professional assessment staff who have well-intended organizational responsibility. In instances when administrators earnestly reach out to engage faculty in assessment efforts, the tepid response of faculty often makes it necessary for administrators to press forward without shared ownership.

This does not deny that assessment has been a tool to advance learning, in fact it has, but the challenge is in identifying which assessment purpose has dominated.

Assessment has emerged, be it through noble or coercive intentions, as a component of a managed professional culture, rather than as a mechanism of shared governance. It is now another mechanism by which administrators assert authority over the university, including the educational activities of faculty. While there is significant rationale to support the need to pay greater attention to the products of what has been learned by college students, the move to

place assessment as a part of what Burke and Associates (2005) term “managerial,” or “market accountability,” replaces professional accountability mechanisms. The move to managerial or market accountability places assessment within a neoliberal ideology. This is a position that is often described as inevitable, or as Rhoads and Rhoades (2005) indicate, “Few call into question the philosophical positions suggested by various measurement and evaluative processes” (p. 250) associated with a managerial approach.

Situating Assessment within Evaluation as a Socio-Political Practice

Administrators, in measuring what has value, control the assessment resource allocations, thus holding power over what has enough value to be measured.

The current culture of assessment rooted in neoliberal ideology is not inevitable; the underlying philosophical assumptions associated with measuring higher education’s processes, outputs, and outcomes, can and should take alternative forms. Assessment as a managerial tool of accountability can be replaced or revised in line with alternative views of shared higher education governance for the public good. In an aim to reconstruct assessment for the public good, we develop three points: First, we situate assessment as a social practice sharing conceptual elements with evaluation and applied social science, but distinct in its own right; second, we conceptually group approaches to assessment in higher education using Alkin’s (2004) branches of evaluation theory as a means to illuminate multiple philosophies guiding assessment practice; and third, we examine the purposes of assessment in higher education.

We see assessment in higher education as differentiated from applied social science research, though assessment draws upon its traditions and approaches. While assessment evolution has included connections to mastery learning and as a tool of benchmarking education performance, we view assessment as a subset of, and is intertwined with, the broader practice of evaluation and qualitative social science research practices that have focused on understanding the value of things in social context (Ewell, 2002; Scriven, 1991; Vogt, 2006). In practice, assessment commonly engages in examinations of individual student learning, aggregation of individual learning, and increasingly, examinations of curricula or programs that make assessment practice synonymous with evaluation that explore the “worth and values of things” (Scriven, 1991, p. 1).

Assessment as Social Practice

As Wehlburg (2008) points out, assessment in higher education operates in a charged political context. This omnipresent social context frames the practice of assessment as not simply socially situated but what Gee (1998) has called a social practice. A social practice is differentiated from a socially situated practice in three ways: First, a social practice is a complex capability, rather than the acquisition of a set of skills; second, the same practices in different settings will have different results; and third, a social practice is developed through learning in practice, from mentoring and experiential learning, rather than from mastery of a set of abstract knowledge.

When assessment is repositioned as a social practice, it is fraught with power dynamics that directly influence framing, implementation, interpretation and use.

When assessment is repositioned as a social practice, it is fraught with power dynamics that directly influence framing, implementation, interpretation and use. Then, the social position of those involved in the work becomes a central element of practice, just as is the case in qualitative social science research and many approaches to evaluation (Alkin, 2004; Lincoln, 1995; Lincoln & Guba, 1985). The act of conducting assessment, whether using qualitative or quantitative data gathering approaches, is a political act and the relative stance of those conducting assessment becomes central to practice itself. Just as many in the evaluation community have noted, assessment is centrally an ethical and valuing practice, in which a value stance is advocated, be it scientific, social justice, or democratic (Greene, 1997). Assessment, as intertwined with and a subset of evaluation, should be conceived as a practice that attends more fully to the social and political position that it occupies within institutions.

Assessment as an ethical and valuing social practice could benefit significantly from drawing upon the qualitative social science and evaluation work that has included conceptualization of practice that address ethical and value concerns inherent in the social and political institutional environments where assessment is carried out (Alkin, 2004; Lincoln & Guba, 1985; Schwandt, 1997). This thinking must be considered in addition to the skills related to method, procedures and techniques, in order for individuals to develop a social practice of assessment as a complex capability.

Rather than casting assessment as a tool of improving learning or accountability through the use of technical tools for higher education to advance efficiency, learning, market or institutional prestige goals, we wish to reposition assessment first and foremost as an ethical and valuing practice. Furthermore, we see assessment as pedagogy, or a form of self-reflection, critique, and learning (Greene, 1997; House & Howe, 2000; McDonald, 1983; Schwandt, 1997). Viewing assessment as having pedagogical purposes comes from value-oriented approaches to evaluation that promote democratic values of inclusion, dialogue, deliberation, and social justice. The view that assessment practitioners should have a pedagogical purpose comes from the idea that evaluation should not simply be a “unilateral act” of an individual or individuals, but an activity of engaged practice in which the context of education forms the basis for engagement in inquiry (Schwandt, 2003, p. 356). In this view, assessment, like evaluation,

is a practical, material and political undertaking concerned with examining and enhancing the ways we make interpretative judgments of the value of human actions that unfold in specific social, historical and cultural contexts. A scientific and theoretical engagement with practice is a technical undertaking, while a practical engagement with practice is a pedagogical undertaking. (Schwandt, 2003, p. 357)

Assessment as a pedagogical practice makes it possible for individuals in a given assessment context to recognize themselves as socio-political actors who are engaged in an assessment dialogue about the nature of their work. This view recognizes the complexity of practice and the difficulty of making practical judgments about how to best engage students in learning and best carry out the activities of a given higher education institution. Indeed, this view acknowledges assessment as a component of being a reflective professional operating in the complex, messy, modern environment of higher education.

Repositioning Assessment as an Ethical and Value-Based Practice

Repositioning assessment in higher education as an ethical and value-based practice is in keeping with the valuing branch of Alkin’s (2004) evaluation tree metaphor. Alkin’s evaluation theory tree has grouped approaches to evaluation into having use, method, or values foci. The application of a conceptual organization of assessment practice highlights differences among ways of thinking, and provides guidance for different ways that assessment might be thought about and practiced. For instance, the utilization-focused evaluation approach of Patton (1997) guides evaluation practice toward maximizing use of evaluative process and results, rather than seeing use of results simply as a component of an assessment loop (Green, Jones, & Aloï, 2008). The higher education literature is replete with the examples of assessment framed with a focus on methods, such as the preeminent Input-Environment-Output (I-E-O) model and associated methods as outlined by Astin (1991).

The value branch of Alkin’s (2004) theory tree perceives evaluation as a value-oriented practice, and provides frameworks for moral and ethical dimensions of practice. In valuing deliberative democratic practice, House and Howe (2000) identify inclusion, and dialogue and deliberation as critical facets of the process of evaluation. Greene (1997, 2000) focuses on the value stance of an evaluator, positioning evaluation first as a moral and ethical practice, and second, as technical or procedural. The focus on values or value-stances in evaluation provides direction for how the socio-political context of assessment can be engaged as a component of practice. Kezar, Gleen, Lester, and Nakamoto (2008), along with Ladson-Billings (1998), offer value-oriented approaches to assessment in higher education that focus on examining questions of equity and culturally-relevant practice. Kezar et al. (2008) and Ladson-Billings’s (1998) value-oriented approaches provide insight into how assessment can be constructed as a moral and ethical practice that responds to key social questions associated with whom higher education serves, and towards what end. Use and value approaches to assessment do not negate the need to examine method, but prompt us to question the socio-political context of assessment efforts.

Five Foundational Responsibilities of Individuals Conducting Assessment

As practical guidance toward repositioning assessment as an ethical and valuing social practice we proposed five foundational responsibilities that should underpin individual assessment practice. First, individuals engaged in assessment are responsible for acknowledging

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the ethical nature of their work. They must identify, and make clear their position relative to the work to be done. While this idea has similarity to qualitative discussions of researcher position, here the focus is not simply on how an individual's background biases influence their interpretations. An ethical practice of assessment asks those engaged in assessment to identify whose interests are being served in conducting a particular assessment process. Has a process been mandated, what methods are deemed credible, what questions are acceptable to be asked, and what organizational consequences might be "in play" depending upon what an assessment process reveals? How do these concerns interplay with one's own preferred methods of data collection and how an individual is socially positioned? Each of these questions conceptually frame the freedom and stakes present in every assessment process and firmly place assessment practice as fraught with ethical decisions that should be surfaced and engaged.

The repositioning has the potential to raise consciousness of how assessment processes are framed by the neoliberal policy context, thereby raising the importance of illuminating ethical value laden positions that are adopted in the process of conducting assessment.

Second, assessment as an ethical and value-based practice should make transparent the purpose(s) of an assessment process. The purpose of assessment includes clear identification of assessment questions, but also considers the consequential nature of the use of assessment information. Is information associated with an assessment process part of performance review, to be used in accreditation, for institutional marketing or political positioning, a research project with publication goals, to advance learning or solely to identify program improvement? Surfacing both the apparent and underlying reasons that an assessment process has been initiated is essential to conducting assessment as an ethical social practice.

Third, an ethical and value-based assessment practice must make transparent the primary, secondary, and tertiary stakeholders. Attention should be particularly paid to intentionally and unintentionally excluded stakeholders. Individuals conducting assessment should make transparent who has and has not been considered in how assessment processes are designed, what methods are employed, who provides data (the sample), who conducts analysis, and who has access to data and results. Identifying whose interests are served in the practice of assessment is central to understand and illuminate as a part of the process of doing assessment work.

By raising consciousness of the ethical and value-based decisions implicit in any assessment context, the practice of assessment truly becomes a complex social practice rather than a collection of technical data gathering approaches that might unwittingly serve power interests unintended by well-meaning individuals.

Fourth, an ethical and value-based assessment practice should base method selection upon finding congruence between method, ethical and value commitments. Individual predetermined competence or preference for a particular way to gather information should be a secondary rationale for data gathering method adoption. Identifying credible methods to fit with ethical concerns and value commitments associated with transparently identified purposes, identified stakeholder needs, and concerns over whose interests are served by different data gathering approaches should frame decisions of methods, rather than deep seated concerns that pull assessment practice into the methods wars. We see method selection as responsive to ethical concerns about the consequential nature of how credible information can be developed to advance ethical and value driven institutional concerns. We exclude no approach to data gathering, but rather steer selection as responsive to social context in keeping with the view that assessment is a social practice where the same practices (methods) engaged in different context will have different results.

Fifth, we place a special value-oriented responsibility on individuals to make interpretive judgments related to the quality and findings of an assessment process. Those who carry out assessment should engage in interpreting findings, rather than see evidence as speaking for itself and allowing others to interpret findings as if the complexity and context of the findings are self-evident. Given that assessment is a social practice, where context frames interpretations regardless of procedure of data collection, it is important that those conducting assessment interpret findings, and make statements as to their credibility, what conclusions are appropriate to draw and what recommendations for action are appropriate. An individual may decide to engage stakeholders in this process, but it is the responsibility of those directly involved in carrying out the assessment to make ultimate value claims.

Repositioning assessment as an ethical, value-based social practice allows individuals to be responsive to the social and political context that frames every assessment context. The repositioning has the potential to raise consciousness of how assessment processes are framed by the neoliberal policy context, thereby raising the importance of illuminating ethical value laden positions that are adopted in the process of conducting assessment. It may be

the case that practitioners still engage in a practice that necessarily adheres to developing symbolic capital, but it may also be the case that by elevating ethical and value-based concerns practitioners can engage in work that intentionally examines a broader range of issues including how institutional activities serve the public good.

Conclusion

We have critically examined the practice of assessment in higher education by exploring how the neoliberal paradigm has framed how we think about assessment. Giroux (2002) observes that “the language of neoliberalism and the emerging corporate university radically alter the vocabulary available for appraising the meaning of citizenship, agency, and civic virtue” (p. 456). We reject neoliberal discourse as it relates to higher education because it weakens our moral purpose and undermines society’s well-being. If the goal of higher education is to serve the public good, rather than primarily positioning institutions and individuals in financial markets for the purpose of self-sufficiency, then we propose that assessment can be framed as an ethical, valuing social practice that seeks to make clear whose interests are served through a particular assessment process. By raising consciousness of the ethical and value-based decisions implicit in any assessment context, the practice of assessment truly becomes a complex social practice rather than a collection of technical data gathering approaches that might unwittingly serve power interests unintended by well-meaning individuals.

We need assessment practices that are transparent, transformative, and oriented toward addressing consumer needs and questions of practical philosophy about how higher education is serving society. Administrative managerialism in assessment practice needs to be replaced by an ethical and value focused approach to assessment where shared campus engagement facilitates learning for its most important stakeholder, the diverse public (Leville, 2005). Assessment practice should be constructed as a place of inclusive, sustained, and informed dialogue, not one that is simply a technical and procedure process that strives for validity rather than purpose and transparency.

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AUTHOR’S NOTE

For my wife and my children. - Andrew

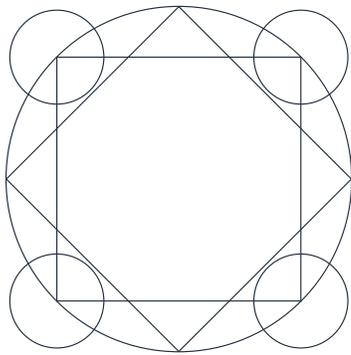
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Abstract

A fundamental goal of student learning outcomes assessment in higher education is to use student learning evidence in decision making to improve educational programs. Such use of assessment findings, however, is atypical. This article argues that a narrow conception of use contributes to this conclusion and an accurate appraisal of the contribution of assessment requires a reconceptualization of the aims of assessment and a more inclusive model of possible uses of assessment evidence. To evaluate the heuristic value of a more inclusive model of influence adapted from the field of evaluation, a content analysis was undertaken of program assessment reports at a research university. Results indicate that existing definitions of use suffer from construct underrepresentation; assessment evidence may be more influential than realized, particularly with regard to enhancing understanding of how student learning occurs; and the more inclusive model has potential utility for faculty, administrators, and accrediting bodies.

An Integrated Model of Influence: Use of Assessment Data in Higher Education

A fundamental goal of student learning outcomes assessment in higher education¹ is use of student learning evidence to *close the loop* (Banta & Blaich, 2011; Banta, Jones, & Black, 2009; Bresciani & Wolff, 2006; Maki, 2010), that is, completing the assessment cycle that includes planning, gathering, interpreting, and using learning evidence to inform decision making about improving educational programs (Maki, 2010; Palomba & Banta, 1999). However, the realization of this goal has been one of the most important and unaddressed challenges related to assessment (Banta & Blaich, 2011; Kuh & Ikenberry, 2009; Kuh, Jankowski, Ikenberry, & Kinzie, 2014). Even the most well-designed and thorough studies of student learning have concluded that the use of available learning evidence is uncommon (Blaich & Wise, 2011). Concern with fidelity of assessment has resulted in a consideration of factors that hamper and facilitate use of assessment results (Banta & Pike, 2012; Blaich & Wise, 2011; Ewell, 2009; Kuh & Ikenberry, 2009; Peterson & Einarson, 2001). Nevertheless, an important issue that has not been addressed in the literature is whether a narrow conception of what constitutes *use* contributes to the conclusion that assessment results typically do not lead to improved educational practices and student learning. If definitions of use are too narrowly defined, some assessment efforts may be considered failures when those efforts actually may have been very transformative but in unexpected or slowly evolving ways. Accurate appraisal of the extent to which assessment of student learning is contributing to improvement in educational practices and student learning requires both a reconceptualization of the aims of assessment as a process for transforming thinking of internal and external stakeholders about teaching and learning and a more inclusive model of possible uses of assessment evidence.

Banta (2002) has suggested evaluation literature as a basis for assessment scholarship. The discipline of evaluation provides a framework for the practice of assessment because both involve a systematic method for collecting, analyzing, and using information to

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¹ Student learning outcomes assessment in higher education is hereafter referred to as *assessment*.

answer questions about the effectiveness of programs (Banta, 2002; Gray, 2002). In particular, evaluation theory provides a framework for considering a broader model of possible uses of assessment evidence.

This research article follows through on Banta's suggestion by applying theories of use that have evolved over time in the evaluation field to assessment practice (Kirkhart, 2000; Leviton & Hughes, 1981; Patton, 2012; Weiss, 1998). More specifically, Kirkhart's (2000) multidimensional and integrated theory of influence is adapted by this study to reconceptualize the aims of assessment and the construct of use and evaluate the heuristic value of a more comprehensive model of influence. This model potentially can be useful to faculty, administrators, and the bodies that accredit postsecondary institutions when determining the implications of assessment evidence for improving educational practices and policies.

Background

The infrequent use of assessment findings to improve academic programs is a key indication in recent literature on the current state of higher education assessment (Banta, 2010; Banta & Blaich, 2011; Blaich & Wise, 2011; Ewell, 2009; Ewell, 2010; Kuh & Ewell, 2010; Kuh & Ikenberry, 2009; Kuh et al., 2014). This lack of use was also recognized over a decade ago in an extensive multi-institutional study of assessment approaches, supports, and uses that found assessment results have very limited impact on academic and faculty related decisions (Peterson & Einarson, 2001). This study also found that most institutions have not monitored the use of their assessment information. Peterson and Einarson (2001) concluded that because of the claims made about the value of assessment and the substantial resources invested, institutions need to prioritize examination and evaluation of uses and effects. This article offers support for Peterson and Einarson's conclusion by suggesting a framework that would allow different dimensions and types of use to be more clearly defined for these monitoring purposes.

...most institutions have not monitored the use of their assessment information.

Extensive multi-institutional studies of the current state of assessment, like Peterson and Einarson's (2001) work, have been infrequent until the publishing of findings from a survey of provosts and chief academic officers at regionally accredited institutions about what their institutions are doing to gather and use evidence of undergraduate student learning (Kuh & Ikenberry, 2009; Kuh et al., 2014). Kuh et al. (2014) found that since the 2009 survey, the use of assessment evidence appears to be increasing but is still not pervasive enough to guide institutional actions that improve student outcomes. Another large-scale multi-institutional longitudinal study by Blaich and Wise (2011) involved the administration and analysis of multiple measures of student learning. One of the unforeseen results in Blaich and Wise's study was that despite a significant amount of credible data, most institutions had trouble finding tangible uses for the information. They found only 40% of institutions involved in the study had shared results with campus constituencies and only about 25% had actively used the data. Blaich and Wise concluded with sound advice on how to engage institutional communities in the discussion and use of assessment data as a process of inquiry.

However, as this article will demonstrate, approaching assessment as a process of inquiry requires a more broadly defined framework for use that honors a slow, but measurable, four-step process across the assessment cycle. The first step is planning assessment as a process of inquiry that focuses on faculty's questions of interest. The second step is gathering data about student learning and the assessment process. The third step is interpreting and evaluating the data collected by engaging stakeholders in *meaning making*, an epistemological process where social construction of meaning is arrived at through dialogue. Engagement in meaning making process has occurred among faculty and student affairs personnel using both quantitative and qualitative information. Baxter Magolda and King (2007) discussed the use of the meaning making in the interpretation of self-authorship interviews and Driscoll and Wood (2007) discussed its use with faculty learning communities. The fourth and final step is the use of assessment results for improving teaching and learning.

Concerns about the persistent lack of use of assessment evidence has led some to call for studying the effects of outcomes assessment on decision making (Banta 2010; Blaich & Wise, 2011; Ewell, 2009; Ewell, 2010; Kuh & Ikenberry, 2009; Kuh et al., 2014; Spencer Foundation, 2010). Granting agencies, such as the Spencer Foundation (2010), recognized the

use of assessment evidence in decision making as a critical issue in K-12 and higher education by identifying data use and educational improvement as one of their strategic initiatives and offering funding “to support scholarship examining the conditions, contexts, and underlying factors and processes that affect how educational organizations use data and information for improvement” (para. 1). This article is an outgrowth of a grant project funded by the Spencer Foundation’s strategic initiative on data use that prompted the need to clarify the meaning of the term *use*. The implicit assumption evident in previous research is that use is only defined by an immediate, observable action for change. However, this narrow definition may underrepresent the construct of interest and limit studies of what conditions, contexts, and underlying factors are most likely to produce meaningful processes and data for decision making and ultimately improvement of student learning. Underrepresentation of use has not been previously discussed in the higher education assessment literature and therefore is a key focus of this study.

Underrepresentation of the Construct of Use

Approaching assessment as a process of inquiry requires a more broadly defined framework for use that honors a slow, but measurable, four-step process across the assessment cycle.

Validity inferences are an important concept in assessment because “broadly defined validity would be nothing less than an evaluative summary of both the evidence for and the actual – as well as potential – consequences of score interpretation and use” (Messick, 1995, p. 742). Messick’s (1995) discussion of validity indicates that a comprehensive measure of a construct can encounter two major threats: construct underrepresentation and construct irrelevant variance. In this study, construct underrepresentation of assessment use is of particular concern and involves a definition of a construct that is “too narrow and fails to consider important dimensions or facets of the attribute” (Messick, 1995, p. 742). If the assessment process is only considered successful when the data contribute to immediate, observable actions for change, then the aims of the assessment process and the existing definition of use are too narrow. The field of evaluation has reconceptualized the aims of assessment and developed a broader understanding of what constitutes use (Kirkhart, 2000; Leviton & Hughes, 1981). A consideration of this reconceptualization offers an opportunity to identify important influences and utilizations of student learning data that may be contributing to improvement of academic programs but may not be immediate or observable.

Contribution of Evaluation Theory

The assessment and evaluation communities share a concern about the effects of their assessment and evaluation efforts (Banta, 2002). There is much the assessment community can learn from evaluation because for over 30 years the field has studied use, conducting empirical studies in addition to conceptual work. The guiding assumption about the aims of assessment has been “that evaluations are conducted to provide information for use in decision making” (Preskill & Torres, 2000, p. 26), which has led to a focus on types of use and the factors that contribute to use or nonuse of the information obtained. Several types of use have been delineated, including *instrumental*, in which the findings influence actions or decision making; *conceptual*, in which the evaluation leads to different understandings or enlightenment; *symbolic*, in which the findings are used for advocacy, argument, and persuasion (Leviton & Hughes, 1981); and *process*, in which learning occurs as function of participating in the evaluation process (Patton, 1997). Factors that have been identified as contributing to the use or nonuse of evidence in educational contexts include organizational characteristics, such as the extent to which assessment is being conducted and supported (Peterson & Augustine, 2000); personal factors, such as beliefs about knowledge (Weiss & Bucuvalas, 1980); and information characteristics, such as whether the evidence is fine-grained enough to guide intervention (Ewell, 1989).

Although there have been advances in understanding the effects of evaluation efforts, Kirkhart (2000) argued that “an inclusive understanding of the influence of evaluation has been hampered by the scope and language of past approaches” (p. 5). More specifically, she contended that the term *use* is awkward and has resulted in construct underrepresentation, that is, an inappropriate emphasis on some components while neglecting other critical aspects of the construct (Messick, 1995). Kirkhart advocated for a shift in construct terminology from *use* to *influence*, which called attention to a more comprehensive understanding about the effects of the evaluation endeavor and proposed an integrated theory that conceptualizes evaluation influence in three dimensions: source, intention, and time.

Source refers to the active agent or starting point of the influence (Kirkhart, 2000). There are two well-recognized sources of influence: *Findings-based*, in which the influence stems from the information or data produced by the evaluation (Kirkhart, 2000; Rich, 1977); and *processes-based*, in which the influence stems from the process of conducting the evaluation (Greene, 1988; Patton, 1997). Findings-based evaluation has been further characterized in terms of three types: *instrumental* in terms of direct action taken on the basis of the evidence; *conceptual*, with regard to changes in understanding stimulated by the findings; and *symbolic*, in the sense of the role of the findings in advocacy, argument, and persuasion (Leviton & Hughes, 1981; Weiss, 1998; Weiss & Bucuvalas, 1980). Similarly, process-based influence as experienced by participants has been reported along three dimensions: *cognitive*, in terms of discussion and processing of information; *affective*, in terms of personal feelings of value and worth; and *political*, in terms of recognition and voice to the less powerful (Greene, 1988). This article proposes an adaptation of Kirkhart's categories that findings-based and process-based sources and their respective subcategories and dimensions can be interrelated such that findings-based evaluations may have an affective effect of influence and process-based evaluations may have an instrumental effect of influence.

In addition to source, Kirkhart (2000) proposed two additional dimensions. *Intention* refers to the extent to which the evaluation has intended or unintended influences. Intended use may be directed through both findings-based and process-based sources. Unintended use reflects unanticipated pathways that may also stem from findings-based and process-based sources. *Time* is the third dimension and refers to the period in which the influence occurs, either as an immediate point-in-time event, an end of cycle event, or as a more long-term process.

One of Kirkhart's (2000) contributions has been to foster the recognition and investigation of multiple attributes of the construct of influence. For example, Rossman and Rallis (2000) argue that evaluation serves an educative purpose and they cast evaluation as a process of learning in which evaluation use involves the generation and application of knowledge. This reconceptualization expands the purposes or aims of assessment and evaluation beyond problem solving that leads to decision making to also include learning, that is, new or enhanced understandings that facilitate meaning-making with regard to the implication of assessment evidence for improving educational practices and policies. Moreover, conceptualizing assessment and evaluation as learning enables a connection with constructivist approaches to learning as transformation, not only at the level of the individual but also with regard to organizations. More specifically, Preskill and Torres (2000) focus on both the learning that occurs through the evaluative process and the use of evaluation to facilitate learning, especially transformative learning in organizational contexts. They argued that, "Learning from evaluation and from organization members' subsequent use of what they learn will most likely occur when evaluation is collaborative, is grounded in constructivist and transformational learning theories, and builds communities of evaluation practice" (p. 29). A constructivist and transformational perspective on learning emphasizes the roles of collaboration and dialogue within an organization as essential to the process of making-meaning from participating in the evaluation enterprise. The ideas of Preskill and Torres expand thinking about the aims or purposes of the learning to be accomplished through the evaluation process. These include both personal transformation as well as building communities of practice in which evaluation and assessment are engaged as processes of inquiry. Communities of practice arise as members engage in common activities, rely on one another, and share decision making (Preskill & Torres, 2000; Wegner, 1988). Its members are bound to their institutions and share common problem sets, which they solve through peer review (Herndon, 2006). Communities of practice serve as faculty development mechanisms to foster and sustain dialogue about teaching, learning, and assessment issues and link ideas to effective practices (Jonson & Thompson, 2013). Examples of building these communities of practice have been introduced by Cox (2004) as faculty learning communities and by St. John (2009) in the professional development of graduate students.

Therefore, the purposes of this article are (a) to enhance the influence of assessment efforts through incorporating advances from the field of evaluation theory; (b) to prompt a conversation about the underrepresentation of the construct of use in assessment as it applies to student learning in higher education; (c) to advocate for a reconceptualization of

If the assessment process is only considered successful when the data contribute to immediate, observable actions for change, then the aims of the assessment process and the existing definition of use are too narrow.

assessment aims; and (d) to encourage a shift in focus from asking about the use of assessment information to asking about its influence. To these ends this article undertakes an evaluation of the heuristic value of a model of influence that adopts, and further adapts, Kirkhart's (2000) integrated theory of multiple and integrated dimensions of influence within a framework of conceptualizing assessment as a process of inquiry learning that involves the generation and application of knowledge (Rossman & Rallis, 2000) that can serve multiple and valued purposes (Preskill & Torres, 2000).

Proposed Model

The question to be addressed is: If assessment is conceptualized as an educative process of inquiry and learning that involves the generation and application of knowledge, how might the influence of the assessment enterprise be appraised? Table 1 presents a schema for an elaborated heuristic model with four dimensions of influence that are adapted from Kirkhart's (2000) model.

Table 1

Heuristic Model of Influence: Dimensions, Subtypes, and Definitions

Dimension	Subtype	Definition
Sources of Influence	Findings-based	Based on student learning evidence
	Process-based	Based on evidence about the process of assessment rather than on learning evidence including consideration of methodology or data (e.g., measurement issues, sample size).
Effects of Influence	Instrumental	Involves a direct action or a decision and commitment to take educational practice or policy actions.
	Conceptual/Cognitive	Involves new understandings, ways of thinking, or processing information that may lead to considering action but lacks the actual commitment to act.
	Affect	Involves participant's disposition, emotions, or tendency regarding assessment process or assessment evidence
	Affirmation	Involves a confirmation of the appropriateness or effectiveness of an existing practice, policy, or understanding.
Results of Influence	Improved student learning	Results in evidence of improved student learning.
	Personal transformation	Results in a personal transformation of stakeholders (e.g., feeling empowered and motivated, changes of beliefs).
	Communities of practice	Results in building new or strengthening existing communities of practice.
	Symbolic/Political	Results in generating or sustaining support for policies or practices.
Time of Influence	Immediate	Occurs concurrent with the assessment process.
	End of Cycle	Occurs surrounding the conclusion of an assessment cycle (e.g., end of term)
	Long-term	Occurs in the future or extends beyond the assessment cycle.

Note: The model definitions provided an existing code set for qualitative analysis of programmatic reports.

Conceptualizing assessment and evaluation as learning enables a connection with constructivist approaches to learning as transformation, not only at the level of the individual but also with regard to organizations.

The first dimension is sources of influence. There are two subtypes depending on whether the influence stems from the learning data (findings-based) or from participation in the assessment process (process-based).

The second dimension is effects of the influence, which act as mediating processes or functions between the assessment findings or processes and various educational practices, policies, or outcomes. The effects dimension includes four subtypes. *Instrumental* refers to an influence that prompts a direct action or decision regarding a change to educational practice, such as curriculum, pedagogy, or policy. *Conceptual/Cognitive* refers to an influence on the understanding of some issue, concept, process, or on ways of thinking. *Affect* refers to an influence on the participant's disposition, emotions, or attitudes regarding the assessment process or the evidence collected. *Affirmation* refers to an influence that involves support for the appropriateness or effectiveness of an existing understanding, practice, or policy.

The third dimension is the results of the influence, that is, the outcomes or consequences that result from the application, either intentionally or unintentionally, of the knowledge and understanding generated through the assessment process. Types of results of influence include *improved student learning*; *Personal transformation*, for example, empowerment, motivation, belief change; *Building/strengthening communities of practice*; and *Symbolic/political*, for example generating financial or institutional support for a policy or practice.

Time of the influence is the fourth dimension and refers to the point in the assessment cycle in which the influence occurs. The cycle is essentially four steps: planning, gathering, interpreting, and using the assessment evidence. *Immediate* refers to an influence that occurs concurrently with one of the steps in the assessment process. *End of cycle* refers to an influence that occurs at the conclusion of the final two steps of the assessment cycle (e.g., interpreting or using). *Long-term* refers to an influence that occurs in the future or extends beyond the conclusion of the assessment cycle.

The proposed model is multidimensional but the dimensions are not meant to be considered mutually exclusive. That is, a particular assessment effort could have multiple *sources*, *effects*, and *results*. Furthermore, dimensions may also be interrelated. For example, effects of influence can serve as mediational processes between the sources and the results that could occur at the end of a cycle or be a long-term consequence.

Method

To illustrate the application of the proposed model to assess activities in higher education, the authors collected qualitative data from 19 narrative reports documenting assessment methods, results, and conclusions. These reports come from a large Midwestern research university and were a part of an institutional process for assessing general education courses. The programmatic reports in the sample include the fields of humanities, social sciences, formal/natural sciences, and professional/applied sciences. The sample, however, was not selected to be representative of any particular population because the goal of the study was not to generalize the results but to demonstrate heuristic value of the proposed model and clarify its application to examples of assessment.

The qualitative data analysis consisted of content analysis of 28 distinct cases documented in the 19 narrative assessment reports. Content analysis is a systematic technique for examining text using explicit coding rules (Stemler, 2001). The analysis focused on identifying influence using an a priori coding scheme in terms of the dimensions of sources, effects, and results of influence on programmatic conclusions about teaching and learning. The documentation in the assessment reports did not lend itself to classifying the fourth dimension of time because reports documented influences at a particular point in time and programs varied in terms of where they were in their assessment cycle; often somewhere between gathered evidence and implementation of changes. The assessment reports also did not elicit or document participants' dispositions or feelings regarding the assessment process or findings; therefore, classification of the affect subtype of the effect dimension was not possible. To ensure qualitative validity, the three authors independently coded the cases using a predetermined coding scheme for dimensions represented in the proposed model (Table 1). The researchers then compared their codes to determine the extent of agreement and to discuss any disagreements to clarify definitions. Next, qualitative codes were tallied based on each dimension presented in Tables 2 and 3 for Source by Effects and in Table 4 for Source and Effects by Result. The raters' independent classifications of sources of influence, effects of influence, and results of influence agreed for 93% of the cases. Raters disagreed on 2 of the 28 cases because of differences in the definition of process-based sources of influence, which will be discussed later. To further illustrate these findings, example report excerpts representing each type of influence appear in Tables 2 and 3. Words or phrases that might identify a specific course or program were removed and, in some cases, replaced with more neutral terms to protect the confidentiality of these programs.

Results and Discussion

Dimension 1: Sources of Influence

Tables 2 and 3 detail the number of cases that were classified for the source by effect dimensions and provide examples for each dimension. All of the analyzed reports documented some type of influence and nine of those reports documented two distinct influences for a total of 28 cases. Raters were able to quickly and efficiently make differential judgments for each dimension.

If assessment is conceptualized as an educative process of inquiry and learning that involves the generation and application of knowledge, how might the influence of the assessment enterprise be appraised?

Table 2

Coding Results: Findings-based Sources of Influence and Effects of Influence Dimensions (n = 28 cases)

Effects of Influence	Case Examples
Instrumental (n = 6)	<p><i>Students write at an acceptable level but continue to struggle with expressing their ideas in a concise and readable way. Several adjustments have been made to help students produce acceptable writing. Specifically, a phased sequence of topic selection, outlining, rough drafts reviewed by instructor and peer groups members has been used.</i></p> <p><i>Paper structure is being modified to focus on the application of core concepts. Specifically, common ... problems are presented to students; students select one and (i) identify three core concepts related to the problem, (ii) develop an intervention, (iii) discuss how the intervention will impact core concepts, and (iv) develop a plan to assess the efficacy of the intervention. Hopefully this will force student to relate what they learn to the (real world environment)</i></p>
Conceptual (n = 6)	<p><i>Faculty submitted samples of various types of questions with a range of difficulty, indicating that students found defining terms and identifying images easier than the more interpretive, analytical question that links work with more than one issue/answer.</i></p> <p><i>Based on the letters evaluated, students demonstrated good technical knowledge, but some are in need of improved writing skills. Additional writing exercises may need to be incorporated into subsequent courses, so that students have additional opportunities to enhance their writing skills.</i></p>
Affirmation (n = 9)	<p><i>Results of artifacts that demonstrate students' mastery of the student learning outcome seem to affirm the effectiveness of the department's efforts.</i></p> <p><i>Assessment results confirmed what we already knew from the (exam) reports that student learning (of) the learning outcomes is high. No program changes are planned.</i></p>

Note: The narrative reports did not contain enough information to code the time dimension.

Table 2 includes examples of findings-based sources, and Table 3 presents examples of process-based sources. Findings-based sources ($n=21$) were three times more common than process-based sources ($n=7$). However, only 25% of the 28 cases were classified as findings-based, instrumental influences, that is, a direct action or decision about a program based on learning evidence. Findings-based, instrumental influences are typically emphasized by accreditation bodies because it represents an observable behavioral change made with the intention of improving student learning. However, intention does not guarantee that an improvement will occur, and often whether the learning improvement does occur is not determined. The results of this study suggest that acknowledging only findings-based, instrumental changes is limiting and shortsighted because other findings-based and process-based sources are just as frequent as, or more so, than findings-based, instrumental influences. The other 75% of cases may not involve immediate, observable changes but are ways assessment findings have affected how one thinks about student learning (conceptual/cognitive, affirmation, personal transformation), how one talks about student learning with others (symbolic, communities of practice), disposition toward future assessment evidence (affect), or how one continues to conduct assessments of student learning (process). In the long term, different types of influences have the capacity to contribute to future improvements in student learning because they are challenging and transforming thinking about teaching and learning through the generation and application of knowledge, as the work from Preskill and Torres (2000) on organizational learning suggests.

Seven of the 28 cases (25%) were classified as process-based sources. These cases did not result in an immediate, observable change to the curriculum, co-curriculum, course, or teaching as a result of assessment process. What changed was how one thinks about assessing student learning or representing what students learn so credible information about student learning can be obtained for decision making. For 2 of the 7 process-based cases, the authors disagreed because of differences in the definition of process-based sources. For these two cases, data or findings were used to identify a change, but what prompted that change was not evidence of student learning. Rather, the prompt was a realization that the learning data and how it was collected was not a sufficient or credible representation of the learning outcome the program was trying to measure. Examples include concerns about inadequate measures (e.g., rubrics), design of the assessment process (e.g., pre/post-testing, longitudinal), strategies for sampling student work, or roles/responsibilities of program faculty/instructors. After discussing these differences and clarifying the definition for process-based sources, the raters reached agreement on all seven of the process-based cases. This disagreement does highlight that the influence of process-based sources can be subtle.

A particular assessment effort could have multiple sources, effects, and results.

Table 3

Coding Results: Process-based Sources of Influence and Effects of Influence Dimensions (n = 28 cases)

Effects of Influence	Case Examples
Instrumental (n = 5)	<p><i>It is difficult to assess how well students are interacting with diverse cultures, and engaging with global issues unless the (product) being reviewed incorporates cultural and global issues. Therefore, some type of unifying textbook (that both incorporates global and cultural issues as they relate to (discipline) and had a reading list of (articles) that include global and diverse cultures is recommended.</i></p> <p><i>A scoring rubric was developed for the final reflection papers in (course). When implementing the rubric, it quickly became clear it was far too complex, so a template was developed with a built-in rubric.</i></p>
Conceptual (n = 2)	<p><i>A discussion of which faculty member (in the program) should be responsible for submitting a report and sampling for each course, and when, does need to be addressed.</i></p> <p><i>It is a challenge to compare five courses, taught by many different instructors, with one another. We will experiment with new ways to facilitate evaluation and assessment at the department level (e.g. creating a formal rubric).</i></p>
Affirmation (n = 0)	None

Note: The narrative reports did not contain enough information to code the time dimension.

Process-based influence has received some attention in the field of assessment. For example, Fulcher and Orem (2010) include process-based sources of influence within the “Using Results” element of their rubric to assess the quality of assessment and how it guides program improvement “in addition to evaluating the presence of results-driven improvements, the rubric also reviews whether programs address shortcomings to the assessment process itself” (p. 16). Working collectively to make meaning of student learning evidence is not a typical experience for many faculty and academic administrators and the learning curve can be steep particularly with regard to expectations. However, even small steps can help move the conversation forward toward the ultimate goal of changes that directly improve student learning.

Overemphasizing the importance of findings-based, instrumental influences can lead to making programmatic changes based on invalid data or no data and has the potential to be as unproductive to the improvement of student learning as making no change. Therefore, the process of inquiry by which faculty are learning how to collect data that is informative and addresses their questions of interest about student learning in the program are important steps toward a meaningful change that may be more likely to improve student learning. One might even argue that greater clarification and communication with students about learning objectives through the articulation of a rubric, for example, may have more impact on student learning than an instrumental change based on poor evidence. Prompting faculty to dialogue about, articulate, and communicate their shared intents for student learning is an example of a collaborative and constructivist approach to assessment.

Dimension 2: Effects of Influence

Approximately 40% of the cases were classified as instrumental while the remaining 60% were classified as conceptual/cognitive and affirmative effects of influence. Instrumental, conceptual/cognitive, and affirmative effects were common with findings-based sources (see Table 2) while only instrumental and conceptual/cognitive effects were apparent with process-based sources (see Table 3). This is somewhat intuitive given that learning from the process tends to lead to changes in how evidence is viewed and collected and not necessarily conclusions about students’ learning if evidence collected is not viewed as credible.

Examples of instrumental effects in Table 2 and 3 are distinct not only because a change is identified but also because those changes are based on conclusions from learning evidence. The use of very detailed and specific language suggests a commitment to a planned change or improvement. Details include rationales for changes and specific aspects of the change. For example, detailed language will not just indicate that new material needs to be introduced or assignments need to be changed, but what material will be introduced or how assignments will be changed and why. Instrumental effects provide the kind of tangible response to assessment evidence is closing the loop.

Only 25% of the 28 cases were classified as findings-based, instrumental influences, that is, a direct action or decision about a program based on learning evidence.

Examples of conceptual/cognitive effects of influence in Table 2 highlight circumstances where evidence revealed an issue or enhanced understanding of how student learning occurs or is represented. Conceptual/cognitive effects differ from previous classifications of instrumental effects in that solutions to issues were either not identified or only suggested, and there was no firm commitment to implement that change. Language from these cases indicate assessment results caused faculty to question current practice or to think more deeply about what they were doing and why. This type of insight has great value in the long term. Although the evidence considered may not have been compelling enough to make an immediate change, it has disrupted conventional wisdom that may lead to a closer examination of the issue in the future when shared collectively through a meaning-making process. In summary, conceptual/cognitive effects reflect deeper and more informed understandings of student learning. Evidence is having an impact but does not necessarily result in observable action at least in the short term. For some disciplines, this type of effect might be more common and more highly valued because it mirrors the process of inquiry used in their disciplines.

However, intention does not guarantee that an improvement will occur, and often whether the learning improvement does occur is not determined.

Cases of affirmation effects typically are confirmatory in nature supporting previous beliefs about the effectiveness of practices and policies and learning concepts. Given the context in which this study was conducted, affirmation effects may also have a persuasive nature. Departments are trying to demonstrate that their courses are meeting the general education guidelines for learning outcomes. As is demonstrated by the example cases in Table 2, these conclusions are often briefly stated and sometimes accompanied by a rationale and only occasionally accompanied by data. Conclusions tend to be stated more strongly and often use persuasive language like “confident” or “pleased.” Not referencing evidence in many of these cases does suggest that these conclusions may not be based on evidence but on affect. Therefore, future research might investigate associations between affirmation effects and viewing the purpose of assessment as accountability rather than improvement.

Dimension 3: Results of Influence

As shown in Table 4, the raters were only able to classify results of influence for 3 of the 28 cases (11%). The cases in this study, and even the full reports, did not provide enough information to reliably classify the outcome or consequence that resulted from the effect of the findings. Only improved student learning outcomes and building/strengthening communities of practices results were identified, and these were restricted to findings-based, instrumental influences. Perhaps, the results dimension is related to the time dimension identified by Kirkhart (2000). The results of even findings-based, instrumental influences may not be apparent immediately but only at the end of an assessment cycle or in the long term. It is possible that some assessment processes may never end in a result when specific types of sources or effects come into play. For example, when the assessment process is conducted to meet a mandate rather than as a process of inquiry, affirmative, or affective effects influence might occur without a result.

Table 4
Coding Results: Results of Influence Dimension (n = 28 cases)

Sources of Influence	Effects of Influence	Results of Influence	Case Examples
Findings-based	Instrumental	Improvement of student learning (n = 2)	<i>Student work revealed that several students were making simple unit errors at the beginning of a new topic. As a result, the instructor used this data as justification for providing more emphasis on the importance of unit for the following course topics. As a consequence, scores for the following quizzes and exams had a noticeable increase. Among the analyzed offerings a variance in the manner in which questions were presented for the purpose of problem solving was noted. In the earlier offerings, quizzes contained a series of simple problem followed by one more complex problem. In later semesters, quizzes were presented with a similar complex problem, but broken down into smaller steps of the same question. Students demonstrated much higher performance in solving this particular type of problem with the new approach.</i>
Findings-based	Instrumental	Building/Strengthening communities of practice (n = 1)	<i>Our department is using the findings as a springboard for continued discussions about student learning. We used the momentum we gathered from our dialogue about (general education) to initiate a teaching brownbag program in the department.</i>

This does not suggest that the results dimension is irrelevant. As discussed earlier, not identifying effects of influence as an end result is shortsighted. For example, findings-based, instrumental changes are without meaning if follow-up evidence does not show that the intended improvement in student learning was actually achieved. Therefore, the results dimension provides another layer for differentiating types of influences that help move beyond effects dimension to measurable, meaningful changes to teaching and learning. To further explore the results dimension it may be necessary to query programs and their faculty through interviews rather than narrative reports. In-depth interviews tend to be better suited to exploring complex issues (Creswell, 2013), such as this proposed multidimensional, integrated model of influence.

Dimension 4: Time of Influence

Although the analysis for this study did not involve classifying the *time* dimension, it was clear that whether a program completed one or more assessment cycles (identify, gather, interpret, implement) had an impact on the other dimensions. For example, in two cases where improvement of student learning result of influence was identified, the programs completed multiple assessment cycles before reporting. Completing multiple cycles allowed for following up on a change to see if it led to intended improvement in student learning. As illustrated by the building/strengthening communities of practice example in Table 4, not all cases identified for the results dimension completed an assessment cycle. In one case, the program had identified, gathered, and conducted some interpretation of their data, but had not identified an instrumental change. However, the program did plan to implement a cultural change to create occasions for all faculty members in the program to discuss assessment evidence gathered. Therefore, there may be a relationship between the time and results and that interaction may be related to length of time it takes to complete an assessment cycle.

Conceptual/cognitive effects reflect deeper and more informed understandings of student learning. Evidence is having an impact but does not necessarily result in observable action at least in the short term.

Conclusions

The call for performance-based results is growing in higher education. Revisions of the Reauthorization of Higher Education Act resemble NCLB through a call to hold colleges accountable for cost, value, and quality including benchmarks for affordability and student learning outcomes as criteria for receiving financial aid (Kelderman, 2013). This may mean a shift in the focus of accreditation from improvement to external accountability. Ewell (2009) indicates that the paradigms that underlie improvement and accountability differ enough that it creates a tension: “Within the ‘Improvement Paradigm,’ the intent is to use the resulting information to enhance teaching and learning. Within the ‘Accountability Paradigm,’ in contrast, the intent is to use information to demonstrate to policy makers and the public that the enterprise they fund is effective and worth supporting” (p. 9); and to demonstrate return on investment, standardized tests and measures are used to compare institutions against standards of performance. This reliance on tests and measures, particularly by policy makers, for accountability purposes is fostered in part by the idea that the only legitimate purposes a test or measure can serve is documenting learning and directly informing decisions about success or failure. As argued in this paper, however, assessment is also responsible for transforming thinking of stakeholders about teaching and learning through the use and discussion of learning evidence. This rising tension is a reason why higher education needs to clarify the intended purposes for the assessment data they collect and clearly understand the multidimensional, integrated ways that assessment evidence can produce program improvement.

The formulation and application of the proposed model of influence in this article demonstrates an important shift in conceptualization of the aims of assessment and terminology from use to influence that was advocated by Kirkhart (2010). Considering influence of the assessment effort in terms of sources, effects, results, and time provides for a fuller appreciation of the aims and effects of the assessment effort and recognizes that organizational learning is facilitated by constructivist and transformational approaches. In particular, the differentiation of the two dimensions of effects of influence and results of influence enables a consideration of the mechanism of effect as well as the consequences, which are critical in closing the loop of assessment efforts. The dimension of time of influence further extends the focus from the immediate and end of cycle periods to the influence that occurs beyond the end point of an assessment cycle. In practice, institutions and the accreditation process may overlook

It is possible that some assessment processes may never end in a result when specific types of sources or effects come into play.

meaningful types of influence by focusing only on findings-based, instrumental influences that occur at the end of the cycle because those influences are more visible. However, it is clear from the applications of a multidimensional, integrated model of influence to examples of assessment activities that several types of influences exist and should be considered when evaluating the contribution of assessment to program improvement. A quarter of the influences identified in this study were from process-based sources of influence and more than half of the effects of influences identified were conceptual/cognitive or affirmative. These influences may have been overlooked as use by both accountability and improvement models. This potential oversight supports the premise of this study that conceptions of assessment use may suffer from construct underrepresentation.

This rising tension is a reason why higher education needs to clarify the intended purposes for the assessment data they collect and clearly understand the multidimensional, integrated ways that assessment evidence can produce program improvement.

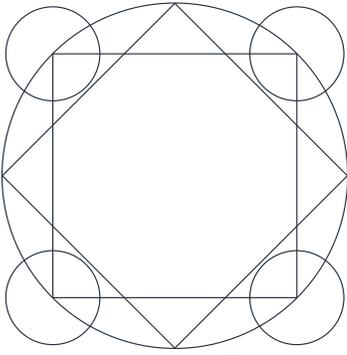
These results support the findings of Peterson and Einarson (2001), Blaich and Wise (2011), and others in that while only a small percentage of colleges and universities used assessment information or reported that information impacted improvements in student learning, assessment information had prompted some campus discussion about undergraduate education and teaching and learning (Banta & Blaich, 2011; Ewell, 2009; Kuh & Ikenberry, 2009; Kuh et al., 2014). This study supports the premise that the influence of assessment evidence in prompting of conversations should be valued because it can facilitate meaning making. Furthermore, the heuristic value of the proposed model of influence is also evident in that it facilitates the implementation of Peterson and Einarson's (2001) recommendation that institutions do a better job of monitoring, examining, and evaluating the multiple, integrated ways assessment evidence impacts teaching and learning. Blaich and Wise also suggest that assessment requires people with different experiences and backgrounds to work together and requires communication as a precursor to action. The importance of communication and community as precursors to action encourages the use of a heuristic that recognizes when these steps are occurring and when they are not. Without communication and community the probability of action is greatly diminished. When it does occur and leads to conceptual/cognitive effects or the building/strengthening of community, the possibility of observable, meaningful improvements to teaching and learning are greatly improved. This proposed model of influence values these recommendations from Blaich and Wise and provides one representation of a constructivist approach to how organizations learn from evidence for improvement as proposed by Preskill and Torres (2000).

It is hoped the results of this study will prompt further research and application of the proposed model to assessment practice. Future research might explore how well the model represents the multidimensional, integrated influence of assessment evidence in other contexts. A broader array of quantitative and qualitative research studies could explore further the heuristic value of this model, specifically in terms of the effects, results, and time of influence. In terms of assessment practice, the model could provide more comprehensive documentation and improved representation of assessment's influence for accreditation self-studies, formal program reviews, and self-monitoring of the contributions and impacts of the assessment process. A more comprehensive and valid representation of assessment's influence has the potential to encourage the academy and external stakeholders to view assessment as an enterprise with multiple positive and desirable outcomes that contribute to a value shared by all, more effective educational programs and improved student learning.

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Abstract

Articles on student learning outcomes assessment often treat faculty as one homogenous body. Yet the exponential growth of contingent faculty in universities and colleges has created two distinct faculty groups with varied concerns and thoughts on everything from the future of higher education to shared governance to student learning outcomes. When considering faculty thoughts and concerns regarding the assessment of student learning outcomes, it is inappropriate to assume the concerns of tenure-line faculty will echo the concerns of non-tenure-line faculty. In this article, we explore survey comments given by non-tenure-line faculty, examining the thoughts and concerns of non-tenure-line faculty in regards to the creation, implementation, and ramifications of outcomes assessment. We find that the contingent status of these faculty creates unique concerns that should be considered and addressed by departments and institutions wishing to increase participation in outcomes assessment.

The Other Half: Non-Tenure Track Faculty Thoughts on Student Learning Outcomes Assessment

The literature is growing on faculty involvement in student learning outcomes assessment. A number of scholars have discussed the concerns tenure-line faculty have with assessment (Fort, 2011; Lederman, 2010a; Lederman, 2010b; Struck, 2007) while others explore concerns about the lack of faculty involvement in assessment (Havens, 2013; Hutchings, 2010; Kuh & Ikenberry, 2009). Assessment clearly divides accreditors, administrators, and tenure-line faculty, and this division is reflected in the spate of assessment articles in the *Chronicle of Higher Education* and *Inside Higher Ed*. Yet a clear blind spot has emerged in the assessment literature: The larger discussion mostly ignores concerns that non-tenure track (NTT) faculty have with assessment.

Understanding the concerns NTT faculty have about assessment is vital to the student success movement. At four-year institutions, NTT faculty are more likely to teach introductory classes than those on the tenure track. When students walk into a First-Year Composition course or Introduction to Philosophy course, the odds are high that they will be greeted and taught by an NTT faculty member. A study by the Coalition on the Academic Workforce revealed that NTT faculty teach nearly 40% of the introductory humanities courses at post-secondary institutions (Modern Language Association, 2001), and the American Association of University Professors recently noted that 75.6% of faculty positions are not tenure-line (Curtis & Thornton, 2013). The importance of NTT faculty to any assessment effort should be obvious: Efforts to improve teaching quality and student success must include those teaching a growing percentage of general education classes.

In a previous article (Scott & Danley-Scott, in press), we discussed ways in which officials at two- and four-year universities were communicating assessment goals to their NTT faculty. Drawing on results from a 2012 survey of NTT faculty, we argued that efforts to offer paid assessment training to contingent faculty might increase participation in sample-

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collection and ratings stages of outcomes assessment, but, more importantly, bringing NTT faculty into the department through communication, recognition, and mentoring, might also help. In this study, we found that feeling appreciated by a department made it more likely that a NTT faculty member would participate in the assessment activities.

For the previous article, we did not analyze the respondents' written comments to see how that qualitative data might further enrich or complicate our understanding of the relationship between contingent faculty and assessment. We also did not compare what respondents reported hearing formally and informally about assessment and student learning outcomes. In this paper, we look at these materials to determine whether the additional data support our hypothesis that communication and inclusion will increase assessment participation.

Background

Although a growing body of literature concerns the pay and work-conditions of adjunct faculty, scholarship on student learning assessment still largely ignores NTT faculty and their perspectives. This may be due to reticence among institutions and departments to admit the extent to which they depend on part-time and adjunct faculty to teach core courses. Outside of academia, most are unaware that a two-track hiring and quality control process exists for faculty. Tenure-track job candidates are carefully interviewed and carted about campuses to give job talks and perform guest lectures, while NTT faculty may be hired at the last minute, just weeks before the term starts (June, 2012; Kezar, 2012; Street, Maisto, Merves, & Rhoades, 2012). And, while not scientific, a perusal of the comments in June's (2012) *Chronicle of Higher Education* article reveals adjunct faculty sharing stories of being hired with no notice, no interview, and no teaching demonstration.

The omission of NTT faculty from the dialogue on assessment may also be due to the feeling by administrators and departments that NTT faculty are of such low quality that assessing their classes may prove embarrassing or that teaching workshops will not be attended. A growing area of study centers on the teaching quality of faculty off the tenure line, echoing these concerns. Some scholars have reported that NTT faculty can negatively affect graduation rates (Ehrenberg & Zhang, 2004; Jaeger & Eagan, 2009) and transfer rates (Eagan & Jaeger, 2009), that they can negatively affect retention (Jaeger & Eagan, 2011), and that they do not properly prepare students for courses later in a discipline's sequence (Burgess & Samuels, 1999). Bettinger and Long (2004) determined that adjunct faculty can reduce future interest in a discipline, though this effect varies by discipline and is minor. Finally, Jacoby (2006) found that community colleges with lower part-time faculty ratios tended to have higher graduation rates. These findings are summed up in a piece by Benjamin (2002), who argues that more tenure-track faculty need to be teaching in undergraduate classrooms because "over-reliance [on NTT faculty] particularly disadvantages the less-well-prepared entering and lower-division students in the non-elite institutions who most need more substantial faculty attention" (p. 4).

As Benjamin's (2002) proposal is unrealistic, other scholars have explored why NTT faculty appear less effective than their tenure-line counterparts. According to this body of research, institutional realities rather than inherent qualities may be causing these deficiencies in teaching. First, the effectiveness of many NTT faculty may be compromised by institutional and departmental policies in staffing (Kezar, 2012). NTT faculty are often thrown into teaching assignments with little support or commitment from employing institutions (Umbach, 2007). Such faculty are often given little advanced notice of teaching assignments, receive sample syllabi only a few weeks before the semester, and are not compensated for preparation or office hours (Street et al., 2012). They are less likely to be familiar with student resources and institutional opportunities (Green, 2007) that are important for incoming first-year and transfer students.

The above conclusions are supported by recent studies showing that NTT faculty can, if given support and commitment, have a positive effect on students. In a study of doctoral institutions, Jaeger and Eagan (2011) found a positive correlation between NTT faculty and student retention when a doctoral institution provided the support and training for all faculty. More recently, a study at Northwestern University caused a stir when it found that

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a non-tenure track faculty member increases the likelihood that a student will take another class in the subject by 7.3 percentage points (9.3 percentage points when limited to classes outside the student's intended major) and increases the grade earned in that subsequent class by slightly more than one-tenth of a grade point (with a somewhat greater impact for classes outside of the intended major). (Figlio, Schapiro, & Soter, 2013, p. 10)

Discussions surrounding the above study have revealed that Northwestern's non-tenure track faculty are contracted lecturers who are paid comparatively well and do not have to split time between research and teaching; they focus on students and teaching quality (Weissmann, 2013). The Northwestern lesson echoes earlier findings by Baldwin and Wawrzynski (2011) that contingent faculty teaching full-time are more likely to have effective teaching practices than contingent faculty teaching part-time, as well as the findings of Bettinger and Long (2010) that professional adjuncts from technical industries (engineering, business, etc.) have specializations that may increase interest and result in students taking future classes within majors.

A related question is whether NTT faculty are as invested in their teaching quality as their tenure-line counterparts. When given the opportunity and incentive, do NTT faculty participate in training and departmental activities? Again, the literature is varied. Some reports indicate contingent faculty in departments are uninvolved (Schmidt, 2013; Umbach, 2007) and that part-time faculty are not very responsive to online departmental discussions (Danley-Scott & Tompsett-Makin, 2012), while others suggest the lack of participation is not by choice. Baldwin and Chronister (2001) observe that contingent faculty are rarely included in higher education professional development efforts and governance. Their book features interviews with many contingent faculty who wanted to be involved but were turned away. Levin and Shaker (2011) note that NTT faculty they interviewed saw themselves as effective teachers and believed their teaching effectiveness was important, supporting arguments by Kezar and Sam (2011) that NTT faculty should be viewed as freelance professionals who are concerned about the quality of their work instead of as piecemeal labor. The latter three studies support and explain findings by Scott and Danley-Scott (in press) that NTT faculty are interested in student success: Adjuncts surveyed indicated they often took advantage of training at their institutions and were generally willing to perform unpaid outcomes assessments if it helped them learn more about their teaching effectiveness. And if some institutions really are placing adjuncts on governance committees in an effort to meaningfully involve adjuncts in the assessment movement (Havens 2013), administrators should witness increasing NTT faculty desire to be involved in teaching improvement.

The above literature implies similarities between the two groups of faculty in terms of concern for student success, and we believe those similarities are real. Nevertheless, although some might hypothesize that NTT faculty concerns about assessment would also mirror those of tenure-line faculty, we question this second assumption. Scholars discussing generic "faculty" perceptions of assessment often address two criticisms: that assessment does not provide useful information (Hutchings, 2010; Lederman, 2010b) and that assessment is an additional obligation without stipends or relief from other duties (Funk & Klomparens, 2006; Gilbert, 2010; Gold, Rhoades, Smith, & Kuh, 2011; Havens, 2013). That is, depictions of generic faculty attitudes describe assessment as an "unfunded mandate" with little benefit. NTT faculty, however, have a tenuous employment situation that already assumes completion of unpaid labor and insufficient materials to do a job properly (June, 2012; Kezar, 2012; Street et al., 2012). As we will discuss below, regular day-to-day obligations are often performed for free by the NTT faculty as a facet of their commitment to teaching, so collecting assessment samples and participating in ratings may just be another item on the list rather than something to be particularly indignant about. Many NTT faculty also express interest in teaching effectiveness (Scott & Danley-Scott, in press), so they may view assessment positively if the assessment is truly designed to collect information that provides insight into student learning and teaching effectiveness.

Because we believe the limited communication and contact between NTT faculty and departments will increase apprehension about the assessment process, we examine previously unreported responses to our 2012 survey of NTT faculty teaching in California institutions.

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These answers and comments to questions on communication channels and departmental assessment activity allow us to gauge the validity of our hypothesis. For example, if NTT faculty are less likely than tenure-line faculty to attend departmental meetings (Chronicle Reporting, 2009) and they are not mentored by tenure-line faculty (Scott & Danley-Scott, in press), they will be left in the dark about the design of assessment devices and collection of student materials. The resulting ignorance may understandably lead NTT respondents to express increased concerns about how departments and institutions will use the results from the rating or scoring of the assessment samples and data.

Most of the assessment process happens outside of the classroom, which leads us to one of the potential differences between faculty.

This is not to say that tenure-line faculty do not worry about the use of data as well, but they are more protected from the results than are adjuncts, who lack tenure and are far easier to replace due to a more streamlined hiring process for contingent faculty. Moreover, units that eliminate a tenure-track faculty member run the risk the line will not be retained, a risk not every unit is willing to brave. This shielding sometimes steers tenure-track discussion towards other concerns, like academic freedom and methodology.

Method

To get a sense of the concerns of NTT faculty, we examined a number of questions from our 2012 survey of non-tenure-track faculty teaching at community colleges and universities in California. The anonymous, online survey was designed and administered on PsychData; the survey link and informed consent were posted on university and college discussion boards, campus and union email lists, and social email lists. Faculty were invited to forward the information to colleagues and friends. We estimate the original pool of recipients to be around 500 potential respondents. The resulting pool of respondents is difficult to estimate, as faculty forwarded the survey information to colleagues at colleges and universities outside of our initial contact. It is known, through email contact with respondents and initial contact points, that faculty from at least nine distinct campuses participated. The survey generated 70 respondents and 67 usable sets of answers, though not every respondent answered every question. Readers interested in viewing the survey may contact the authors.

Description of the Survey Questions

Department chairs may be unwilling to ask NTT faculty to participate in unpaid meetings or work, even if it relates to assessment, because the chair does not want to ask a person to work for free.

In our exploratory survey, we asked faculty about their experiences with student learning outcomes assessment. Specifically, we were interested in their training in, feelings about, involvement with, and knowledge of student learning outcomes assessment. Questions differentiated official messages and experiences with assessment from personal feelings and informal messages about assessment. Additional questions were asked to determine the effects of work expectations, mentoring opportunities, pay and compensation, professional involvements, and general experiences as a faculty member of the institution. In most cases, particularly demographic and experience-related questions, respondents were asked to pick the response that most closely matched their situation. Some questions in the automated survey allowed respondents to select multiple answers, as was the case with the question, "What have you heard informally about SLOs?" For a number of questions, respondents had the option of selecting "Other" and giving an open response.

Because numbers only offer part of the picture and can be interpreted beyond what the respondents intended, we wanted to evaluate the written comments left by our respondents and compare their comments to our interpretations of the numeric results. Two parts of the survey provided opportunities for open comment on assessment and the administration of assessments. Thirty of the 67 respondents used the open response opportunities to share experiences and concerns. Although some comments did not make sense in the context of the questions, 20 offered specific critiques borne out of experiences with assessments.

We examined the 20 responses to assessment-related open question for shared key words and concepts, boldfacing the classifying phrases. For example, in their comments, some respondents focused on the design of the assessment device. These comments included phrases relating to the qualifications of the person creating the device, the device's compatibility with the course, and the validity of externally required assessment. We coded those comments as design-focused. Other respondents' comments focused on external entities using the data punitively or on the lack of useful data.

Respondent Demographics

No faculty completing the survey were on the tenure track. The majority of respondents were teaching part-time (79%), while the rest held full-time positions with multi-year or tenure-like contracts (10%) or without these contracts (8%). Most of the respondents worked at either a 2-year institution (60%) or a 4-year institution (30%), although 10% of the respondents indicated they worked at both types of institution concurrently. Nearly 80% of respondents answered that they were teaching classes regularly, but only 39% felt that they had reasonable job security. Fifty-six percent of the respondents had been teaching for more than 11 years, while 29% had 4 to 10 years of experience and 8% marked that they had less than 4 years of experience. A majority of the survey respondents were 45 years of age or older (57%) and were female (53%). Only 14% of the respondents held a Ph.D., with 64% holding at least an M.A. and 4% holding a J.D. Nearly half (48%) of respondents were hoping to find full time employment that emphasized teaching. (Percentages were rounded to closest whole number.)

Limits to Interpretation

Although the survey was sent to a large number of respondents, a selection bias effect is likely: Respondents were not compensated and the 35-question survey was estimated to take 10 to 15 minutes to complete. Thus, faculty choosing to respond to this survey may have been more likely to be interested in student learning outcomes (SLOs), assessment-aware, and teaching-oriented. We must also point out that the presence of faculty unions and legislative support in California has led to better working conditions for many of the faculty responding to this survey.

In addition, the survey was conducted during fall term in 2012 when many community colleges in the region were filing College State Reports on SLO Implementation for the Western Association of Schools and Colleges' (WASC) community college arm (2012), the Accrediting Commission for Colleges and Junior Colleges (ACCJC; Reminder, 2012). It is likely that this semester would result in more administration and committee communications with faculty, and thus increased formal and informal dialog about assessment. We must also note that the small *n* of the study limits the range of conclusions we can draw.

Results

Indications of a Divided Faculty

One might argue that, in terms of assessment, faculty are faculty. Assessment measures student gains in knowledge and skills, which are related to teaching. Both NTT and tenure-line faculty are paid to teach as a part of their contracts, so one could also argue that both groups are paid to perform assessment as part of their classroom duties. However, such an argument takes a limited view of the process of assessing learning gains. Assessment devices and rubrics must be designed and implemented. The resulting data must be scored, analyzed, and applied. In fact, most of the assessment process happens outside of the classroom, which leads us to one of the potential differences between faculty. Tenure-track faculty generally work on a contract with a salary. The expectation is that the faculty member will teach, grade, hold office hours, perform departmental and institutional service, research, and advise. Assessment, arguably, falls under institutional and departmental service.

In our previous study, we noted that the majority of NTT respondents reported they are not paid to do many things that are included in a standard contract for a tenure-line faculty member. For example, few are paid to attend department meetings (16.4%), attend training (13.4%), or hold office hours (34.3%). In addition, only 13.4% of NTT faculty reported being compensated for outcomes assessment (a figure we segregate from Table 1 because many tenure-line faculty also claim not to be compensated for such activities). These findings are consistent with the literature (Kezar, 2012; Patton, 2013; Street et al., 2012) and conversations in academic forums, such as the *Chronicle of Higher Education*. While these findings are not surprising, they are important in establishing that faculty are not one homogenous group. It is logical to presume that a lack of pay might inhibit some NTT faculty from participating in assessment, but pay also has indirect effects.

Relatively few respondents indicated they had heard about the true goal of assessment—improvement in teaching—either directly or indirectly.

While 68% of respondents reported learning through direct channels that SLOs were required and 53% had heard through similar channels that SLOs had to be assessed in classes, only 34.8% respondents had heard that their teaching methods should be updated based on the assessment findings.

Almost 57% of respondents were asked by their departments to assess classes, and of those, 97.4% completed some form of assessment.

Of these respondents, 42.2% said they would assess more if they had a relationship with their department, or if they knew that participating would help them learn more about their teaching effectiveness.

Pay causes a divide between faculty in several ways. First, it impacts what people choose or are able to do with their time—NTT faculty may teach at multiple campuses to make a livable income, leaving little time for unpaid meetings, office hours, or trainings. If faculty are not paid to be in office hours or in training sessions, they are unlikely to be spending additional hours in their departments or at department meetings (Chronicle Reporting, 2009). Thus, pay disparity creates a situation in which NTT faculty are less likely to have spare time to spend with colleagues or become informed on policy changes, especially those in the ever-changing world of assessment. These are important contract differences because they contribute to contingent faculty becoming detached from the decisions made by the department and the tenure track faculty in their disciplines, leading to two groups of faculty that are profoundly different from each other thanks to variance in institutional knowledge they possess. Second, department chairs may be unwilling to ask NTT faculty to participate in unpaid meetings or work, even if it relates to assessment, because the chair does not want to ask a person to work for free. Although the logic behind the exclusion is rational, in our survey, only 13% of faculty marked that they were paid for attending training, yet 64% said they still attended training sessions. The statistic is consistent with suggestions from Kezar and Sam (2011) that NTT faculty behave more like professionals than like hourly labor, with an interest in professional activity and development. These facts lead us to believe that additional uninvited NTT faculty would, if invited, also attend department meetings, and that even if they did not attend, the invitation might still help relieve anxieties by rendering the process more inclusive and transparent.

Impacts of Direct and Indirect Messages

Because we posit there are communication and institutional knowledge differences between the two faculty groups, we asked NTT faculty what they are hearing about assessment from varied sources. Hutchings (2010) and Kuh and Ikenberry (2009) have indicated that tenure-line faculty hear about accreditation and institutional plans for assessment from their institution’s administration. This information is distributed directly through institutional and departmental meetings, as well as indirectly through faculty discussions. NTT faculty, however, if not present at formal meetings, may receive the information indirectly, from alternate sources, or not at all. For this reason, we asked how our respondents heard about assessment and SLOs and what sorts of statements they heard. We classified the channels through which they obtained information as *direct* or *indirect*. *Direct* includes an announcement stated institutionally, from an administrator, department, or from an official meeting or workshop. *Indirect* information includes information obtained through informal discussion or a side conversation.

Table 1
Percentage of NTT Faculty Hearing the Following Expectations, by Direct or Indirect Channels

Expectations	Direct	Indirect
SLOs are required by accrediting agencies.	68.2%	71.2%
SLOs promote increased student learning.	50%	30.3%
SLOs have to be tied to material from class to demonstrate where students learn.	48.5%	42.4%
SLOs have to be assessed in each class to show what students are accomplishing.	53%	47%
Faculty need to show how they updated their teaching methods in accordance with the results of the assessments.	34.8%	33.3%
SLOs and assessment are likely to disappear.	0%	1.5%

N=66*; 1 respondent skipped these questions on the survey

were aware teaching methods should be updated based on results. Taken together, participant responses suggest that reasons for collecting assessment data are not being as heavily stressed as the vague concept of assessment is.

Implications. We can only speculate about what is happening to cause the above imbalance, but the findings support the statement that messages are not conveyed consistently. Many of our respondents' departments may not have been discussing the results of previous assessments ratings or scorings with NTT faculty. If departments had contacted NTT faculty about the results of previous assessment attempts, perhaps through the scheduling of teaching workshops or special meetings to discuss ways to increase student learning and interaction in classes, we expect that more respondents would have stated that they had heard about the need to update their teaching. Or perhaps, if departments or institutions were trying to inform NTT faculty about a discipline's assessment project's relationship to teaching methods, they were not doing so in a way that was heard or recognized. For instance, such communications may have been treated as formalities, to be done once and then checked off as completed. Communications that are not "on message" and not repeated often are likely to be missed or misconstrued. By contrast, communications about accreditation may have been more direct, more on-message, and more frequently repeated due to the immediate anxieties of administrations. Regardless, one can expect NTT faculty concerns about assessment to increase when instructors are unaware how the process is about helping faculty improve their teaching.

Two of the comments express frustration that the faculty or administrators designing their departmental assessments were not familiar with the material and the pedagogy used in the classroom, possibly leading to misleading or misinterpreted findings.

Involvement in Assessment Activities

Considering the push by accrediting institutions to increase the number of classes and sections assessing SLOs, we asked our respondents whether their departments were implementing assessment processes in their courses without their involvement or were asking them to assess SLOs in their sections. Almost 57% of respondents were asked by their departments to assess classes, and of those, 97.4% completed some form of assessment. Although those numbers sound encouraging, 30.8% reported their department or discipline administered an assessment in a section without the faculty member's involvement. If NTT faculty are not involved in the design, discussion, or administration of department-run assessments (which, unlike institutional tools, tenure-track faculty often influence), then the results may be less useful for them. If they are not given the results culled from the instruments, then they are left with less information to update teaching methods.

Predicted Effects for Incentives to Assess

As a part of the survey, we listed potential scenarios that might increase participation in the creation, implementation, and ratings of assessment instruments. Not surprisingly, a paid stipend was picked the most often (60.9%), with one respondent writing that compensation for assessment should be explicitly included in the instructor's contract. Another echoed, "[T]he college has given so little guidance to part-time faculty about specific SLOs and their development. We've been asked to voluntarily develop them because of the accreditation process but no compensation is available."

Nevertheless, many survey respondents showed an interest in participating for reasons other than money. Of these respondents, 42.2% said they would assess more if they had a relationship with their department, or if they knew that participating would help them learn more about their teaching effectiveness. These findings echo those of earlier studies showing that NTT faculty are very concerned with being strong and effective teachers (Baldwin & Wawrzynski, 2011; Kezar & Sam, 2011; Levin & Shaker, 2011; Scott & Danley-Scott, in press). These numbers are summed up in the words of one respondent: "I will do it because I think it's important; [I] don't need further incentives."

Given that NTT faculty employment is tenuous and unprotected, it is not surprising that some believe assessment results could be used against them or inappropriately.

Patterns in Open Comment Responses

When we look at the written comments of the NTT faculty to determine why they would feel uncomfortable with departments administering SLO assessments in classes, we see three strong trends. Respondents expressed concerns about usefulness of collected data, control of assessment, and punitive actions based on data.

It is clear from the first set of comments that NTT faculty concerns over whether assessment data are useful, are consistent with the general “faculty” perspectives described by Fort (2011), Hutchings (2010), and Lederman (2010b). The respondents question whether assessment instruments accurately measure student learning in an instructor’s class. If students do not understand the questions or material presented in the assessment, their progress may be inaccurately measured. Similarly, if students are not given a good reason to take assessment activities seriously or if the activities do not take into consideration course format (online, hybrid, evening), data may be misleading. This concern is most likely to exist when those in the classroom are not involved in designing the assessment instruments or determining the learning outcomes. While the view is not entirely unique to NTT faculty, exclusion from the assessment process may heighten these concerns beyond those of tenure-line faculty.

Within the second set of comments, some responding faculty remarked that assessment instruments and activities created by others (faculty or administrators) may not be appropriate for the courses they are teaching. Two of the comments express frustration that the faculty or administrators designing their departmental assessments were not familiar with the material and the pedagogy used in the classroom, possibly leading to misleading or

Table 2

Open Responses: Why Would You Feel Uncomfortable Having Your Department Administer SLO Assessments in Your Class? Which of the Following Would Make You More Likely to Participate in Assessing the SLOs in Your Class? (“Other” Open Responses)

Concern 1: Lack of useful data
<p>-The uncomfortableness comes from being told to put them in the syllabi, knowing some may not be tailored to your class specifically, and then hoping the students are understanding or at least comprehending most of them, if not at least knowing they are supposed to be?</p> <p>-Students may perform differently if they sense someone other than their teacher will be evaluating them.</p> <p>-I would need to be convinced [the results] are useful.</p> <p>-Continuity about what is deemed important for students to know after completing the course.</p>
Concern 2: Control over assessment design and procedure
<p>-It’s my class and it would be my responsibility.</p> <p>-Prefer to do it myself.</p> <p>-No control over the assessment, the process or outcome.</p> <p>-The department assures me that they don't have the quals to teach the class and they love the results from the students who have taken it. I'm not confident that the faculty actually understands the domain well enough to do this without me.</p> <p>-It takes away from my own authority in class.</p> <p>-It's not having my class assessed--I do that myself. I would have a problem having someone else do it. I am the one who has taught the material based on the purpose of the class and the looked for terminal objectives.</p> <p>-Because the important SLOs are complex - e.g. critical thinking - and I find the best assessment strategy is to build it into an assignment which I can then improve in subsequent semesters based on assessment results.</p> <p>-I know more about teaching writing than anyone in my department. The only tenured faculty member in the university writing program is an administrator, not a writing teacher. He is not qualified to assess my class, in my opinion. In fact, he asks me for advice about certain issues.</p> <p>-Instructions on what exactly I need to do.</p> <p>-I believe that the pursuit of SLO's is a noble goal, but is misplaced at the collegiate level. The emphasis of a college education should be to expose students to new concepts and idea's while trusting that it is the students responsibility to learn the material. I feel that SLO assessments only serve to corrode the college learning environment with an ultimate result of making the completion of a four year degree as formatted and formulaic as secondary education has become. The responsibility for actually learning the course material must always reside with the student and not the educator.</p> <p>-If assessed as a group, the most important factor is the day/time of the meeting.</p> <p>-Because the college has given so little guidance to part-time faculty about specific SLOs and their development. We've been asked to voluntarily develop them because of the accreditation process but no compensation is available.</p>
Concern 3: Use of assessment data
<p>-Administrators often have a way of making assessments on student progress about ability of an instructor to teach the concepts. Administrators heed no regard to other criteria such as student participation, interest or application of the concepts learned. Further, assessments of SLO's are of no interest to students and they may choose to skew their answers.</p> <p>-I do not trust the judgment of administration.</p> <p>-I don't trust them. It can be used against me.</p> <p>-I would need more information. Without it I would feel scrutinized.</p>

misinterpreted findings.

Apprehension about the alignment of assessment instruments with course content may be particularly rational for those off the tenure line. If NTT faculty are not involved in their departments, then the assessment instruments are likely to be designed by administrators or tenure-line department faculty. NTT faculty are most likely to teach the introductory courses and tenure-line faculty often teach the upper-division courses at four-year institutions (Benjamin, 2002), so there may be a disconnect among expectations of what the students should be able to accomplish or what is assigned in class. Moreover, because NTT faculty are often hired at the last minute (as noted earlier), they are unlikely to communicate with other faculty in the department until after the semester starts. Tenure-line faculty are more likely to have developed their syllabi and course content toward a departmental norm over the years, due to discussions with colleagues, performance reviews, and mentoring. Combining these facts with the tradition that instructors have freedom over topics, assignments, and materials presented in class, the syllabi and course content may vary significantly between tenure-line and NTT faculty. If assessments are designed based on the norms of tenure-line faculty classes, there may be incorrect assumptions about which books, assignments, and activities occur in NTT-taught classes. Student learning may occur in the latter classes, but if that progress fails to appear in the same topics or skills, or does not align with departmental norms, the data will not show a growth in mastery.

Third and finally, some respondents voiced concern over how the assessment data will be used. Given that NTT faculty employment is tenuous and unprotected, it is not surprising that some believe assessment results could be used against them or inappropriately. When departments and institutions do not share how the assessment device will be constructed, which outcomes will be measured, and how the resulting data will be used, the faculty are left to assume the data will be used for evaluation or judgment. Although tenure-line faculty do express concern over how assessment data is used (Gold et al., 2011; Hutchings, 2010; Lederman 2010b), they attend departmental and division meetings that discuss assessment, where they can opt to participate in the process. In comparison, NTT faculty are often in the dark and cannot choose to participate more than they do. The final category of comments, those that discuss concerns with the use of assessment data, may be the easiest for institutions to alleviate. If data are used in workshops, newsletters, or departmental memos on improving pedagogy or teaching techniques, the concerns may decrease over time, assuming the department ensures the NTT faculty are made aware of these events and communications.

Differences Among Those Making Comments

It is worth noting that the respondents in Set 3—those who expressed concerns over how assessment data might be used—shared a teaching profile strikingly different from that of the other respondents, coming closest perhaps to respondents within Set 1, but differing markedly from those in Set 2 and from those not leaving comments.

All Set 3 respondents at the time of the survey taught part-time for two-year colleges and had taught for more than seven years. None had a doctorate. None indicated having received any department assistance with assessment design, none had faculty mentors, and none were paid to conduct assessments. Just one in four felt the department treated him or her well, only one in four felt his or her job was secure, and just one in four was invited to department meetings.

The foregoing demographic contrasts sharply with respondents who gave no response when asked what about the assessment response made them uncomfortable. Although lack of response might include respondents in a rush to finish, it also by definition includes respondents who had no concerns about assessment in their programs. The no-comment group featured more respondents with doctorates (21%), as well as respondents with better-than-normal job security: 23% of non-commenters had full-time jobs or a secure employment contract, and 45% indicated they felt secure in their jobs. The non-commenting population had also indicated through earlier answers that they were more involved in their departments: 19% had faculty mentors, 57% had been invited to department meetings (indeed, 17% indicated they were compensated for such meetings). They had also indicated more support for assessment efforts,

Respondents who felt secure in their jobs and whose other responses indicated more opportunities for department involvement seemed more likely to focus on the how of assessment, if they commented at all, while their more sidelined peers tended to focus on the why.

Our findings suggest departments that want to have increased NTT involvement in distributing, collecting, and rating assessments need to increase opportunities for involvement in assessment design, and they need to open communication between the institution and the NTT faculty.

with 40% reported having received department assistance with assessment and 17% indicating they had been paid for assessment activities.

Respondents expressing concern about punitive actions also differed sharply from those making Set 2 comments—those expressing concern about assessment design and procedure. In fact, the respondents who focused on design and process questions seemed much more like the non-commenters than like others who had commented: 17% had full-time positions or secure contracts, 33% felt they had reasonable job security, 67% were invited to department meetings (with 25% paid to do so), 17% had mentors, 8.3% were paid to assess, and as with the non-commenters, 42% reported receiving department assistance with assessment design.

In short, respondents who felt secure in their jobs and whose other responses indicated more opportunities for department involvement seemed more likely to focus on the how of assessment, if they commented at all, while their more sidelined peers tended to focus on the why. Most units with any experience with administering assessments are likely to find the how discussions more productive than the why discussions, and judging from the data above, it seems like one way to shift discussion from why to how might be to give NTT faculty a wider range of ways to participate.

Conclusion

Our findings suggest departments that want to have increased NTT involvement in distributing, collecting, and rating assessments need to increase opportunities for involvement in assessment design, and they need to open communication between the institution and the NTT faculty. To further reduce anxiety over assessment, departments should close the loop with their assessment data and show the pedagogical uses for data. When departments use assessment data the way it was meant to be used, trust in the department's practice of assessment should increase. Increased participation in assessment should, in turn, lead to more awareness of what practices improve student mastery of student learning outcomes.

Our results support scholars who argue that institutional factors, rather than faculty, are leading to a less-effective teaching environment. Other studies have highlighted the frustrations that assessment is an unfunded mandate (Funk & Klomprens, 2006; Gilbert, 2010; Gold et al., 2011), that it is not recognized appropriately for the energy and time it requires (Hutchings, 2010), and that it is “making relatively little difference on their campuses” (Lederman, 2010b, para. 10). The previous literature shares a presumption that all faculty have these concerns with assessment, but NTT faculty we surveyed have additional concerns that may be of higher priority to them, due to a different job description, less-inclusive compensation package, and departmental norms on communication and involvement.

NTT faculty are concerned with (a) whether assessment data are useful; (b) whether the findings from assessment attempts will affect their tenuous employment; and (c) whether the assessment instruments will properly measure learning gains in their classes. If we look at these three concerns, a clear picture emerges: When departments and institutions do not involve their NTT faculty in the design, implementation, and analysis of assessment, particularly in the assessment of general education courses, NTT faculty insecurities will rise and participation in assessment implementation and ratings will likely decrease. Given only 39% of our sample felt they had reasonable job security, the respondents would be rational to distrust administrators collecting random artifacts and data from classes.

As accrediting bodies push institutions to perform discipline- and department-level assessment of student learning outcomes, it will be increasingly common to see such units assessing all sections of a class or major using a common assessment device and a common rubric. This practice leads to centralized assessments and centralized scoring, as well as a collection of data about individual instructor's courses and student success. Even if it seems like a small intervention, units should involve NTT faculty in assessment efforts. Nearly half of our respondents reported that they would be involved in the assessment process if it helped them learn about the effectiveness of their teaching. Given NTT faculty teach a large percentage of introductory classes and are interested in the pedagogical benefits of measuring student learning gains, assessment data have a higher likelihood of producing change if departments

When departments and institutions do not involve their NTT faculty in the design, implementation, and analysis of assessment, particularly in the assessment of general education courses, NTT faculty insecurities will rise and participation in assessment implementation and ratings will likely decrease.

ensure usable data is distributed to all faculty. Developing instruments and analyzing results in the dark may encourage passive resistance toward assessment and resentment toward the department, both of which may taint the results or decrease participation.

In addition, communication with this half of the faculty body needs to improve. One should assume that faculty left out of department and assessment meetings hear only bits and pieces of announcements and news, or that the informants may frame plans and policies based upon personal feelings and concerns. Departments might believe important details will filter down the ranks, but as only 16.9% of respondents stated they had some type of mentoring relationship with a full-time faculty member, it is unlikely accurate information will reach a majority of the contingent faculty. Formal departmental communication, via meetings, emails, or memos, would aid in conveying essential information accurately and building a relationship.

Lack of personal communication between NTT faculty and permanent members of an institution, such as administrators, departments, and tenure-line faculty, is also contributing to the problem of participation in student learning outcomes assessment. Policies that make it difficult for NTT faculty to be a meaningful part of a department will also affect whether all faculty feel allowed to offer suggestions about assessment design and implementation. Overlooking those teaching the classes being evaluated can also reduce the accuracy of measuring student learning gains. It reduces teaching effectiveness because the data is not optimal and may be ignored. As communication and openness are inexpensive ways to reduce concern, and have a great impact on the desire to participate in assessment (Scott & Danley-Scott, in press), we again recommend opening dialog and encouraging participation to increase participation and create useful data that can increase teaching effectiveness.

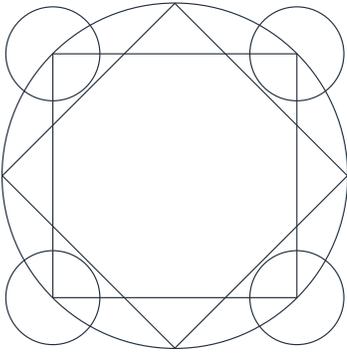
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Abstract

Higher education institutions have taken to redesigning high-enrollment, introductory courses to improve student learning outcomes, student success, and degree completion. This paper presents findings from the assessment of course redesign by focusing on the case of developmental math at a large community college. The college adopted modularization, a common course redesign method in which concepts are disaggregated into modules and delivered through computer software. Preliminary results from the quantitative analysis of student performance in redesigned courses have been mixed. The study discusses faculty and student views and experiences with modular math redesign in order to complement and help illuminate the results from the quantitative analysis. Using evidence from five focus groups, one with faculty and four with students, the paper provides insights on how to help faculty and students ease into their new roles and reshape those roles for an enhanced, more engaging, and more effective teaching and learning experience.

Assessing Course Redesign: The Case of Developmental Math

Nationwide, colleges and universities have embraced course redesign to improve various aspects of higher education, including, but not limited to, student learning outcomes, student success, and degree completion (Twigg, 2003, 2013). New instructional technologies, policymakers' emphasis on accountability, and private foundations' work to increase college completion have converged to create widespread interest in course redesign (Rassen, Chaplot, Jenkins, & Johnstone, 2013). Course redesign usually entails changes in the curriculum and in the delivery of instruction using some form of information technology (Education Advisory Board, 2013; Twigg, 2003). Typically, course redesign initiatives have targeted college-level introductory, high-enrollment courses.

In the case of community colleges, course redesign efforts have commonly focused on developmental education. Studies have shown that nearly 60% percent of community college students are not sufficiently prepared for college-level courses and must enroll in at least one developmental course (Bailey, 2009). Most students who require developmental education are usually placed into some level of developmental math. Data from 26 institutions participating in the Achieving the Dream network showed that on average 62% of their fall 2002 cohort were referred to at least one developmental math course (Zachry-Rutschow et al., 2009).

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As the federal and state governments pay more attention to student success and degree completion, reforming developmental math has become a priority for community college leaders. One of the most common approaches to revamp developmental math is modularization. Modularization disaggregates math coursework into separate modules, which are often delivered to students through computer software. The rationale for this reform is to accelerate students' completion of their developmental math requirements.

Modularization has shown promising results, but low pass rates for some groups of students and other challenges remain (NCAT, 2009). Addressing these challenges will

require careful assessment of redesign efforts, including ongoing consultation with faculty and students. As a step in this direction, this paper incorporates faculty and students' views and experiences in the assessment of modular math redesign in order to complement and help illuminate the preliminary analysis of student performance in redesigned courses. Findings are based on five focus groups, one with faculty and four with students, at a large community college. Lessons are relevant for any institution committed to the needed process of fine-tuning the modular math redesign after its initial adoption. Lessons are also applicable beyond developmental education, to two-year and four-year institutions, which have recently adopted or are looking into instructional technology for the redesign of college-level introductory, high-enrollment courses.

Developmental Math Education in Community Colleges

Modularization disaggregates math coursework into separate modules, which are often delivered to students through computer software. The rationale for this reform is to accelerate students' completion of their developmental math requirements.

Traditionally, developmental math courses are taught in a sequence that includes basic arithmetic, elementary algebra, and intermediate algebra. Depending on the students' placement test scores, their developmental sequence may require up to three or four semesters of courses before reaching college-level coursework. Many students end up failing or withdrawing from these courses, dropping out before they have completed their sequence, or fail to enroll in developmental math altogether. Consequently, only 30% of community college students complete their developmental math sequence and even less get to enroll in college-level math (Attewell, Lavin, Domina, & Levey, 2006; Zachry-Rutschow et al., 2009). Remediation comes at a high financial cost to students and institutions, and negatively impacts student success and college completion.

With mounting pressure from the federal and state governments with regard to college completion, community colleges have started to reform developmental math. Most reform initiatives, such as compression, boot camps, summer bridge programs, and mainstreaming, focus on accelerating students through their developmental math sequence (Bailey, 2009; Bragg, Baker, & Puryear, 2010; Edgecombe, Cormier, Bickerstaff, & Barragan, 2013; Epper & Baker, 2009; Sherer & Grunow, 2010). For example, compression combines two or more courses in the developmental sequence into one semester (Edgecombe et al., 2013). Boot camps and summer bridge programs provide students with intense math coursework during the summer, before their first college semester starts (Sherer & Grunow, 2010). Mainstreaming simultaneously enrolls students in their college-level course and their developmental course, where they receive supplemental instruction (Edgecombe et al., 2013; Hanover Research, 2013).

Modularization

Consequently, only 30% of community college students complete their developmental math sequence and even less get to enroll in college-level math.

The focus of our article is the acceleration approach known as modularization. One of the reform initiatives that use modularization, the National Center for Academic Transformation's Emporium Model, has been implemented at multiple colleges and universities around the United States. A few states, such as Virginia, have adopted variations of this method to launch a state-wide redesign of all developmental math courses in community college. The hallmarks of this method are heavy reliance on computer-aided instruction (lessons, tutorials, homework, quizzes, and exams) and breaking down math concepts into separate modules for students to complete.

Students in modularized courses must demonstrate mastery of each module in order to advance and progress through their developmental math sequence (Hagerty & Smith, 2005; Twigg, 2013). The model allows for self-pacing, as students have the opportunity to accelerate their developmental process or spend more time on certain competencies. Different types of instructional software (e.g., Pearson's MyMathLab, Enable Math, ALEKS, etc.) are used to deliver lectures, pre-tests, post-tests, tutorials, homework, and quizzes (Epper & Baker, 2009). Because the instruction is computer-based, most versions of this model split instructional time between smaller classrooms equipped with computers and larger computer labs. In the classroom and computer labs, students work at their own pace on math tutorials, assignments, and assessments, and can receive individualized support from their math instructor or tutors.

Institutions have seen some positive, preliminary results from implementing modular developmental math. Allowing students to enroll only in the modules needed for their program of study and placement scores has increased the overall completion rate of developmental

math. However, the benefits vary based on students' prior math knowledge. Students who need the least amount of remediation (placed into elementary or intermediate algebra) have higher success rates than under the traditional models, whereas those students who start in basic arithmetic are the least likely to benefit from this approach (NCAT, 2009).

Beyond performance gaps, researchers and practitioners have come across other challenges with modularization. Some faculty and students struggle to adjust to new roles and expectations, older students with weaker technological skills find it hard to navigate computer-aided instruction, and many students do not fully understand the new expectations about performance, workload, and homework (NC Community College Creating Success, 2012). Furthermore, the feedback provided by the software is too generic for students to understand how to arrive at the correct answer and for faculty to identify students' gaps in understanding (Bickerstaff & Lachniet, 2014). These challenges underscore the importance of establishing an ongoing process of assessment, customization, and refinement after the initial adoption (Bickerstaff, Monroe-Ellis, & The Scaling Innovation team, 2012). A key aspect of this process is continuing consultation with students and faculty.

Capturing Student and Faculty Voices, Views, and Experiences

Our paper builds on a tradition of scholarship centered on the notion of faculty and students as stakeholders whose voices need to be heard in education research and reform (Manor, Bloch-Schulman, Flannery, & Felten, 2010; Mitra, 2004; Nodine, Jaeger, Venezia, & Bracco, 2012; Public Agenda & WestEd, 2012). Capturing student and faculty voices can reveal unintended consequences of reform initiatives. For example, by gathering feedback from students on redesigned developmental math courses, researchers found that the new course structure created barriers and exit points that slowed down students' progression (Fay & Cormier, 2014). Furthermore, collecting feedback from students and faculty can highlight the misalignment between each other's expectations. In a recent study, for instance, researchers showed that students expected more guidance from faculty, but faculty members were unaware because students failed to ask for help (Bork & Rucks-Ahidiana, 2013). Most importantly, encouraging faculty and students to talk about their own views and experiences can open up opportunities for self-awareness. Through such opportunities, faculty and students can learn about themselves, reflect on their own role, and achieve greater agency and responsibility in teaching and learning (Cook-Sather, 2002).

This paper incorporates faculty and student experiences in the assessment of modular math redesign at a large community college. The assessment was guided by three questions:

1. How do faculty and students perceive the notion of mastery?
2. How do faculty and students feel about the practical requirements set by the redesign to help students achieve mastery?
3. How do faculty and students experience computer-aided instruction?

By delving into faculty and student responses to these questions, the assessment seeks to shed light into unplanned effects of the modular redesign, while pointing to areas of agreement and disagreement between students and instructors. In addition, the assessment brings to the fore what faculty and students identify as their own needs for successful teaching and learning. Highlighting those needs is important not only as an exercise in self-awareness but also as an opportunity to adjust and reshape the modular redesign in ways that make it more engaging and more effective. Lessons from the assessment can be helpful for other colleges currently striving to find solutions to the long-standing and newly emerged challenges faced by developmental math students and faculty. More generally, these lessons can be useful for institutions that have implemented or plan to implement technology-mediated redesign of college-level introductory, high-enrollment courses.

Modular Math Redesign at a Large Community College

The research was conducted at a large community college, with over 13,300 credit students, located in the suburbs of a culturally and ethnically diverse metropolitan region. Since 2011, the college has been part of Achieving the Dream, a national network of colleges and state policy teams that share knowledge and resources with the purpose of advancing

Students who need the least amount of remediation (placed into elementary or intermediate algebra) have higher success rates than under the traditional models, whereas those students who start in basic arithmetic are the least likely to benefit from this approach.

Some faculty and students struggle to adjust to new roles and expectations, older students with weaker technological skills find it hard to navigate computer-aided instruction, and many students do not fully understand the new expectations about performance, workload, and homework.

institutional reform, reducing gaps in student achievement, and improving college completion. As part of the plan presented to Achieving the Dream, the college redesigned its developmental math curriculum by adopting the modular approach in order to help students succeed and accelerate through the developmental sequence.

By delving into faculty and student responses to these questions, the assessment seeks to shed light into unplanned effects of the modular redesign, while pointing to areas of agreement and disagreement between students and instructors.

Before the redesign, the college had three developmental math courses, each lasting one semester. With the redesign, there are fourteen modules spread across three developmental courses, but students who complete all the modules in one course before the semester ends can immediately start working on the following course. Students take the ACCUPLACER placement test to determine which developmental course(s) they require. In addition to in-class assistance, provided by the instructor and a tutor, tutoring is available to students seven days a week.

Instruction is computer-based; students use software to go through tutorials, complete homework, and take quizzes and exams associated with each module. Before each module, students have the opportunity to take a diagnostic test and, if they pass it, they can move on to the next module. Those who do not pass go through all the steps necessary to master the module. Mastery for each module is set at eighty percent or higher. Students are required to take course notes on each module before they can take module exams. If students fail a module exam, they must complete a correction sheet and show it to the instructor before retaking it.

These results suggest that, at the outset, students in traditional courses appear to outperform students in modular courses. But looking at performance in the subsequent course in the sequence tells another story. Students in the modular format might struggle initially, but those who pass seem more likely to learn and retain the concepts and skills needed to succeed in higher level developmental math courses.

The redesign was piloted for two semesters starting in fall 2012, with full implementation in fall 2013. During the pilot, the course schedule distinguished modular courses with an “M” and students were able to choose whether to enroll in traditional or modular courses. Twenty-three percent of students who enrolled in their first developmental math course selected the modular approach, while 77% opted for the traditional format. The assessment of the pilot included two components: a quantitative component centered on the analysis of student performance and a qualitative component focused on the study of faculty and student views and experiences. These two components were designed as complementary strategies to conduct a comprehensive evaluation of the impact of course redesign on student success (Small, 2011).

Preliminary Results from the Quantitative Assessment of Modular Math

Pass rates were used to compare the performance of students who took their first ever developmental math course in fall 2012. Overall, students who took traditional courses performed better; they had a pass rate of 68% compared to 28% for students who enrolled in modular courses (see Table 1, for course pass rates). One reason for the large gap in performance between the two course formats can be explained by how passing is defined in modular courses. Unlike what happens in traditional courses, students must earn a B or higher to pass a modular course. If the same definition applied to students in traditional courses, the pass rate would drop to 37%. Even though the recalculated traditional pass rate is still higher than the modular course pass rate, the gap is significantly smaller. This pattern holds when individually comparing each course level.

Table 1
Success in First Developmental Math Course, Fall 2012

Developmental Math Course Format	% Pass Rate (ABC)	% Pass Rate (AB)
Traditional Courses- All	68%	37%
Traditional Pre-Algebra	71%	37%
Traditional Introductory Algebra	73%	44%
Modular Courses- All	--	28%
Modular Pre-Algebra	--	28%
Modular Introductory Algebra	--	36%

Note. Dashes indicate that pass rates cannot be calculated for a particular course.

In addition, pass rates were used to examine the performance of students who enrolled in the next developmental course in the sequence, the following semester. This analysis was confined to those students who had earned an A or B on their first developmental course in either the traditional or the modular format. Students who had earned an A or B in a modular course the previous semester were more likely to pass their next course in the developmental sequence compared to students who had earned an A or B in a traditional course. Fifty-four percent of those who had initially succeeded in modular courses passed the next course in the sequence, compared to just 34% of those who had initially succeeded in traditional courses.

These results suggest that, at the outset, students in traditional courses appear to outperform students in modular courses. But looking at performance in the subsequent course in the sequence tells another story. Students in the modular format might struggle initially, but those who pass seem more likely to learn and retain the concepts and skills needed to succeed in higher level developmental math courses. Based on the quantitative component of the assessment, early results of the modular math pilot have been mixed. With more semesters of data, a larger and more complete picture of the outcomes of modular math will emerge.

In the meantime, the preliminary results from the quantitative analysis highlight the need to examine in depth how faculty and students experience the redesign. Specifically, the preliminary findings on student performance suggest two lines of inquiry. First, given students' initial struggles in redesigned classes, what elements of the redesign do faculty and students identify as challenging? And second, in light of the more promising results in students' outcomes at a later point in time, what elements of the redesign do faculty and students perceive as helpful for learning and retaining knowledge? We explore these issues in the qualitative component of the assessment, which we discuss in the remainder of the article.

Qualitative Assessment Methodology

This article centers on the qualitative component of the assessment, which consisted of five focus groups, one with faculty members and four with students enrolled in modular math classes. The selection of cases was guided by purposeful sampling, "a strategy in which particular settings, persons, or events are selected deliberately in order to provide important information that can't be gotten as well from other choices" (Maxwell, 1996, p. 70). Consistent with this strategy, the study focused on faculty and students' experiences with introductory algebra, which is the second or intermediate-level course in the developmental math sequence. Focusing on this course was the logical first step in the inquiry, as it would ease the task of identifying common patterns in participants' experiences with the modular approach.

We decided to postpone the inclusion of pre-algebra, the lowest-level course in the developmental sequence, for a later stage in the research. This decision was based on the analysis of longitudinal evidence on the overlapping developmental needs of entering students. The analysis suggested that pre-algebra students' difficulties with the modular approach would likely be confounded or overshadowed by more general challenges with learning of basic skills, including reading and writing. We also decided to postpone the study of intermediate algebra, which is the third- most advanced course in the developmental sequence, because this course is placed under a different department and their instructors may follow different guidelines.

Focus groups were scheduled in spring 2013, and each lasted approximately one hour. Most of the instructors who had taught at least one semester of introductory algebra in the modular approach (seven individuals) participated in the faculty focus group. Participants in the student focus groups were not selected individually, but based on their class section. Four class sections of introductory algebra were selected to cover different days of the week and different time slots, adding to 30 participants. The student demographics in these four sections resembled those of the overall population of students enrolled in introductory algebra. Similar to the overall population, students in the four selected sections were majority female (70%) and predominantly African American (74%), and they had a median age of 20. The four focus groups with students were conducted in class, with IRB approval. Each focus group was approached as an opportunity to replicate and refine the findings from the previous one, leading to data saturation (Small, 2009).

For example, the requirement of submitting correction sheets after failing a test ensured that students would review the test and practice before retesting rather than just retesting to take another chance.

Furthermore, instructors believed that computer-aided instruction encouraged a more active student role and greater student responsibility in the learning process.

Focus groups were transcribed and analyzed with NVivo qualitative research software. The analysis proceeded in stages, following the iterative process outlined by Lichtman (2013). First, each transcript was reviewed to develop incipient themes and categories. These themes and categories were then used for initial coding in NVivo. Once the initial coding was completed, the material coded into each theme and category was examined in greater depth, resulting into the revision and refinement of the entire coding system. Finally, NVivo's analytic capabilities were used to analyze the degree of overlap and discrepancy between faculty and students' views.

Qualitative Assessment Findings

Instructors' Views and Experiences with Mastery and Related Practical Requirements

Even when they recognized the opportunities for student growth opened up by the redesign, instructors had difficulty coming to terms with their new monitoring and supporting roles.

As explained in the previous section, students in the redesigned course are expected to master all the concepts and skills included in each module before moving on to the next. In order to help students achieve mastery, the redesigned course has in place practical requirements such as attending class, submitting course notes based on the tutorials, and reviewing test problems with incorrect answers before retesting. Focus groups findings show that instructors agreed with the notion of mastery and generally supported the requirements introduced by the redesign to help students achieve it.

Instructors' views about the notion of mastery have been shaped, in part, by their previous experiences with traditional math courses. Those who had previously taught in the traditional format were concerned about persisting "learning gaps" in students completing developmental math courses. In the traditional course, students were able to pass even if their knowledge of the material was uneven or incomplete. Furthermore, although students were asked to take a comprehensive exam at the end of the course, the bar was not set high enough to ensure that every student passing the class would have fully acquired all the core concepts and skills. As told by one instructor comparing the traditional and the redesigned course:

In a final exam [in the traditional course] you usually take the questions for the whole course to make sure the student knows what they are doing because they may have passed one chapter with a ninety and the next chapter with a sixty. So at the end of the course you want to make sure that they have a moderate knowledge of everything. We are kind of saying with this redesign that that's not good enough, this is like the ABCs of math and they've really got to master every single part of this.

Instructors suggested that computer-instruction by itself may not provide students with all the learning opportunities they need to become proficient in Math. Instructors expressed interest in complementing the software with critical thinking activities, group work, and real world applications of Math concepts.

In addition, instructors welcomed the practical requirements introduced by the redesign to help students achieve mastery. From instructors' point of view, these requirements were important pedagogical tools because they helped students retain new knowledge and made it "inescapable" for them to develop successful learning habits.² For example, the requirement of submitting correction sheets after failing a test ensured that students would review the test and practice before retesting rather than just retesting to take another chance. Similarly, the requirement of submitting course notes based on the tutorials ensured that students would watch and pay attention to the complete tutorials rather than skipping parts or paying only intermittent attention. As an instructor explained:

In this case in this modular class they have to go through all steps on the tutorial. They cannot miss any part, because of the notes. Because after they read the tutorial they have to put the definitions of the concepts on the notes. They cannot avoid it, they have to do it. I noticed that several of the students who were trying to take the diagnostic test with eighty-five percent they were using notes when they were going through it. They didn't have to complete their notes if they successfully completed the diagnostic test; they used the notes just to be sure that they did not miss anything.

² The notion of making certain behaviors inescapable for students is prominent in the findings from the Community College Survey of Student Engagement, in reference to student use of advising and other services (CCSSE, 2010).

Instructors' Views and Experiences with Computer-aided Instruction

While instructors embraced the notion of mastery and related practical requirements, they were more ambivalent about another key component of the redesign, computer-aided instruction. Instructors acknowledged that computer-aided instruction went a long way in addressing one of the main challenges in developmental classes, the fact that students come to class with different levels of knowledge and skills. As shown by research on placement, the most commonly used tests do a poor job in accurately placing students in the right class, with many students ending up either “over-placed” or “under-placed” (Scott-Clayton, 2012). This means that in the traditional format, instructors would have a hard time calibrating their lectures to keep the material relevant and challenging for the entire class. Computer-aided instruction squarely addressed this problem by allowing students to make progress at their own pace. As one instructor explained:

The main difference is that before in the traditional class I was struggling trying to find the balance between students with the good background and bad background. It was really difficult; there were several students that couldn't understand because they don't know the previous material and there are students who know everything and so both of the groups will not pay attention if I don't explain more. Right now all students are coming into class and they [get] challenged exactly the level they are.

Furthermore, instructors believed that computer-aided instruction encouraged a more active student role and greater student responsibility in the learning process. From instructors' point of view, computer-aided instructions put students “in the driver's seat,” which helped them become more knowledgeable and better prepared for the next courses in the Math sequence. Moreover, computer-aided instruction helped students' become better learners in general; computer-aided instruction fostered in students new time management and organization skills and a greater sense of responsibility for their own learning, which were needed to succeed not only in Math but also in their whole college experience. As told by one instructor:

In our classes in the developmental area, a lot of times these students are taking developmental English too and maybe even developmental reading so their peer group is sort of all developmental students which look like grade thirteen, high school or an extension. This course is like a rude awakening because in the past we had trouble making them aware that this is college and you have a lot of responsibility for your own learning so this is like a hammer on the head, this is it, it's like dropping them right in the middle of it and saying you've got to assume responsibility from this point on.

Even when they recognized the opportunities for student growth opened up by the redesign, instructors had difficulty coming to terms with their new monitoring and supporting roles. Instructors' main responsibilities in modular classes included first, monitoring each student's work with the aid of the software to determine how much progress the student was making and whether the student was ready to take the module test. As part of this monitoring work, instructors had to take attendance, review students' notes, homework, and correction sheets, and print students' permission slips to take or retake the module test. Second, instructors were charged with walking around the class, with the help of the tutor, to answer questions and assist students who were struggling with the course material.

Although the model called for instructors to provide students with one-on-one assistance in class, in practice, instructors had limited time for this type of individualized interaction. Instead, instructors found that they were spending much of their time monitoring attendance, tracking student progress, and collecting students' notes, homework, and correction sheets. The high volume of administrative work left little time to connect with students. In fact, some instructors noticed that it now took them longer to learn students' names. Their new administrative duties challenged instructors' professional identity and left some longing for greater involvement in the learning process. Take, for example, the comments by one instructor:

In contrast to the instructors, students did not fully comprehend the notion of mastery or the reasons why it was important for math learning.

For most students, the amount of work expected in the redesigned class came as a surprise. Some found it hard to reconcile the time needed to work on their math class with other commitments, including other coursework, job responsibilities, and family life.

Much like the faculty, students felt ambivalent about computer-aided instruction. Students did see some advantages in receiving instruction from computer software rather than from an instructor.

I'd rather have a secretary do some of the work...I really felt that I was a secretary most of the time keeping track of everything. I would rather have more time to work with the students.

In addition, instructors' comments highlighted what they considered shortcomings in computer-aided instruction. Instructors suggested that computer-instruction by itself may not provide students with all the learning opportunities they need to become proficient in Math. Instructors expressed interest in complementing the software with critical thinking activities, group work, and real world applications of Math concepts. In addition, instructors echoed students' complaints that the software took knowledge for granted and skipped steps when demonstrating how to arrive to a particular solution. As one instructor detailed:

Because the computer will skip certain methods in between, assuming that you understand it... The professor would tell you the reason why you go from this step to this step what happened from here to here, but the computer will move from here to here, will not really explain what happened in between there. Some of the students get stuck there, and ask their peer why they leap from here to here, they don't know what happened.

Students' Views and Experiences with Mastery and Related Practical Requirements

In contrast to the instructors, students did not fully comprehend the notion of mastery or the reasons why it was important for math learning. Students noticed that the redesigned class was much more challenging and time consuming than the traditional class, but they did not seem to see clear benefits in the higher standards set by the redesign. In fact, the difficulty level of the tests at the end of each module was a frequent source of complaints. Some students explicitly stated that they preferred the traditional class because it was possible to get a good grade without doing well in the final exam, as long as the student completed all the homework. As a student who preferred the traditional format pointed out:

Because even if you did all the work on the computer, at the end if you didn't pass the final at least you had a good grade that would help you carry through onto the next.

For a small number of students, computer-aided instruction brought additional, unexpected benefits: the realization that they did not need to rely on a teacher to learn math.

Students also voiced strong objections to the course requirements set by the redesign to help them achieve mastery, such as attending class, submitting course notes, and reviewing test problems before retesting. For some, these requirements stood in the way of making progress and completing the modules in the expected timeframe. Many students felt particularly upset about the requirement of submitting correction sheets before retesting. Students had to figure out by themselves why they had gotten a wrong answer on the test and then use the correction sheets to show how to arrive at the right solution. After that, the instructor had to review the correction sheets and give students a permission slip to take the test again. From students' point of view, the whole process amounted to an obstacle course of tedious exercise and unnecessary delays:

Personally I did some test last week, and I failed it, I had to stay home one week just to get another attempted. That's my own time! Because I need to do (the) correction sheet, do notebook check, it's too much. And then the teacher comes up to you and checks to see if you understand what you are doing and if you don't understand then she gives you more work to do.

Requirements such as submitting class notes and completing correction sheets added to the regular homework associated with each module. For most students, the amount of work expected in the redesigned class came as a surprise. Some found it hard to reconcile the time needed to work on their math class with other commitments, including other coursework, job responsibilities, and family life. Students varied in their accounts of how much time they spent working on math outside of class, but they generally agreed in describing the workload for the class as heavy and, in some cases, overwhelming. See, for example, the advice offered by a student to anyone planning to take the same class in the future:

Don't have no job, don't have no other classes, don't have no food to cook, nothing. And make sure you have a laptop, some wireless internet and a little refrigerator in your room and that's about it, other than that, nothing, nothing.

It is important to note that some students found strategies to make the workload for the redesigned class more manageable without feeling that every other sphere of their lives had to be compromised. These students acknowledged that the redesigned class was more demanding compared to other classes and left no room for “procrastinating” or “fooling around.” However, they learned that they could fulfill the class requirements and make progress with the modules by strategically using available college resources and carefully planning their time. These students had a different type of advice for anyone taking the class in the future. Rather than “removing everything else from your life,” they recommended getting additional help when needed by using the tutoring center and even dropping by other sections of the same class. Furthermore, their advice for other students included planning how much work to do each week in order to finish all the modules on time, by the end of the semester. In the words of another student:

Try to get to through the modules as fast as you can. Try and set a schedule like: this week I will try to get through this whole module, and this week, and next week. If you spend too much time on them, then at the end of the semester you find yourself rushing.

Students' Views and Experiences with Computer-aided Instruction

Much like the faculty, students felt ambivalent about computer-aided instruction. Students did see some advantages in receiving instruction from computer software rather than from an instructor. Mainly, they valued the opportunity to learn at their own pace. Students could control how fast or how slow content was delivered within each module and they could stop at any time to ask for help. For some, this was a welcomed change, as they did not need to worry about getting lost while the teacher kept moving ahead. Furthermore, even if passing the course required completing a certain number of modules, students who did not reach that goal could continue the following semester wherever they had left. As a student pointed out, this contributed to reducing stress:

I kind of understand the modular thing; I'm not going to lie, in some ways I like that. I don't think I am going to get to eight [modules], I don't see it in my future before the end of the semester. I feel a little bit better knowing that I won't fail it completely and that I could pick up at six or seven, wherever I end up, next semester.

For a small number of students, computer-aided instruction brought additional, unexpected benefits: the realization that they did not need to rely on a teacher to learn math. As a student explained, teaching oneself math did not come about without struggle or even frustration (see Silva & White, 2013). But the result was a strong sense of empowerment:

I feel like I'm a genius. Sometimes you get the answer wrong and maybe frustrating but I think for you to teach yourself math is a big step in our life. Instead of letting the teacher teach you it's like you don't even have to be a teacher, you be your own teacher and computer, say, it's assistance.

More frequently, though, most students felt discomfort with computer-aided instruction. Many missed having a teacher demonstrate how to solve problems on the board and being directly observed by the teacher when working on a problem. While some called for a complete return to the traditional model, others were more open to the possibility of maintaining computer-aided instruction, but with stronger instructor involvement. These students expected more opportunities for interaction with the instructor as well as greater instructor involvement in explaining the material and checking students' level of understanding of the material presented. In the words of a student who reported having enjoyed a redesigned class the previous semester:

When I was in 0031 I passed with an “A,” like flying colors, zoom, gone, done, but the thing was I had a professor that made sure we understood things. He

Instructors found in the redesign a remedy to the challenge of tailoring instruction to students with different levels of math knowledge and skills, while students welcomed the opportunity to exercise greater control on the pace of content delivery.

Unlike instructors, students perceived the course practical requirements as hurdles that stood in the way of completing the modules on time.

had us work it out in front of him, to check it and see if it was right...If we needed something or whatever, he would go over the modules before we took the diagnostic test, and I'm just not seeing that anywhere.

Stronger instructor involvement in introducing the material and in checking students' level of understanding could also help overcome what students perceived as a deficit in the software. As instructors had noted, students pointed out that the software often made inaccurate assumptions about students' preexisting knowledge and did not go through all the necessary steps to arrive at a solution. For example, a student observed:

Sometimes I feel like when you go through the tutorials, it teach you and everything but sometimes I felt like it's not helping me a little bit because sometimes it skips steps and I wonder what did I miss, so I have to go back over it again.

Discussion and Recommendations

The qualitative analysis helps to illuminate these findings by revealing some of the challenges that students faced in modular classes, namely, problems following the explanations presented by the software and difficulties developing time management strategies to handle the course workload and finish the modules on time.

By incorporating the study of faculty and students' views and experiences in the assessment of math redesign, the assessment showed expected and unexpected consequences of this approach. The two groups identified advantages in the redesign, which largely fitted into the benefits expected by reformers. Instructors found in the redesign a remedy to the challenge of tailoring instruction to students with different levels of math knowledge and skills, while students welcomed the opportunity to exercise greater control on the pace of content delivery. At the same time, the assessment showed unintended—and one could argue, less desirable—features and consequences of the redesign. These included difficulties encountered by instructors to connect with students, and even to learn students' names, and gaps noted by instructors and students in the explanations delivered via instructional software.

Although there was significant common ground between instructors and students' perceptions, their views also differed in important ways. Instructors embraced the notion of raising the bar and believed that requirements such as submitting course notes and completing correction sheets helped students retain knowledge and become successful learners. By contrast, students did not quite grasp the rationale for the redesign's emphasis on mastery and the resulting high standards for module tests. Furthermore, unlike instructors, students perceived the course practical requirements as hurdles that stood in the way of completing the modules on time.

Another way to look at these findings is to consider how they complement the preliminary results from the quantitative analysis of student performance. As the quantitative analysis had shown, at the outset, students in modular classes seemed to perform comparatively worse than students in traditional classes. The qualitative analysis helps to illuminate these findings by revealing some of the challenges that students faced in modular classes, namely, problems following the explanations presented by the software and difficulties developing time management strategies to handle the course workload and finish the modules on time. Furthermore, the analysis of student outcomes in the following semester suggested the possibility that the modular approach would help students retain math knowledge. Support for this notion is found in instructors' insights on how course practical requirements such as submitting course notes and correction sheets leave students with no choice but to pay attention and review their work.

Heeding to faculty and students' views would require a set of adjustments. The low hanging fruit lies in addressing the gap between instructors and students' perceptions of the notion of mastery and related practical requirements. Following North Carolina's example (NC Community Colleges Creating Success, 2012), institutions need to adopt a clear, consistent, and accurate communication campaign to let students know how redesigned courses work and why students are expected to achieve mastery in each module. Such communication campaign needs to be continued in class, through conversations with the instructor about the purpose of course requirements such as attendance, course notes, and correction sheets.

But merely informing students about the redesigned class may not suffice to create and sustain student engagement. The analysis of students and instructors' experiences suggests a persistent desire for closer interaction and more direct involvement by the instructor in the

learning process. Even when most of the content delivery may be left to the software, instructors could still play a role in creating engaging learning opportunities that are not provided by the software. Instructors could set time aside each week for opportunities to apply math concepts in the real world, explanations that connect the dots across the modules, group-based work, and activities or assignments for students to demonstrate how they think about math and whether or not they understand the material³. This would not only contribute to covering what instructors and students perceive as deficits in the software, but also help instructors and students ease into their new roles, and even reshape those roles for an enhanced, more engaging, and more effective teaching and learning experience.

Increasingly, some of the features of course redesign discussed in this paper, such as computer-based instruction and self-paced learning, are spreading beyond developmental education. Both two-year and four-year institutions are adopting computer-based instruction and self-paced learning for their college-level introductory, high-enrollment courses. As pointed out by previous studies, successful implementation of these innovations requires much more than selecting the right software package and equipping the classrooms. Successful adoption calls for new ways to prepare instructors and actively guide, support, and motivate students (Education Advisory Board, 2013). The present study suggests that these tasks, which are essential to make the redesign work, need to be informed by local, institution-specific knowledge, which can only be gathered in situ through qualitative techniques such as focus groups with faculty and students.

While the results of this study offer valuable lessons on how to refine and improve modular math redesign, further research is needed. Future research should compare the views of students placed into different levels of developmental math and the perceptions of students belonging to different age groups. In addition, additional research should examine similarities and differences in how students experience redesigned math classes, depending on how many courses they have completed in the modular format.

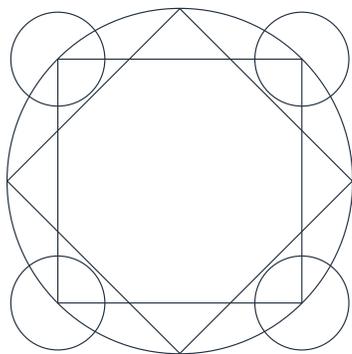
The analysis of students and instructors' experiences suggests a persistent desire for closer interaction and more direct involvement by the instructor in the learning process.

³ Personal conversation with Susan Bickerstaff, CCRC; see also Bickerstaff & Lachniet (2014). Introducing these kinds of activities may require pairing down the homework required for each model, a recommendation put forward by Fay & Cormier (2014).

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Abstract

Program assessment has been a topic of significance in higher education over the last decade. Initially, program assessment was implemented in response to concerns over the quality of college graduates' education and increasing competitiveness in the job market for American college graduates. Recently, higher education institutions have been encouraged to engage in assessment which can generate data that is comparable between institutions; resulting in assessment models which are predominantly quantitative. While quantitative data aids in cross-institution comparison, which remains important, alone it lacks the specificity that is needed to understand nuanced experiences of students, faculty, and administration. In this article, the assessment model that has been developed and implemented at one small-sized private institution is described. Focus is given to the qualitative elements of the multiple-method model. An evaluation of the model, post-implementation, is included in order to provide detail to facilitate potential application at other institutions.

Case Study: One Institution's Application of a Multiple Methods Assessment Framework

Institutional assessment has become a topic of cumulative importance, and even great debate, amongst higher education professionals, and within higher education institutions, over the last two decades (Halpern, 2013). Both regional and secondary accreditation organizations have imposed rigorous assessment requirements and higher education institutions have become accustomed to environments that are characterized by assessment and oversight. Regional accrediting organizations provide guidelines and expectations for accreditation; however, the design and implementation of assessment procedures are at the discretion of the higher education institution (e.g., Northwest Commission on Colleges and Universities, 2013). Thus, higher education institutions must develop a formal assessment methodology that meets accountability standards of accrediting organizations. Yet, a lack of consensus and specificity regarding the ways in which assessment ought to be conducted within an institution remains. Though quantitative assessment methods have historically been preferred within higher education, a shift in the field of higher education has emerged as educational researchers have come to realize that important information and questions cannot necessarily be gathered or answered by a single methodology (Commander & Ward, 2009; Van Note Chism & Banta, 2007). Furthermore, Howard and Borland (2001) noted that institutional assessment is actually a form of qualitative research since institutional research is context-focused and unique to the specific university. Considering this information, qualitative research methodologies and frameworks are important elements that must be included within institutional research. This does not exclude or nullify the importance of quantitative measures and methods; rather this information highlights the importance of integrating both qualitative and quantitative inquiry into institutional assessment (Howard & Borland, 2001). Therefore, integrating qualitative methods and frameworks into institutional assessment practices increases access to important data.

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A Brief History of Higher Education Assessment

Traditionally, accountability in higher education meant that institutions used financial resources effectively and appropriately (Ewell & Jones, 2006; Liu, 2011). However, at the turn of the century, a shift in the concept of higher education accountability began to emerge. The new form of accountability mandated institutions provide evidence that they were producing a qualified workforce through assessing learning and performance outcomes (Contreras-McGavin & Kezar, 2007; Ewell & Jones, 2006; U.S. Department of Education, 2006). The purpose of these learning and performance outcomes was to measure students' mastery of knowledge and skills, and they have become important and contentious topics within the field of higher education (Contreras-McGavin & Kezar, 2007; Furman, 2013; Halpern, 2013). This change in accountability appears to be in response to several factors (U.S. Department of Education, 2006). As the quality of higher education in other countries began to surpass the United States, it became apparent that the United States' higher education system was falling behind. In addition, employers began to criticize higher education institutions for failing to produce a qualified workforce with basic writing, problem-solving, critical thinking, and leadership skills (Liu, 2011; U.S. Department of Education, 2006). Thus, the demand for qualified graduates and effective educational programs has resulted in an emphasis in higher education on learning and performance outcomes. As a result, discussion in the literature about creating universal, or at least, comparable across institutions, outcome assessment processes has emerged (Contreras-McGavin & Kezar, 2007; Hanson & Mohn, 2011; Liu, 2011). In addition, ideas about how to measure student learning and report these outcomes have been debated (Furman, 2013; Germaine, Barton, & Bustillos, 2013).

Outcomes Assessment

Institutional comparison. The recommendation that institutions measure their performance outcomes in such a way as to be easily comparable to other institutions does not account for the various roles and unique missions of different institutions within the higher education landscape (Ewell, 2013; Ewell & Jones, 2006; Liu, 2011). Liu (2011) questioned if it is meaningful or helpful to compare performance outcomes of premier research universities with liberal arts baccalaureate colleges. Instead, Liu suggested that a more helpful comparison would be among similar-type institutions. Furthermore, performance and learning outcomes can be useful tools in assessing an institution's effectiveness in fulfilling their distinct role and purpose (Ewell & Jones, 2006; Germaine et al., 2013). Thus, performance and learning outcomes are beneficial for evaluating an institution's ability to fulfill its mission in comparison with similar-type institutions.

Methods for measuring outcomes. Measuring certain outcomes and unique roles of higher education institutions can be difficult; some outcomes (e.g., leadership, self-awareness, critical thinking, mission fulfillment, etc.) are not easily or efficiently measured quantitatively (Contreras-McGavin & Kezar, 2007; Furman, 2013; Germaine et al., 2013). Though these outcomes are important goals of higher education, quantitative measures for these outcomes typically involve lengthy self-reported surveys (Furman, 2013). Furthermore, the desire for an institutional-comparable assessment process encourages the development of a simplistic, broad quantitative approach that can be applicable to multiple types of institutions (Contreras-McGavin & Kezar, 2007). However, the demand for detailed information about program effectiveness, student learning, and fulfillment of unique roles on difficult to measure outcomes is more attainable through the use of qualitative methods (Contreras-McGavin & Kezar, 2007; Harper & Kuh, 2007; Van Note Chism & Banta, 2007). Thus, there is a paradox within the literature on how to assess outcomes: quantitatively and institutionally comparable or qualitatively with an emphasis on the institutions' role and purpose.

Outcomes assessment process. Despite the increasing emphasis on learning and performance outcomes, there is very little information or recommendations for developing a formal assessment process (Contreras-McGavin & Kezar, 2007). However, a close connection between the formal assessment process, especially the evaluation of learning outcomes, and the institution's overall mission and purpose is recommended (Contreras-McGavin & Kezar, 2007; Germaine et al., 2013; Halpern, 2013). Considering this literature, we believe that it is essential to include qualitative methods within institutional assessment. Specifically,

Though quantitative assessment methods have historically been preferred within higher education, a shift in the field of higher education has emerged as educational researchers have come to realize that important information and questions cannot necessarily be gathered or answered by a single methodology.

qualitative methods are useful for evaluating in-depth, specific outcomes for less quantifiable educational goals and allow institutions to evaluate their effectiveness in fulfilling their unique role and mission.

In recent years, there has been an increase in literature published about the possible uses of qualitative methods in institutional assessment (e.g., Contreras-McGavin & Kezar, 2007; Fifolt, 2013; Harper & Kuh, 2007; Museus, 2007; den Outer, Handley, & Price, 2013; Van Note Chism & Banta, 2007), however, very little has been published on the applied use of qualitative methods in a formal assessment process. Furthermore, there are few publications on higher education institutions' formal assessment processes. Therefore, the purpose of this article is to expand the literature on (a) institutional assessment processes by presenting one university's assessment procedures, and (b) the applied use of a qualitative framework for institutional research.

Methodology

Institutional Profile

The university is a private, regionally-accredited, Christian co-educational liberal arts institution founded in 1934. The university maintains campuses in multiple states and numerous extension sites; in addition, the offering of online courses, degrees, and programs has rapidly expanded for traditional, adult, and graduate students. The university employs five senior administrators, 69 full-time faculty members, and a pool of 311 adjunct faculty members to award associate, baccalaureate, master, and doctoral degrees.

The total fall 2013 enrollment was approximately 1,740 students. On-campus residence is encouraged for traditional undergraduates and 674 of the 958 undergraduate students live in on-campus residence halls and student apartments. Students participate in a wide range of co-curricular activities, including student government, residence life, campus ministries, student organizations, intramural athletics, and intercollegiate athletics for men and women.

Applied Framework/Instrument Design

In response to revisions and new requirements in the regional accreditation process, the university's Accreditation Committee, composed of a mix of administrators, faculty, and staff, created an institution-wide assessment process. The purpose of the assessment process was to be sufficiently broad so as to effectively function at both the institutional and departmental level: (a) to measure institutional mission-fulfillment and, (b) to facilitate departmental accountability and improvement. In addition, the process was to be sufficiently flexible so as to encompass both quantitative and qualitative departmental assessment.

Assessment matrix. Central to the assessment process was the Assessment Matrix (Appendix A). In order to assess both the overall mission fulfillment and the work of individual departments, an Assessment Matrix was established that was applicable to all areas of the institution, from academic departments and student development to administrative support offices and facilities maintenance. Along with outcomes, indicators, findings, and an analysis of findings, the matrix delineated a standard for success and required that a success score is assigned to every outcome. Through the use of this Assessment Matrix, the university was able to gain a summative evaluation of departmental success and institutional mission fulfillment.

Assessing mission fulfillment. In accordance with the new regional accreditor requirements, the mission of the university was detailed in four core themes (community, spirituality, academics, and engagement). The university defined institutional mission fulfillment in relation to the success of core theme outcome achievement measured using the Assessment Matrix for each core theme.

These core themes were specifically created to be sufficiently broad in order to be applicable to all university functions. Therefore, in the completion of a departmental Assessment Matrix, the department director selected the most appropriate core theme that is addressed by each departmental outcome. For example, while an academic major outcome might be assigned the academic core theme, the security office might perceive their outcome that encompasses their work toward student safety as addressing the community theme.

The recommendation that institutions measure their performance outcomes in such a way as to be easily comparable to other institutions does not account for the various roles and unique missions of different institutions within the higher education landscape.

The matrices from all areas of the university were then compiled by core theme and core theme outcome to facilitate institution-wide assessment of mission-fulfillment through core theme achievement. Specifically, the university defined institutional mission fulfillment as an overall average success score on the core themes of 3.0 or higher on a 4.0 scale. Thus, every department on campus contributed to institutional mission fulfillment through the achievement of their departmental outcomes and associated core themes.

Assessing departmental accountability and improvement. In addition to measuring mission-fulfillment, the Assessment Matrix provided a structured process for facilitating accountability and improvement. Every department on campus engaged in ongoing systemic assessment through the use of the Assessment Matrix. The staff department assessment matrices assessed performance-based outcomes, measuring the primary departmental responsibilities, tasks, and functions. In contrast, the academic department assessment matrices were primarily learning-based outcomes, measuring the primary student learning goals within a major. All outcomes were framed in terms of a customer, who may be a student, parent, donor, alumnus, or faculty and/or staff in another department. The utilization of both qualitative and quantitative means of outcome (and indicator) assessment were encouraged in order to most appropriately, effectively, and comprehensively measure and interpret the data in terms of departmental performance and/or student learning. This assessment occurred throughout the year, with staff following the Assessment Strategy Cycle (Appendix B) and academic departments following the Academic Assessment Cycle (Appendix C).

Assessment cycle. Although variation between the staff and academic cycles existed, a similar timeline was followed by all departments. Prior to the commencement of the traditional academic year, the outcomes, indicators, data source, time period, and standards for success were established and core themes assigned. The collection of data occurred throughout the year. Upon the completion of the academic year, the data were analyzed for findings and based on the results, a success score assigned. Finally, based on this analysis, subsequent program changes were planned (e.g., added or deleted outcomes and/or indicators, adjusted standard for success, implemented program changes for next assessment cycle, etc.). Upon completion of the Assessment Matrix, the finalized document was sent to the respective vice president and the Office of the Provost. The cycle then began again for the subsequent year with a matrix that reflected the changes made.

Initially, as part of departmental planning, the vice president of the appropriate division reviewed and provided feedback on the department outcomes, indicators, and standard for success. Upon completion of the assessment cycle the vice president of the appropriate division reviewed and evaluated the subsequent findings. This involvement fostered shared expectations and increased communication between the vice president and department directors. The faculty, specifically the program directors and the deans, evaluated the academic programs each year and implemented changes for improvement, including curriculum changes. This assessment was based on student achievement as documented through the student's completion of the learning outcomes for each course, major, and degree as indicated by the instructors and program directors.

Thus, the findings of the assessment matrices were then used to determine what, if any, changes were needed in the departmental outcomes, indicators, and/or success scores in order to most accurately assess the work of the staff department or the learning of the students within a major. This process ensured that assessment is reviewed at all levels of the institution, with the Assessment Matrix findings included in divisional reports to the Board of Directors, yet empowered the staff and faculty to lead the changes necessary for departmental improvement.

Procedures

By utilizing the process described above, the university established a system of assessment that highlighted both worthy achievement and areas necessitating improvement. In addition, this model encouraged investment in and growth toward increased mission fulfillment. The flexibility of this process to include both qualitative and quantitative assessment was a distinctive strength of this applied assessment approach. In particular, the ability of both staff and academic departments to utilize qualitative assessment methods

Thus, there is a paradox within the literature on how to assess outcomes: quantitatively and institutionally comparable or qualitatively with an emphasis on the institutions' role and purpose.

Through the use of this Assessment Matrix, the university was able to gain a summative evaluation of departmental success and institutional mission fulfillment.

to measure their outcomes and indicators provided a more nuanced understanding of the individual experience and better protected and communicated the voices of those involved in the outcome. In addition, the establishment of standards for success rubrics by department directors was qualitative in nature, based on their analysis of observations, interviews, and past experience. For example, for student advising outcomes within the X major, the department chair created the standard for success rubric based on individual student interviews, class focus group feedback, and past experience in supporting struggling students. Thus, this process intentionally provided space for the diversity of stories and experiences of the students and customers served by the various departments.

The ability of both staff and academic departments to utilize qualitative assessment methods to measure their outcomes and indicators provided a more nuanced understanding of the individual experience and better protected and communicated the voices of those involved in the outcome.

Standards for success. The Standard for Success Rubrics undergird the Assessment Matrix as this stage includes both the definition and measurement of departmental success. The development of the Standard for Success Rubrics was intentionally qualitative, as the detailed information about program effectiveness and student learning on difficult to measure outcomes was most effectively obtained through the use of qualitative methods (Contreras-McGavin & Kezar, 2007; Harper & Kuh, 2007; Van Note Chism & Banta, 2007).

The Success Score Rubric was described as follows:

4 = significantly exceeded the Standard for Success

In the Success Score Rubric, a 4 signifies that the department or program has fully reached its goals in this area. This score indicates that no improvement or change is necessitated and maintaining current practice will ensure the ongoing success of the department and its contribution to the continued health and wellbeing of the University.

3 = met the Standard for Success

In the Success Score Rubric, a 3 signifies that room for minor improvement remains and/or is possible for the specific departmental goal, but that at the present time, this item has been sufficiently fulfilled for the ongoing success of the department and its contribution to the continued health and wellbeing of the University. No urgent improvement is necessary, although vigilance remains important.

2 = partially met the Standard for Success

In the Success Score Rubric, a 2 signifies that attention to the specific area is necessitated in order to maintain the ongoing success of the department and its contribution to the continued health and wellbeing of the University. This specific area needs to be considered a priority for improvement that should be addressed within the next few months.

1 = did not meet the Standard for Success

In the Success Score Rubric, a 1 signifies that attention to this area is necessitated immediately in order to maintain the ongoing success of the department and its contribution to the continued health and wellbeing of the University. This specific area must be considered a high priority and addressed immediately.

X = outcome not addressed; need to revise the outcome or select a different indicator.

In the Success Score Rubric, an X signifies that the outcome was unable to be measured due to a problem with the indicator or data source. A change needs to be made in order to assess this outcome.

Through the use of the standards for success on the Assessment Matrix, the university was able to gain a summative evaluation of department and institutional success. This model was an effective system to assess both departmental performance and mission fulfillment because the subjective nature of the Standard for Success Rubric ensured the space for the primary purpose to be achieved: the measurement of change over time.

Analysis. The standards for success were established by the department directors, who were most knowledgeable in that area and, therefore, most able to apply best practices and accepted professional standards to the assessment of their outcomes. However, they were also most aware of the minority opinion and the outlier experience. In addition, the standards for

success were reviewed by the appropriate dean, supervisor, director, or vice president who was also in a strong position to ascertain whether reasonable standards for success were established. This step in the process facilitated conversation in regard to departmental expectations and served as an opportunity to reconsider the departmental priorities, in addition to the customer needs and preferences.

Thus, standards for success were established and then measured by the directors in order to measure improvement in their department over time, and to that end, this system was effective. Subsequently, if, over time, a standard for success proved to be set too high or too low, it could be adjusted in the same way that outcomes or indicators could be changed.

Most significantly, this system of assessment was successful in measuring mission fulfillment because the core themes were a direct application and representation of the mission statement. The core theme measurement ensured that the entirety of the institution was represented in the assessment process. In addition, the core themes were designed to be formative, as they encouraged the institution to devote human and financial resources to those advances most closely tied to the fulfillment of the mission.

Implementation. In response to changes in the regional accreditation process and requirements, the university created an institution-wide assessment process that was initially adopted in the fall of 2010 and has been refined through application over the past few years. Assessment workshops, in which assessment theory and practice was reviewed, particularly related to the categories of the departmental Assessment Matrix, were conducted annually, in addition to individual training sessions with department directors. Regular reminders as to progression through the assessment timeline were communicated, based on the staff Assessment Strategy Cycle (Appendix B) and the academic department Academic Assessment Cycle (Appendix C). This assessment framework has received commendations from the regional accreditor and recently undergirded a successfully comprehensive evaluation report.

Findings

As a result of the last few years of utilizing this assessment process, changes have occurred at the departmental, divisional, and institutional levels. At the institutional level, the findings from the core themes measurements have resulted in a shift in resources in order to address areas of weakness, emphasis and training has occurred in areas that gaps were identified, and areas of strength have been communicated in order to celebrate positive achievements. The findings from both the core themes measurements and the departmental assessment matrices have influenced changes at the divisional level. In some divisions, vice presidents integrated the assessment process into the performance evaluation process. In others, the assessment process became a tool to facilitate a discussion about departmental time usage, workload, and priorities. The public nature of the core themes assessments increased the inter-departmental awareness of responsibilities and functions, but also resulted in some difficult conversations as unmet goals were published with the assessment documents. Finally, at the departmental level the process has proven effective in refining the expectations of and priorities for staff department performance and academic student learning. In addition, the strong work performed by most departments was obvious and documented through the Assessment Matrix; this evidence was used to celebrate the daily work of many faculty and staff.

Culture of Assessment

Although assessment is standard within academia, the idea of an assessment process was unfamiliar to most staff directors. Extensive individual training sessions were necessary in order to support the creation of sufficiently broad outcomes, measureable indicators, and achievable standards for success. Even among the academic departments, regular communication and graduated deadlines were necessary in order to ensure that the deans were working with program directors and department chairs throughout the year in a systemic and constructive process. A culture of assessment has not yet been created, but most directors now appreciate the findings from their matrices and no longer view the Assessment Matrix as an additional and unrelated task.

The public nature of the core themes assessments increased the inter-departmental awareness of responsibilities and functions, but also resulted in some difficult conversations as unmet goals were published with the assessment documents.

However, the model proved successful, as over the past few years the directors have realized that the standards for success are not intended to be consistent across departments, but rather department specific in measuring change over time.

Perhaps because of the unfamiliarity many directors had with assessment or perhaps simply a symptom that the assessment model is effective, nearly 25% of the original outcomes have been modified or deleted, replaced by higher priority department functions and/or customer service needs and/or preferences. In addition, many of the indicators have been adjusted in order to allow for more accurate, more effective, and/or more contextualized measures of success. Finally, the standards for success on the assessment matrices were also frequently modified, as surprisingly, most directors initially established unrealistically high standards for their measurement (in contrast to establishing a less challenging standard for success that could be easily achieved and thus guaranteeing a high score on that outcome). One academic dean, reflecting upon the assessment process and model, noted that “the continual use, and review, of the assessment matrix has resulted in our college really thinking through our program outcomes and determining what is important. In many instances, program outcomes have been changed, or eliminated, as a result of authentically using the process.”

Qualitative Framework

The focus group setting has allowed faculty and staff to further elucidate important data (especially from student narratives gathered in the assessment process) that could have otherwise been considered vague or unusable.

The interpretive approach of the assessment process, in particular the Success Standard Rubric which was inherently qualitative in nature, but also allowed for both qualitative and quantitative departmental outcome assessment, was necessary in order to achieve the dual intentions of the university (assessment of department accountability and improvement, as well as mission-fulfillment) and to provide a framework to capture the nuanced and varied experiences of stakeholders. However, the very space that allowed this process to successfully fulfill the diverse objectives also created frustration for some staff and faculty. Some staff questioned the reliability and/or validity of the scores, expressing discomfort with establishing their own thresholds for assessment. However, the model proved successful, as over the past few years the directors have realized that the standards for success are not intended to be consistent across departments, but rather department specific in measuring change over time. For example, in one college within the university all faculty and staff meet together in a focus group setting to discuss and respond to the scores derived from the assessment process and the corresponding data, including narratives from which the scores were obtained. This process of providing a venue for faculty and staff to discuss scores with one another (and the change in those scores over time), has proven invaluable in the assessment process. Specifically, the focus group setting has allowed faculty and staff to further elucidate important data (especially from student narratives gathered in the assessment process) that could have otherwise been considered vague or unusable. This model does not quantitatively allow for comparison between departments or institutions, but rather qualitatively assesses improvement at the departmental and institutional levels over time.

Thus, this applied qualitative framework has proven successful at both the departmental and institutional level. The university concluded with a success score of 3.04 on a 4.0 scale for the core theme achievement, with scores ranging from a low of 2.71 and a high of 3.4. These findings represented an accurate portrayal of the strengths and weaknesses of the university and demonstrated a reasonable level and extent of mission fulfillment according to the regional accreditors. Further, the university has found that the use of this scale over time has had both a motivational and corrective effect on institutional priorities and budgetary allocations.

Discussion

The described assessment model was designed to provide a mission-centric focus to assessment and to assess all aspects of work across the institution. In addition, it was important to create an assessment model that moved away from periodic reporting and to a model characterized by ongoing and integrated assessment throughout the academic year (Ewell & Jones, 2006). A review of our experience in developing and implementing a new approach to institutional assessment was useful in our work to continually refine the process. In addition, potentially significant applications also exist for other institutions, especially those that are mission focused and open to fundamentally re-thinking their approach to assessment.

While quantitative assessment models can be useful for developing metrics which can be compared between institutions, these models are insufficient for assessing mission fulfillment and departmental efforts within an institution. Furthermore, given the importance of linking student learning to institutional mission and culture, assessment approaches must

be developed in ways that are consistent with the institutional mission (Contreras-McGavin & Kezar, 2007). We found that mission-centric assessment was both fundamental and essentially practical in our assessment model. For example, our institution is self-defined as a private mission-driven institution. Our educational pedagogy, programs, and student learning outcomes are directly linked to the institutional mission. With this in mind, it was necessary to develop an approach to assessment that helped us to understand the ways in which we were accomplishing our mission and the degree to which we were experiencing success in doing so. In addition, a mission-centric approach to assessment was also found to be very practical. Specifically, by centering on our mission, focus was given to the process. Faculty, staff, administrators, and students were able to better understand both the purpose and goals of institutional assessment: to assess how well we do what we say we do. Furthermore, using our mixed qualitative and quantitative framework, we were able to learn about the specific ways in which constituents experienced mission fulfillment. We found that mission-centric assessment was easily understood by those in academic departments, however, it was found to be more elusive in non-academic departments. This highlighted our need to continue to build a culture of mission-driven work throughout the institution. Understanding mission fulfillment, not just in academic programs but across campus, is an essential step in identity formation within mission-driven institutions. Mission-centric approaches to assessment become iterative in this process; guiding the institution in assessment of mission fulfillment, and then, in turn, developing an improved sense of institutional identity across campus.

Although our previous approach to assessment focused solely on the evaluation of academic programs, it was important to develop a new model that involved campus-wide participation (Contreras-McGavin & Kezar, 2007). The expansion of assessment across campus, while important, was also met with some resistance and confusion. As noted, the linkage between academic programs and institutional mission was self-evident. However, non-academic departments, for example accounting or maintenance, were unsure of how to assess their work within the frame of our institutional mission. This experience highlighted the bifurcation that oftentimes occurs within higher education institutions. However, unfortunately, this bifurcation has potential negative consequences for stakeholders at all levels. Additionally, the qualitative framework and opportunity for qualitative indicator assessment was essential in elucidating stakeholders' varied experiences. For example, students may experience receiving one message from within their academic program or from a faculty advisor and another message from student accounts or housing – as if the values or principles guiding the work of the respective departments are divergent. Engaging in a campus-wide approach to mission-centric assessment highlighted this bifurcation and the importance of institutions working toward creating a consistent and collaborative educational experience.

In addition to developing an approach to assessment that was both mission-centric, and campus-wide, we also purposed to develop a method that was ongoing, integrated and iterative (Ewell & Jones, 2006). According to Bresciani (2006), although assessment is typically conducted, often the intended results and/or outcomes are not articulated in advance, the changes or decisions based on the data and findings are not documented, and the subsequent changes are not re-assessed in order to measure whether or not the intended improvements were achieved. Similarly, Hanson and Mohn (2011) noted that little attention has been given in the literature, to making meaning of collected data and Ewell (2011) highlighted the importance of setting expected levels of performance. Our approach to assessment, particularly the Assessment Matrix, has aided our institution in engaging in ongoing, and definable, assessment, as well as a process of data evaluation that is essentially practical and linked to the change process. Regardless of the specific method employed, the inclusion of qualitative analysis is essential to ensuring meaningful interpretation and documentation of the collected data.

Limitations

Although the interpretive nature of this assessment model has proven both successful and necessary in order to assess the diverse functions of the university, the qualitative approach limits the ability for inter-departmental comparison. In addition, the mission-centric framework also limits the ability for comparison with other institutions. Ultimately, this method only measures the department and university improvement over time, benchmarking only with ourselves, rather than external indicators.

While quantitative assessment models can be useful for developing metrics which can be compared between institutions, these models are insufficient for assessing mission fulfillment and departmental efforts within an institution.

Finally, as discussed previously, a culture of assessment does not yet exist, particularly among the staff, at the university. Thus, an ongoing challenge is how to integrate the assessment process in a manner that is practical and attainable without adding significant additional work. Comprehensive and robust assessment is time consuming, especially within a subjective and interpretive model; establishing the importance of this process and the results continues to be a challenge for the university.

Conclusion

Ultimately, this method only measures the department and university improvement over time, benchmarking only with ourselves, rather than external indicators.

Qualitative assessment frameworks are both advantageous and necessary in today's higher education environments. In response to mandates from both regional and secondary accreditation bodies, higher education institutions must embrace cultures of assessment. Engaging in assessment practices that allow for meaningful comparisons between institutions, for example, between similar degree programs, can be useful in developing and maintaining standards or benchmarks for professional fields of practice. However, in doing so, higher education institutions must not lose sight of data that are essentially practical and contextualized within the respective institution. Specifically, qualitative assessment frameworks must be utilized in order to obtain institutional data that are both contextualized to the institutional environment and mission and representative of diverse constituents. Qualitative assessment frameworks move beyond the numbers and further elucidate the experience of the stakeholders; the voice of diverse students, staff, faculty, and administrators are heard. In this process, meaningful data are not only obtained, but a culture of assessment, where participation is valued, is created. In this article, the multiple-method assessment model utilized by one small-sized private mission-driven institution is outlined. The assessment model, while not solely qualitative in nature, is designed to (a) involve stakeholders, at all levels, in the annual assessment process, and develop a culture of institutional assessment; (b) develop assessment practices that are essentially practical and meaningful for respective departments, resulting in a cycle of ongoing assessment and change implementation; and (c) engage in assessment practices that model the values and mission of the institution.

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Appendix A Assessment Matrix

Division/ Department:

Program:

OUTCOME	INDICATOR	DATA SOURCE	TIME PERIOD	STANDARD FOR SUCCESS	FINDINGS	ANALYSIS OF FINDINGS	SUCCESS SCORE	RESULTING PROGRAM CHANGES	CORE THEME ADDRESSED

Assessment Key:

OUTCOME: The department or program outcomes

INDICATOR: What will be measured that directly or indirectly indicates mastery of the outcome?

DATA SOURCE: What student action or product is being evaluated?

TIME PERIOD: When will the data source information be collected?

STANDARD FOR SUCCESS: What level of accomplishment will be considered satisfactory for meeting the outcome goal?

FINDINGS: What level of accomplishment was observed?

ANALYSIS OF FINDINGS: What is the conclusion regarding meeting the outcome?

SUCCESS SCORE:

- X = outcome not addressed; need to revise the outcome or select different indicator.
- 1 = did not meet Standard for Success
- 2 = partially met the Standard for Success
- 3 = met the Standard for Success
- 4 = significantly exceeded the Standard for Success

RESULTING PROGRAM CHANGES: What changes in the program will be made to improve the success score?

CORE THEME ADDRESSED: What Institutional Core Theme is related to this outcome?

Core Theme One: Building a caring community and enduring culture

Core Theme Two: Developing Christian commitment and Spirit-formed lives

Core Theme Three: Advancing academic engagement through teaching, learning and scholarly production

Core Theme Four: Empowering people with the vision and tools to meet human need in their personal and professional lives

Assessment Matrix: Department (Staff) Example

OUTCOME	INDICATOR	DATA SOURCE	TIME PERIOD	STANDARD FOR SUCCESS	FINDINGS	ANALYSIS OF FINDINGS	SUCCESS SCOPE	RESULTING PROGRAM CHANGES	COPE THEME ADDRESSED
Students are prepared for success when entering the LEAP or Ministry Head Start programs.	Orientation	Attendance at orientation	Beginning of Program	4 – 80% of new students attend 3 – 75% 2 – 70% 1 – 65%	April 2012 Orientation: 86% attendance (37/43 eligible students)	Importance of attendance at Orientation was communicated to students by Enrollment, OEE staff, and advisors.	4	None	1
Students know who their advisor is and understand their academic plan to graduate.	Advising appointments and academic plan	Advising schedule and transfer reports	Beginning of each semester	4 – 80% of students meet with advisor prior to the semester to review their academic plan 3 – 75% 2 – 70% 1 – 65%	April 2012 semester start: 135 of 175 students (77%) were advised at least one month prior to the beginning of semester.	Students were contacted by office staff and advisors and encouraged to complete the advising process in advance.	3	Ongoing conversation about the best dates to open registration and for facilitating advising appointments.	1
Students currently enrolled are satisfied with their educational experience.	Responses on annual survey	Adult Student Priorities Survey question: "Rate your overall satisfaction with your experience here thus far."	Spring semester	4 – 80% of students indicate satisfied or higher 3 – 75% 2 – 70% 1 – 65%	Spring 2012 survey result: 5.69 mean for all LEAP students.	Average response was between somewhat satisfied and satisfied.	2	Standard needs to be rewritten to accurately reflect results provided from survey.	1
Students complete the LEAP program with a feeling that they have made a worthwhile investment.	Responses on exit survey	Exit survey question: "Tuition paid is a worthwhile investment"	Completion of program	4 – 80% of graduates mark satisfied or higher 3 – 75% 2 – 70% 1 – 65%	April 2012 Exit Surveys: 65%	Psychology: 6 of 11 Ministry Leadership: 6 of 10 Business Management: 12 of 16	1	Standard for success needs to be rewritten for a more realistic approach.	4
New adjunct instructors are effectively trained before teaching in OEE programs.	Orientation for faculty	Meeting schedule with faculty	Meeting with faculty 3 months prior to their first course	4 – 80% of faculty meet with OEE staff 3 months prior to first course 3 – 75% 2 – 70% 1 – 65%	4 of 5 new professors starting between January 1 and April 30 completed the OEE orientation process.	The one instructor who did not complete an orientation is a residential faculty member. Follow up was conducted during and after the course.	4	OEE personnel are considering how best to continue orientation with faculty through their first course to ensure the best experience.	3
Current OEE faculty have the opportunity for professional development.	Development workshops and online development courses	Attendance at workshops and use of online courses	Minimum of 1 workshop scheduled for each semester	4 – 20 or more faculty in attendance 3 – 15 2 – 12 1 – 10	Two spring workshops were conducted with attendance of 30 and 15.	Attendance declined for the second workshop but positive feedback was received.	3	A comprehensive schedule for workshops and topics for the 2012-13 academic year will be developed in summer 2012.	3
Curriculum and delivery models consistently evaluated for possible improvement.	Responses on course evaluations	Course evaluations	Conclusion of each class	4 – 80% of course evaluations score 4.0 or higher 3 – 75% 2 – 70% 1 – 65%	Course evaluations processed from January 1 through April 30: 45 of 48 classes (94%) rated 4.0 or higher	For the most part, positive feedback received from students regarding curriculum and delivery models.	4	Standard for success may need to be adjusted to a higher expectation.	3

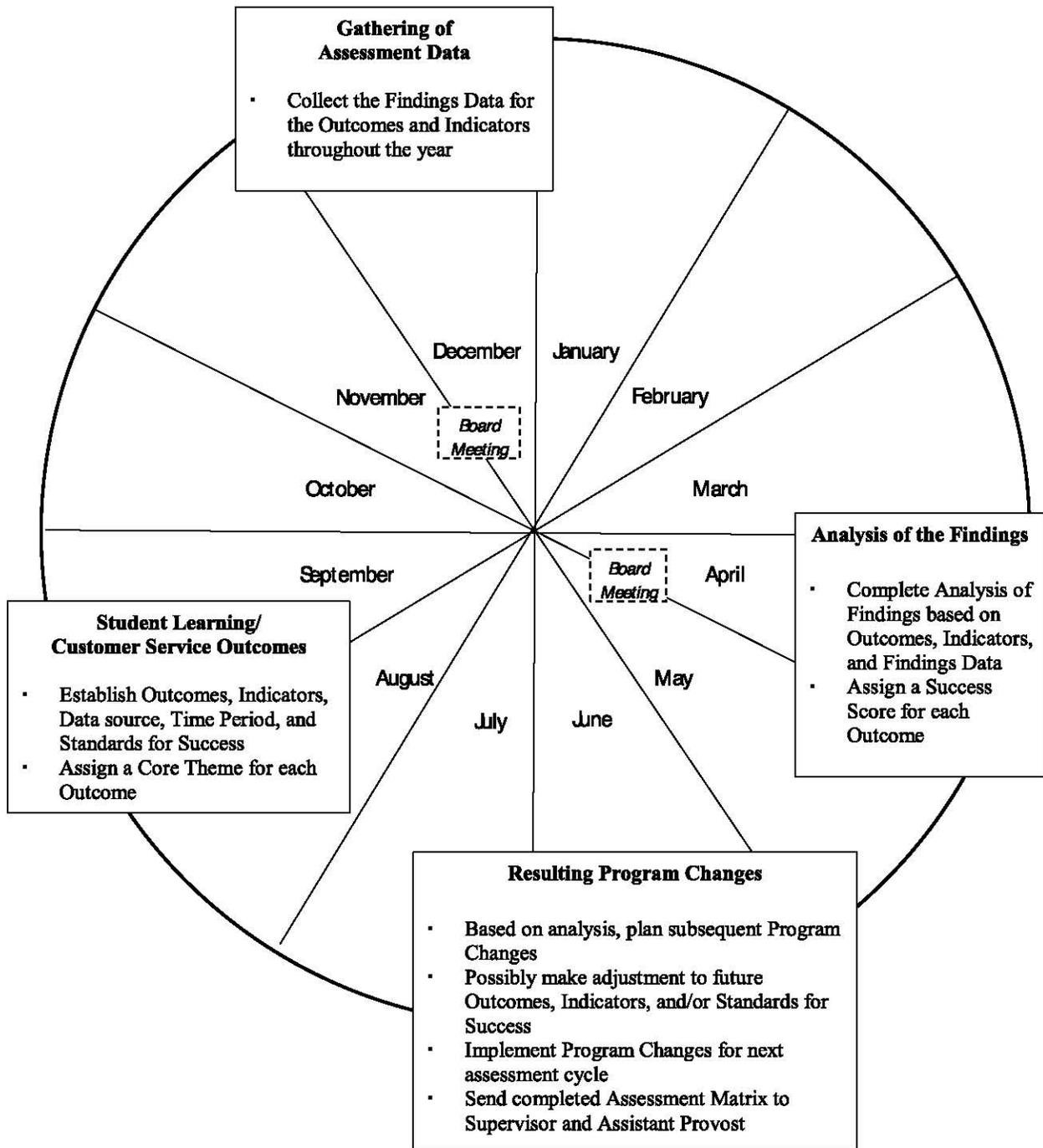
Assessment Matrix: Program (Academic) Example

OUTCOME	INDICATOR	DATA SOURCE	TIME PERIOD	STANDARD FOR SUCCESS	FINDINGS	ANALYSIS OF FINDINGS	SUCCESS SCORE	RESULTING PROGRAM CHANGES	NU CORE THEME
Traditional Undergraduate – Bachelors of Arts in Psychology									
Demonstrate competency in academic content areas that meet prerequisites for graduate work in behavioral and social sciences;	Student performance on ETS Major Field Test in Psychology.	Psyc 4403 Advanced Topics in Psychology – ETS Major Field Test in Psychology	Data is reported by the Advanced Topics professor to the undergrad psychology chair at the end of Spring semester.	The mean score of NU undergrad psychology students is above the 50 th percentile thereby demonstrating competency in academic content areas of behavioral and social sciences. <ul style="list-style-type: none"> • 1 ≤ 40% • 2= 41%-49% • 3 = 50%-55% • 4 ≥ 56% 	Due to an unforeseen circumstance the ETS Major Fields Test was not administered to students.	Suggestion: CSBS develops its own Capstone Exam to administer to student.	X	CSBS undergraduate faculty will develop an NU psychology exam to administer in the 2014-2015 academic year. Rationale: By developing our own test, CSBS faculty will be better able to determine which content areas students are the strongest and weakest in. However, for the 2013-2014 academic year, faculty will continue to use the ETS Major Field Test.	3
Demonstrate the ability to effectively communicate their understanding of psychological issues in both oral and written formats including mastery of APA style	Student performance on 4 key elements of oral communication on a Class Presentation Assignment	Psyc 4203 Cognitive Psychology – Class Presentation Assignment	Data is reported by the Cognitive Psychology professor to the undergrad psychology chair at the end of Fall semester.	50% of students demonstrate an ability to effectively communicate orally by achieving 80% (B-) or higher on the 4 key elements of oral communication. <ul style="list-style-type: none"> • 1 ≤ 39% • 2= 40%-49% • 3 = 50%-55% • 4 ≥ 56% 	97% of students scored 80% or higher on the four key elements of oral communication.	Only one student did not score 80% percent or higher on key element "Quality of Presentation"	4	Resulting Change: All standards will be revised by faculty for 2013-2014. The goal of the revision is to standardize the outcome standards within each program.	3
Demonstrate the ability to effectively communicate their understanding of psychological issues in both oral and written formats including mastery of APA style;	Student performance on 6 key sections of the Final Research Paper.	Psyc 3023 Research Methods II – Final Research Paper	Data is reported by the Research Methods II professor to the undergrad psychology chair at the end of the Spring semester.	50% of students demonstrate an ability to communicate in writing with a mastery of APA style by achieving 80% (B-) or higher on the 6 key sections of the Final Research Paper. <ul style="list-style-type: none"> • 1 ≤ 39% • 2= 40%-49% • 3 = 50%-55% • 4 ≥ 56% 	95% of students demonstrated an ability to communicate in written format including mastery of APA style.	Nothing noted	4	Resulting Change: All standards will be revised by faculty for 2013-2014. The goal of the revision is to standardize the outcome standards within each program.	3

Assessment Matrix: Program (Academic) Example

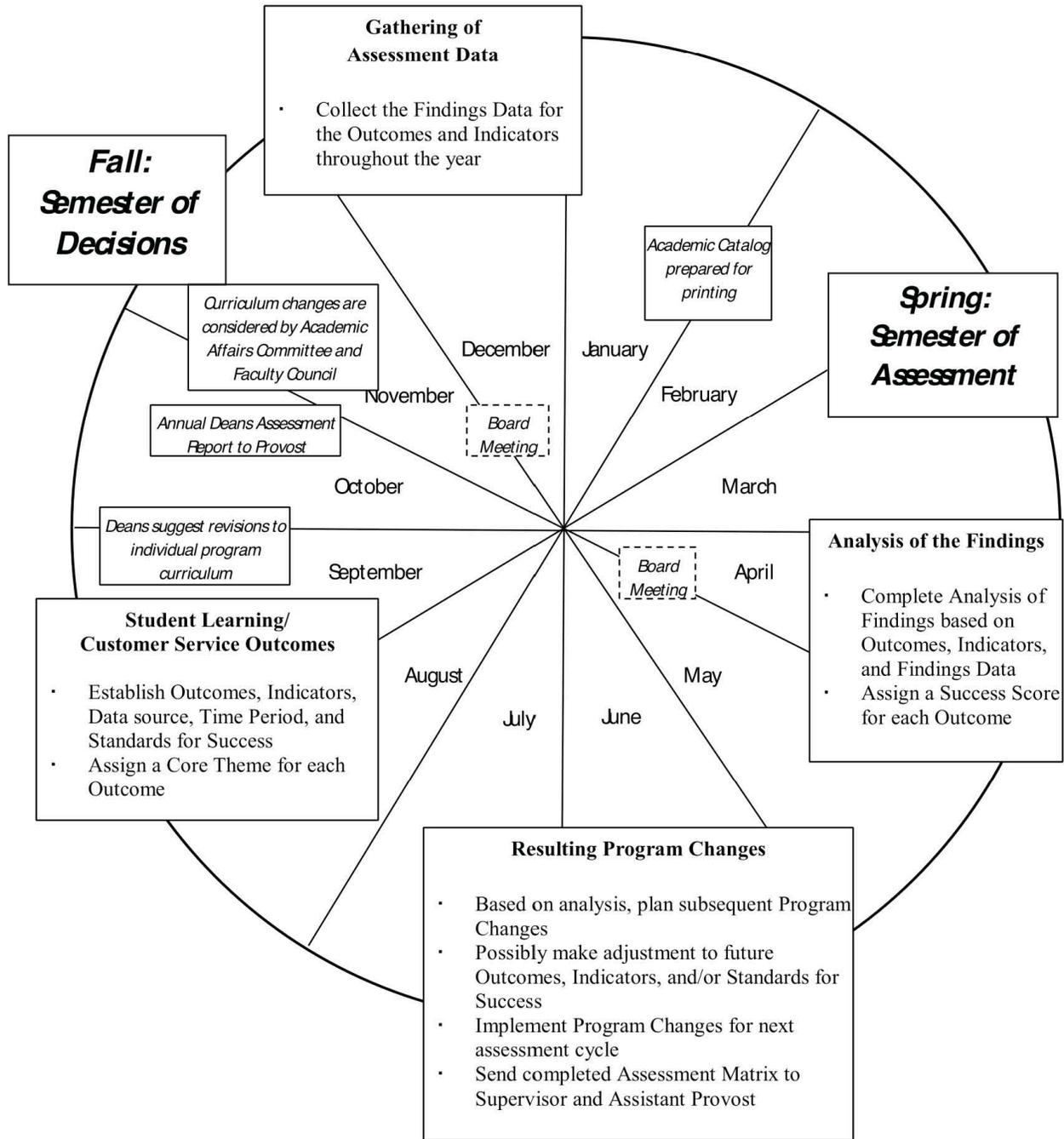
OUTCOME	INDICATOR	DATA SOURCE	TIME PERIOD	STANDARD FOR SUCCESS	FINDINGS	ANALYSIS OF FINDINGS	SUCCESS SCORE	RESULTING PROGRAM CHANGES	NU CORE THEME
Traditional Undergraduate – Bachelors of Arts in Psychology									
Think critically concerning issues relating to psychology, culture, and social injustice within the context of a globalized world;	Student ability to think critically concerning issues of psychology, culture, and social injustice as demonstrated in 3 sections of a reflective writing assignment	Psyc 4973 International Field Study – Student Journals	Data is reported by the International Field Study professor to the undergrad psychology chair at the end of the Spring Semester.	80% of students demonstrate an ability to think critically in areas of psychology, culture, and social injustice by achieving an 80% or higher on the 3 sections of a reflective writing assignment. <ul style="list-style-type: none"> • 1 ≤ 69% • 2= 70-79% • 3 = 80-89% • 4 ≥ 90% 	77% of students demonstrated an ability to think critically in areas of psychology culture, and social injustice by achieving an 80% or higher on a reflective writing assignment	Several submitted the assignment late and, therefore, lost points; this affected their overall grade on the assignment.	2	Resulting Change: All standards will be revised by faculty for 2013-2014. The goal of the revision is to standardize the outcome standards within each program.	3
Examine Christian faith integration and psychology.	Student integration of psychology and Christian faith as demonstrated on a paper about a fictional meeting of Sigmund Freud and CS Lewis.	Psyc 4403 Advanced Topics in Psychology	Data is reported by the Advanced Topics in Psychology professor to the undergrad psychology chair at the end of the semester.	80% of students successfully integrate psychology and Christian faith by achieving 80% or higher on a paper about a meeting between Freud and Lewis. <ul style="list-style-type: none"> • 1 ≤ 69% • 2= 70-79% • 3 = 80-89% • 4 ≥ 90% 	100% of students successfully integrated psychology and Christian faith.	Nothing noted	4	Resulting Change: All standards will be revised by faculty for 2013-2014. The goal of the revision is to standardize the outcome standards within each program.	2

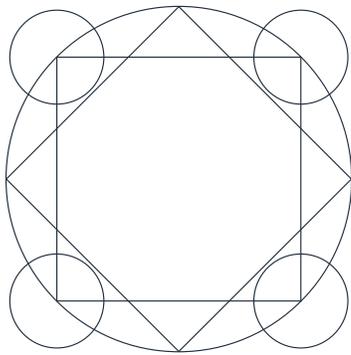
Appendix B Assessment Strategy Cycle



Appendix C

Academic Assessment Cycle





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Abstract

As assessment becomes an ever more critical facet of higher education, it is apparent that some faculty do not always value assessment (Crossley & Wang, 2010; Ebersole, 2009). Further, faculty may react with resistance, particularly when they perceive that assessment is being imposed upon them from external sources (Crossley & Wang, 2010; Marrs, 2009; Welsh & Metcalf, 2003). Motivation for faculty to participate in assessment is therefore a critical question. We conducted a qualitative study to explore faculty attitudes towards general education assessment, focusing particularly on faculty motivation for engaging in assessment. General education coordinators were interviewed about their perceptions of student learning outcomes assessment, using a semi-structured interview approach, and then coded by consensus according to Expectancy-Value Theory of motivation (Eccles et al., 1983; Wigfield & Eccles, 2000; Wentzel & Brophy, 2014). Implications for future assessment practice are also shared.

Faculty Attitudes toward General Education Assessment: A Qualitative Study about Their Motivation

In today's climate surrounding higher education, one would be hard-pressed to find a university that is not conducting assessment of student learning outcomes. Whether the university has developed a long-standing culture of assessment or is simply conducting assessment for purposes of accreditation, the underlying notion is to systematically and empirically study what students gain from their university experience (Astin & Antonio, 2012; Erwin, 1991; Ewell, 1991). A systematic process of assessing student learning involves at least four steps: (a) defining student learning outcomes, (b) developing curriculum and interventions to promote student growth on learning outcomes, (c) gathering empirical evidence about student learning outcomes, and (d) using the results to understand and improve student learning (Suskie, 2010). The most critical of these steps is the final one, leading to improvement of student learning, which (regardless of an institution's approach toward assessment) necessitates faculty participation. In the current study, we conducted a qualitative investigation to explore faculty attitudes towards engaging in general education assessment.

General Education at the Current Study's Institution

To provide additional context for the current study, we will first outline the structure of general education at the institution under study. The underlying philosophy of the general education program is to help students develop their ability to reason and make ethical choices; to appreciate beauty and understand the natural and social worlds they live in; to recognize the importance of the past and work towards a better future (James Madison University, n.d.). Within this philosophical description, the five areas of general education are highlighted. Specifically, the five areas are (a) *Skills for the 21st Century*, (b) *Arts and Humanities*, (c) *The Natural World*, (d) *Social and Cultural Processes*, and (e) *Individuals in the Human Community*.

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Each of the five general education areas is led by a coordinator who chairs a committee that is comprised of general education faculty representatives and other university staff members (e.g., the university writing center staff participate in the *Skills for the 21st Century* committee). Coordinators are selected for their role through a rigorous internal and/or external search process, and serve a dual appointment as coordinator and as faculty who teach general education courses within their substantive area. Duties of the coordinators are varied and include not only managing the day-to-day operations of their area (e.g., course enrollments), but also organizing and reporting the assessment of student learning outcomes for their area to multiple constituencies. Two of the general education areas also report assessment information to the state higher education council. Hence, assessment is an integral part of the coordinator's duties. The coordinators each lead their respective faculty in developing/refining student learning outcomes and in selecting or developing assessment tools to evaluate each learning outcome. The university assessment center provides support to each of the coordinators in the form of an assessment liaison who participates as an active member of the area committee, collaborating with the coordinator and committee on all phases of the assessment process.

Each committee has the freedom to collect assessment data in any way they choose, although many choose to collect data during one of the university-wide assessment days. Specifically, two assessment days are conducted annually for the primary purpose of assessing student learning related to the general education curriculum. The first assessment session occurs prior to the first day of classes for incoming first-year students. During this session, students are randomly assigned to complete a series of general education content area tests and attitude measures. The second assessment session occurs after students have completed 45-70 credit hours, typically when they are second-semester sophomores. During their second assessment session, students are assigned to take the same tests that they completed as first-year students.

Assessment is valued by university administration, as evidenced by the numerous resources (e.g., time and money) that are allocated to university-wide assessment. General education faculty invest time and effort into developing assessment tools. Assessment liaisons aid in developing, evaluating, and reporting on assessment measures. Finally, students who do not participate in their assigned assessment session are unable to register for classes until their assessments are completed, resulting in a nearly 100% participation rate. Consequently, one may envision that assessment is an integral part of the university's evaluation of student learning, providing useful information for curriculum improvement. One might also anticipate that the general education coordinators would be the champions of student learning outcomes assessment at such an institution. Unfortunately, not all faculty view assessment as a productive endeavor. To help understand why, we review literature on faculty attitudes towards assessment in higher education as well as literature related to motivation theory.

Faculty Attitudes toward Assessment in Higher Education

A number of studies suggest that faculty frequently question the value of assessment (Crossley & Wang, 2010; Ebersole, 2009; Grunwald & Peterson, 2003; Kramer, 2008; Marrs, 2009; Sundre, 2005; Yarkova & Cherp, 2013). In fact, faculty may even react with resistance, particularly when they perceive that assessment is being imposed upon them from external sources such as administration or from accrediting agencies (Crossley & Wang, 2010; Marrs, 2009; Welsh & Metcalf, 2003). Faculty may become even more resistant if they fail to understand the purposes for assessment. For example, faculty who believe that the purpose for assessment is to scrutinize their classroom practices or prove their worth may become particularly resistant (Kramer, 2008; Linkon, 2005; Marrs, 2009). Additionally, some faculty may view assessment as a threat to academic freedom, either inhibiting their autonomy to choose what they teach in their own classrooms or infringing upon their methods of evaluating their students (Kramer, 2008). One author went as far as describing faculty perceptions of assessment activities as "...a game we can't win" (Linkon, 2005, p. 3).

In addition, assessment can be viewed as just another fad or additional responsibility piled on to faculty's already busy schedules (Kramer, 2008; Linkon, 2005; Marrs, 2009). Faculty must continually negotiate competing demands for their time, including teaching, research, and service. If an institution does not incentivize engaging in assessment, faculty perceive

Unfortunately, not all faculty view assessment as a productive endeavor.

Faculty from disciplines that embrace constructivist perspectives may lack appreciation for assessment tools that include quantitative data collection and analyses.

assessment duties as one more demand that could be spent on activities for which they receive incentives, such as engaging in scholarship (Crossley & Wang, 2010; Grunwald & Peterson, 2003). Moreover, when assessment is conducted by the institution without much faculty input, faculty may fail to find the meaning or connection to their own classroom (Grunwald & Peterson, 2003).

However, when there is significant resistance to assessment, how do we engage faculty and motivate them to participate, thereby potentially increasing the value they place on assessment?

Faculty from disciplines that embrace constructivist perspectives may lack appreciation for assessment tools that include quantitative data collection and analyses. As one faculty stated, “This problem of misunderstanding and undervaluing knowledge in our disciplines is especially challenging for the humanities. The very idea of measurement is, for many of us, somewhat foreign” (Linkon, 2005, p. 4). Hence, for some, an assessment process (like the four-step process we highlighted at the outset of this article) can conflict with a deeply-held worldview of how best to evaluate learning.

It is important to note that not all faculty respond with resistance. Faculty who engage in the assessment process and gain experience with assessment frequently report that they find the process useful (Crossley & Wang, 2010; Ebersole, 2009; Welsh & Metcalf, 2003). Involvement with assessment also has been positively related to support for assessment activities (Kramer, 2008; Welsh & Metcalf, 2003). However, when there is significant resistance to assessment, how do we engage faculty and motivate them to participate, thereby potentially increasing the value they place on assessment?

Expectancy-Value Theory

To help answer the question of how to engage and motivate faculty in assessment, we turn to Expectancy-Value Theory. Expectancy-Value Theory is one of the most dominant contemporary theories of motivation (Eccles et al., 1983; Pintrich, 2003; Wentzel & Brophy, 2014). According to Expectancy-Value Theory, motivation to engage and persist in a task primarily depends on three factors: (a) an individual’s anticipated ability to successfully accomplish the task (i.e., Expectancy), (b) an individual’s perceived importance for the task (i.e., Value), and (c) how much an individual perceives that he or she has to sacrifice or give up to accomplish the task (i.e., Cost).

The costs associated with balancing assessment responsibilities along with other responsibilities of teaching, research, and service activities are all too familiar to faculty in higher education.

First, to be optimally motivated, Eccles et al. (1998) argued that an individual needs to say “yes” to the question, “Can I do the task?”, indicating expectancy for the task. Expectancies may be differentiated into two distinct factors: *Ability beliefs* and *expectancies for success* (Eccles & Wigfield, 2002). Ability beliefs refer to a person’s current sense of competence in being able to complete a task, whereas expectancies for success reflect how successful an individual believes he or she can continue to be in the future. For example, in the case of faculty engagement in higher education assessment, ability beliefs relate to the faculty’s current perceptions of their competence for conducting assessment. Expectancies for success, however, reflect faculty beliefs about being able to successfully improve and develop assessment skills and to carry out various components of the assessment process in the future.

Second, to be optimally motivated, Eccles et al. (1998) argued that an individual needs to say “yes” to the question “Do I want to do the task?”, indicating value for the task. Specifically, Eccles and colleagues proposed four different types of value: *Intrinsic value*, *utility value*, *attainment value*, and *cost*. Three of the four types of value (intrinsic value, utility value, and attainment value) positively influence an individual’s desire to engage in a task. Intrinsic value refers to the interest or enjoyment an individual derives from engaging in the task. For example, a faculty member may volunteer to serve as the assessment coordinator in her department because she finds engaging in assessment work inherently enjoyable or interesting. Utility value refers to the usefulness or relevance of the task to reach some long-term goal or other external reward. A faculty member who engages in assessment because he perceives it as being useful in improving pedagogical practices (and therefore student learning) is motivated by utility value. Attainment value refers to the extent to which a task is congruent with an individual’s identity or beliefs about oneself. For instance, a faculty member may be motivated to participate in assessment activities because it contributes to her scholarly achievements and she identifies as a scholar in her field. In contrast, cost, the fourth type of value, negatively impacts an individual’s willingness to engage in a task. Cost refers to an individual’s beliefs about the negative aspects of engaging in a task, how much the individual

perceives he or she has to sacrifice, or how much the task limits his or her ability to engage in other activities. The costs associated with balancing assessment responsibilities along with other responsibilities of teaching, research, and service activities are all too familiar to faculty in higher education.

Eccles, her colleagues, and others have measured the impact of adopting different types of expectancies and values in a number of longitudinal studies (Eccles et al., 1983; Wigfield & Cambria, 2010). A number of findings are worth highlighting. First, although current and future expectancies can be theoretically distinguished, researchers have been unable to separate them empirically in factor analytic studies. As a result, most researchers combine the two types of expectancies into a single measure. Second, in terms of measuring values, most researchers have focused on the positive values. Only recently has work begun investigating the impact of cost and how cost may combine with expectancy and values to influence motivation, specifically that cost may be negatively related to performance (see Barron & Hulleman, in press; Wigfield & Cambria, 2010 for reviews). In addition, because recent measurement studies of cost indicate that it may be a separate and distinct factor from expectancy and value, a number of researchers argue that cost should be considered a separate component in a revised Expectancy-Value-Cost model of motivation (see Barron & Hulleman, in press). Theoretically, motivation is then highest when an individual has high expectancies, high values, and relatively low cost for engaging in a task, which we can represent as $Motivation = (Expectancy * Value) - Cost$.

Using the revised Expectancy-Value-Cost model, this study explored the motivation of faculty serving as general education area coordinators. Specifically, the research question was: do area coordinators' perceptions of expectancy, value, and cost contribute to their motivation to engage in assessment of general education?

Methods

Research Team

The research team for this study consisted of three doctoral students in an educational measurement program, and two faculty members. None of the individuals on the research team have ever served as general education area coordinators. Team members had varying degrees of familiarity with general education assessment at the institution under study.

Participants

The participants in this study were faculty who served as area coordinators for the general education program or as a senior administrator of general education. The area coordinators spend half their time teaching in their discipline, and the other half of their time as area coordinators. Seven individuals were invited to participate, and all but one accepted. The person who declined to participate had recently changed roles in the university, and reported having a lack of time. The six who did participate consisted of the area coordinator for all five general education areas, and a senior administrator with oversight of general education. Participants' experience with general education assessment ranged from 2 to 11 years.

Procedure

We adopted a semi-structured interview approach, which Patton (2002) refers to as an interview guide. Because it is not a standardized procedure or script, a semi-structured interview guide allows the researcher to be flexible during the interview itself, while ensuring that major points are covered. Use of the interview guide approach also allowed the interviewer to follow up on interesting points or ask clarification questions, which we felt was important in this type of research situation. All interviews were conducted in teams of two interviewers, with one primarily responsible for asking questions, and the other primarily responsible for taking notes and monitoring a recording device.

We asked several main questions (Appendix A) to all respondents while leaving room for the interviewer to follow up on interesting responses. The questions were divided into two main categories: The area coordinator's personal perspectives and the area coordinator's perspectives of faculty teaching in their areas. Interviews were conducted between May and

Although we discovered many negative attitudes about assessment in our interviews, it is important to emphasize that the majority of respondents who were actively engaged in the assessment process also expressed appreciation for assessment.

Our purpose was to understand faculty opinions from a particular theoretical stance, in order to explore how to increase motivation. And, indeed, each component of a revised Expectancy-Value-Cost model of motivation offers practical implications for increasing motivation for assessment.

September; each interview lasted 45-60 minutes, depending on how much the respondent expanded on their responses or what follow-up questions were asked by interviewers. All interviews were audio recorded and transcribed verbatim for data analysis purposes.

Results

Overview of Coding

Specifically, institutions may want to consider implementing initiatives that increase faculty expectancies and values, and decrease the costs associated with conducting assessments.

Once interviews were transcribed, data were coded through a line-by-line consensus process (Fonteyn, Vettese, Lancaster, & Bauer-Wu, 2008) according to Expectancy-Value Theory. The research team read through each interview transcript line-by-line, and identified phrases or thoughts that related to a priori codes for expectancy, value, and/or cost; codes were recorded only when consensus between all team members had been reached (Creswell, 2013). As the data analysis commenced, new codes were added as necessary (i.e., emergent coding). For example, although we had a code for utility value, we quickly realized that respondents were not discussing assessment in terms of positive utility value (that is, they did not find results from assessment useful in their day-to-day work). Because all raters agreed that this was important information, we added a code to capture the lack of utility value that respondents were articulating. Furthermore, although previous quantitative research has measured current ability beliefs and future expectancies as a unidimensional construct, we chose to qualitatively disaggregate them. As themes emerged from the data, it became clear that respondents saw their current and future ability as two separate things, which we felt was important to reflect in the coding. We also saw a situational-expectancy theme emerging from the data, in which faculty felt competence in one area of assessment (such as the assessment of their major) but not in another (such as assessment of general education). A complete codebook can be found in Appendix B. In addition to the qualitative phrases identified for each code, frequencies of each code were calculated as a pseudo effect size, which helps demonstrate the practical significance of the results (Creswell & Plano Clark, 2011; Maxwell, 2010). As an indicator of the relationship between self-reported competency in assessment and amount of experience, number of years of experience and competency were plotted (Figure 1).

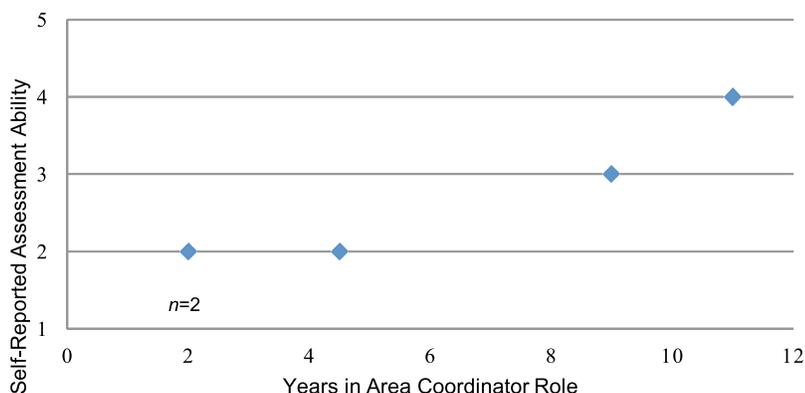


Figure 1. Relationship between years in coordinator role and perceived ability rating.

Coding Analysis

The results of the interviews and the subsequent qualitative data analysis via line-by-line consensus coding showed a clear pattern that aligned with a revised Expectancy-Value-Cost model of motivation. The relationship between expectancy, value, and cost had clear implications for respondents' motivation to invest (or not invest) significant effort and energy into assessment. Table 1 summarizes the frequencies of each qualitative code in this sample of interviews (for an expanded table that also includes representative phrases drawn directly from the interviews for each code, see Appendix B). The codes with the highest frequencies were V5: Lack of utility (n=41); V2: Utility (n=33); C1: Task-related effort (n=23); E1: Ability (current; n=21); and E4: Low expectancy (n=18). This frequency pattern was consistent across respondents.

Table 1
Qualitative Codes and Frequencies

Code	Frequency
E1: Ability (current)	21
E2: Expectancy (future)	11
E3: Expectancy (situational)	8
E4: Low expectancy	18
E5: Negative situational expectancy	3
V1: Intrinsic value/interest	7
V2: Utility	33
V3: Attainment	1
V4: Lack of intrinsic value	7
V5: Lack of utility	41
V6: Lack of attainment	3
V7: Value (other)	6
V8: Lack of value	16
V9: Extrinsic value	13
V10: Situational value	6
C1: Task-related effort	23
C2: Task-unrelated effort	6
C3: Loss of valued alternatives	11
C4: Negative Psychological Experiences	3

Note. Expectancy codes are E1-E5; Value codes are V1-V10; Cost codes are C1-C4

Discussion

Our research question for this study is: “Do area coordinators’ perceptions of expectancy, value, and cost contribute to their motivation to engage in assessment of general education?” Recall that according to a revised model of Expectancy-Value-Cost motivation (Barron & Hulleman, in press), an individual’s motivation to engage and persist in a task depends primarily on three factors: (a) an individual’s expectancy to successfully accomplish the task, (b) an individual’s perceived value for the task, and (c) how much the individual perceives he or she has to sacrifice or give up to accomplish the task (Wigfield & Eccles, 2000). Indeed, each person who was interviewed offered responses that directly expressed expectancy, value, and cost. The most frequent expectancies were related to ability or lack of ability to conduct assessment. As one respondent stated, “I think that many faculty are just baffled by the idea of assessment.” Not only do faculty lack expectancy for assessment tasks, but respondents consistently expressed that faculty do not appreciate or value the usefulness (utility value) of assessment. One respondent went so far as referring to assessment as “a waste.” In addition to low expectancies and lack of utility value, a recurrent theme was that assessment requires time and therefore significant cost. For example, one respondent discussed barriers to assessment as “Resources. Time. The big, the big resource is time, and that’s time at every single level.... time to develop instruments, time within the classroom, time in processing the instrument, time in reporting, time in workshops, time, time, time, time, time, time.” Moreover, the time required to do assessment is done in lieu of other valued alternatives, such as research or class preparation. As another respondent expressed, faculty time is a “finite pie.”

If motivation is a function of the product of expectancies and value, minus cost [i.e., $Motivation = (Expectancy * Value) - Cost$], low motivation for assessment is not surprising. Furthermore, if expectancy or value for assessment equals zero, the motivation equation starts at zero. If we then subtract cost, a negative value quickly results. In the context of the current study, faculty expectancies and value were both low and cost was high, resulting in low to absent motivation for assessment.

Although we discovered many negative attitudes about assessment in our interviews, it is important to emphasize that the majority of respondents who were actively engaged in the assessment process also expressed appreciation for assessment. For example, as one respondent noted, “Well, the attitudinal assessment we did in the department actually led to some changes in the curriculum, and I made some changes in my personal teaching style based on that. So, it’s been useful in changing instruction, even though it was not competency based and was just attitudinal.” In other words, not all respondents thought that assessment was “a waste”; in fact, as shown in Table 1, there are several high-frequency codes related to

We most frequently heard that faculty do not see the relevance or usefulness (utility value) of assessment in their day-to-day work with students. As one respondent stated, ‘I’ve had faculty tell me, how is this supposed to help me improve my teaching? How is this supposed to improve student success? There’s a huge disconnect...it’s not relevant to the individual faculty member.’

positive perceptions of both expectancy and value. Our purpose was to understand faculty opinions from a particular theoretical stance, in order to explore how to increase motivation. And, indeed, each component of a revised Expectancy-Value-Cost model of motivation offers practical implications for increasing motivation for assessment. Specifically, institutions may want to consider implementing initiatives that increase faculty expectancies and values, and decrease the costs associated with conducting assessments.

Suggestions for Improving Faculty Motivation

Course-embedded assessments ‘close to home’ for the faculty member also have the potential to be more relevant than assessments in which the faculty member is not at all involved.

Expectancy. Institutions may want to consider investing in initiatives that increase faculty expectancies for assessment. Specifically, initiatives may include training or collaborations that increase faculty capacity for writing goals and objectives, developing measures, analyzing the data, and interpreting findings. Providing support from trained professionals who are clearly in a supportive role (rather than an authority role) can also increase positive faculty expectancies. As one respondent stated, “I think the number one resource is to have a flesh-and-blood human being who knows how to establish learning outcomes and establish protocols for whether those learning outcomes are being achieved.” On our campus, programs who engage more with consulting services also routinely conduct higher-quality assessment than programs who do not (Rodgers, Grays, Fulcher, & Jurich, 2013).

Institutions that have the capacity may want to consider offering intensive hands-on support. Our institution offers intensive sessions focused on assessment through our faculty development center. Additionally, we offer an assessment fellowship for one month during the summer, in which faculty are paid to intern within our assessment center to work on a project related to their assessment practice. During the assessment fellowship, faculty and student affairs professionals receive assistance and support from assessment specialists. Experiences such as these increase the assessment efficacy of all involved. Although it is common for fellows to initially express fear and inadequacy related to assessment, faculty participating in the fellowship routinely express greater efficacy after the fellowship. A clear example of the efficacy built is illustrated by one respondent who said in relation to the assessment fellowship and similar programs: “...those things have just really made it to where faculty can go back and say ‘Wow, what we’re doing is...’”

That is, if we want to increase motivation for assessment, we need to actively pursue ways in which we can connect assessment with the discipline, thereby making the assessment relevant to the users of the information.

Another aspect of expectancy is perceived situational expectancy; that is, the respondents frequently stated that faculty lack expectancies for broad program-level assessment yet appreciate and are capable of conducting their own classroom or discipline-related assessment. If we are able to relate our broader assessments to what faculty do in the classroom, faculty expectancies to successfully participate in assessment activities may increase. Applying faculty-created, course-embedded assessments to program assessment may increase the expectancy (and value/relevance) for assessment. Faculty in disciplines that do not value a quantitative approach toward assessment may feel more comfortable with being exposed to a variety of assessment methods, such as performance assessments or dynamic criterion mapping (Broad et al., 2009), thereby increasing efficacy, interest, and relevance. Note that it is difficult to tease apart efforts to increase expectancy from efforts that increase relevance or utility (i.e., value) for assessment. Indeed, they appear to be related, and research indicates that expectancies and values are moderately correlated (Eccles & Wigfield, 1995); building efficacy is likely to increase value, and vice-versa.

Value. We most frequently heard that faculty do not see the relevance or usefulness (utility value) of assessment in their day-to-day work with students. As one respondent stated, “I’ve had faculty tell me, how is this supposed to help me improve my teaching? How is this supposed to improve student success? There’s a huge disconnect...it’s not relevant to the individual faculty member.” In order to combat the feeling of uselessness, one suggestion is to involve faculty gradually and in small steps, in assessment projects that are related to their own disciplinary interests (Kramer, 2008). Course-embedded assessments “close to home” for the faculty member also have the potential to be more relevant than assessments in which the faculty member is not at all involved. For example, some institutions that have implemented a course-embedded strategy for assessing general education have reported greater faculty endorsement of assessment, because it puts assessment in the “hands of the faculty” (Gerretson & Golson, 2005, p. 144). Doing so may make the implicit benefits of assessment more explicit.

Faculty also need to become involved at the very beginning of the assessment process, creating and evaluating their student learning outcomes. Otherwise, and particularly if the faculty do not even know what the student learning outcomes for their program are, it is no wonder that faculty do not find relevance in the assessment findings. Assessment professionals need to engage faculty in the creation or evaluation of their current student learning outcomes, posing questions such as: “What is it that you hope students are learning?” “What would be useful information for you to know about your students’ knowledge, skills, and abilities?” “What do you most passionately desire for your students to learn?” “What is the most important thing that you try to convey to students?” In other words, it is crucial to try to capitalize on inherent curiosity of the faculty and to help them tease out the most relevant pieces of information such as the situation described by one respondent: “I’m trying to work with faculty on things that help the faculty, and I think that processing the assessment data that we’ve been getting is something that captures their imagination.”

When faculty can state their learning outcomes and objectives, it is important to ask questions, such as, “Once you have information about whether your students know this, what will you do with that information?” In other words, utility or relevance must be included in the planning or reevaluation stages of the assessment process. Moreover, including faculty in this process increases their autonomy and ownership related to assessment, increasing value for the process. In the case of our university-wide assessment day, one respondent astutely observed that we do not currently involve general education faculty in assessment day. If general education faculty participated in assessment day, as proctors in the examination rooms or even in the general planning of assessment day, they may begin to develop greater value for the process or begin to see more clear connections to the results of the assessments and the work they do in their own areas. Engaging faculty in performance assessment rating has also increased faculty acceptance of assessment. One coordinator pays faculty for rating students’ writing assessments and critical-thinking assessments. Following each rating session, a brief focus group is conducted to review the outcomes and objectives for the respective assessment. Faculty raters are specifically asked, for example, “After going through today’s rating, what do you know about students’ critical thinking that you did not know before? What can we say about critical thinking?” Questions such as these are specifically related to increasing the relevance of the assessment. And if the faculty do not find the ratings relevant, they are provided the autonomy to help change the goals/objectives or assessment methods.

Creating assessment reports that are accessible and digestible are also key to increasing relevance. As one respondent mentioned:

I’m a cluster¹ duster. I dust the cluster and move on...I have to laugh at this... mentioning statistics and numbers to [members of my discipline] and most of us are like, holy [expletive]...it goes right over us...I know when we have the assessment meeting, you see people turning around and it’s like “I don’t know what to make of all this!”

It behooves assessment professionals to actively collaborate with faculty in creating digestible and useful reports that appeal to the perspective of the discipline. That is, if we want to increase motivation for assessment, we need to actively pursue ways in which we can connect assessment with the discipline, thereby making the assessment relevant to the users of the information.

Another value-related issue pertains to the intrinsic versus extrinsic motives for assessment. That is, if faculty feel that assessment is externally imposed, they are likely to become resistant (Crossley & Wang, 2010; Marrs, 2009; Welsh & Metcalf, 2003). There is support for the notion that faculty are more likely to embrace assessment when their institution portrays an intrinsic desire to learn from assessments, rather than an extrinsically-imposed accreditation perspective (Welsh & Metcalf, 2003). It is crucial that upper-level administrators convey an intrinsically-driven motivation for assessment at the institutional level. Appreciation for the relevance of assessment for institutional excellence is imperative for faculty to embrace assessment practice. As one respondent stated, “...I think for me to use assessment as effectively as I’d like to use it, and for the things that I’d like to use it for, I would need a culture that values it.”

¹ Cluster refers to the area of general education which the respondent is responsible for coordinating.

Given that faculty typically identify as scholars, counting assessment toward scholarship may further increase attainment value.

Autonomy, relevance, and ownership are all increased when faculty are involved to develop the assessment plans.

Initiatives that increase efficacy, capacity, and the relevance/utility of assessment may help to lessen some of the perceived costs associated with conducting assessment. Our findings indicate that given the opportunities and resources to build individual capacity and efficacy, faculty will wholeheartedly engage in student learning outcomes assessment at the program level.

Faculty also need to become involved at the very beginning of the assessment process, creating and evaluating their student learning outcomes. Otherwise, and particularly if the faculty do not even know what the student learning outcomes for their program are, it is no wonder that faculty do not find relevance in the assessment findings.

Institutions can demonstrate value for assessment in other ways as well. For instance, investing monetary resources into assessment efforts sends the message that the institution values assessment. Providing resources such as intensive workshops, assessment fellowships, and summer grants for assessment work demonstrates institutional value for assessment. It is important to note that assessment resources do not need to be monetary. As Sundre (2005) noted “Vision, high standards, and commitment cost nothing, but they mean everything to the development of a quality institution of higher education” (p. 43). Offering university-wide assessment excellence awards also sends the message that assessment is important (Sundre, 2005). Awards for assessment may, in turn, increase attainment value for the recipients. Another approach would be to count assessment activities as scholarship. Given that faculty typically identify as scholars, counting assessment toward scholarship may further increase attainment value.

By including faculty in assessment, they may experience greater autonomy. One respondent astutely noted that, rather than participating in an assessment fellowship herself, it is valuable for her to encourage general education faculty to attend the fellowship. She stated that she says, “Oh look, you come do this wonderful thing;” she felt that it was worthwhile to her to give up a fellowship in order to bring other faculty into the fold. Autonomy, relevance, and ownership are all increased when faculty are involved to develop the assessment plans. Moreover, increasing expectancies and value for assessment may also minimize some of the perceived cost associated with assessment.

Cost. Throughout the interviews, we heard themes of cost related to the effort required to conduct assessments, and often in place of other valued activities. One respondent observed, “Assessment isn’t just ‘oh we’re giving a test’, right? It’s the development of the test, it’s the giving of the test, it’s the reporting of the test, it’s the workshops that you’re going to do to help develop a new test.” Clearly faculty see the amount of time and effort required to conduct quality assessment, and many are not willing to invest their time in that way. Initiatives that increase efficacy, capacity, and the relevance/utility of assessment may help to lessen some of the perceived costs associated with conducting assessment. In other words, it takes less effort to do the things that we are good at and we value; if faculty begin to feel efficacious about conducting relevant assessments, they may begin to embrace assessment.

One respondent offered direct suggestions for decreasing the costs associated with assessment. Specifically, the respondent stated that currently academic departments differentially reward assessment efforts. The departments that value assessment tend to offer incentives that lessen the cost of engaging in assessment. For example, some departments offer a reduction in course load for those who are actively engaged in departmental assessments. In doing so, the department lessens the cost related to loss of valued alternatives, and is in essence paying the faculty for conducting assessment. As this respondent noted, “If the department head is rewarding assessment, then I think the faculty see the value.” The same respondent suggested that the incentive needs to become consistent across the university, perhaps by offering consistent financial rewards (e.g., “\$5,000 bonus”) and/or course load reduction for assessment. The respondent further suggested that summer grants to conduct assessment are ideal, given that the assessment work can be rewarded during the time that faculty are most free.

Limitations and Future Study

The current study included a small sample size that was appropriate for the intensive nature of qualitative research. In fact, we had reached saturation on many of the concepts that we heard from the respondents. Future research investigating experience and efficacy for assessment with a larger sample of faculty would be warranted. Given the academic structure at our institution, it made sense to begin by interviewing the general education leaders on campus. Our next steps will be to employ “snowball sampling” to follow up with general education faculty other than area coordinators; in other words, we will identify “cases of interest from people who know people who know what cases are information rich” (Creswell, 2013, p. 158).

One strategy for increasing faculty motivation for assessment would be making concrete connections between classroom and program assessment. Doing so increases the

utility for faculty. Strategies, such as course-embedded assessment have aided in making this connection (e.g., Gerretson & Golson, 2005). As another example, at our institution, involving faculty members in rater training sessions have also aided in bringing assessment findings back to the classroom.

Summary

Although it is tempting to conclude that the overwhelming majority of faculty do not and will not value assessment, we do not believe this is a static situation. Our findings indicate that given the opportunities and resources to build individual capacity and efficacy, faculty will wholeheartedly engage in student learning outcomes assessment at the program level. Faculty in our study felt strongly about being able to improve their teaching, and in turn, student learning. One respondent stated that “we just need to keep concentrated on the value of it for the student, not the value of it for accreditation.” Statements like these indicate that if faculty can see the value of assessment for improving student learning, then the cost associated with conducting good assessment is worthwhile.

The suggestions we offer here are simply that: suggestions. However, based on what we heard from our respondents, these are important considerations for assessment practitioners and administrators to consider when tackling the question of how to motivate faculty to engage in assessment. We need to find ways to make more people identify with a statement that one of our respondents made, that “the assessment data that I’ve seen has really helped me have confidence in why I’m doing what I’m doing and understand why I’m doing what I’m doing, and helps me convince others that this might be a reasonable path to go down.”

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Appendix A

Interview Questions

1. What does assessment mean to you?
2. What are some examples of assessment?
3. What is your experience with assessment?
4. On a scale of 1-5, 1 being novice and 5 being expert, how would you rate your level of expertise with assessment?
5. How long have you been a cluster coordinator?
6. How did you get into assessment?
7. What keeps you engaged in assessment?
8. Have you had any specific training in assessment?
9. How do you become a cluster coordinator?²
10. What do you gain from your role as cluster coordinator?
11. How much of your role as cluster coordinator is related to assessment? How much of it is other stuff? Estimate time spent on assessment.
12. What resources, personally and institutionally, does it take to do this assessment work?
13. What impact do you think this assessment work has (for you, for our students, for the institution)? In what ways?
Clarification question: In what ways has assessment been useful?
14. Is assessment driven by faculty or by administrators?
15. How competent do you feel in carrying out the assessment process?
16. What are the barriers to doing assessment? (i.e, carrying out, completing, improving, using results)
17. What do you hear faculty say about assessment? We are really interested in faculty engagement, both positive and negative.
18. How competent do you think faculty members feel in carrying out the assessment process?
19. What are the barriers for faculty members in doing assessment?

² This question was not asked to respondents other than the general education administrator, as it was answered fully during that interview.

Appendix B

Example Statements and Frequencies for Each Qualitative Code: Expectancy

Code	Frequency	Representative example	Representative example
E1: Ability (current)	21	“I think there’s a lot of faculty that truly understands what they’re doing, why they’re doing it.”	“And I feel like I can talk about any aspect of [area] now more cogently, more ah specifically, um, than I ever could have before.”
E2: Expectancy (future)	11	“I set out to really try to get a handle on assessment, and it was really hard to get a handle on it. So, I spent time with [the assessment liaisons] trying to work through the existing instruments, trying to figure them out and what they were measuring.”	“I think there’s others that don’t have the training, don’t know where to go, and I think we’re doing a lot better making sure that faculty have liaisons they’re working with.”
E3: Expectancy (situational)	8	“I think if you put me in charge of something I could get it done really well, but if you ask me to do it, I don’t think I have the skills that the assessment people [do].”	“They think assessment is CARS, and they’re not competent in that – locally they feel good about it.”
E4: Low expectancy	18	“They probably have the same kind of self-doubts that I had in my writing, in my classroom.”	“I think that the skills that are required to do good assessment are far beyond where I am right now.”
E5: Negative situational expectancy	3	“The main barrier is coming to some kind of consensus or agreement about what it is that we’re trying to accomplish.”	“If I were teaching people how to sell real estate, I could design an assessment because I think I know the technical steps that you have to do. But, in the [discipline] I don’t know what to do. There are some things that you can assess the outcome. If you’re building a boat, the question is whether it floats or not. And, if you’re doing heart surgery, the question is whether the patient survives. But, in the [discipline], it’s not that clear what that is that is the indicator of success.”

Example Statements and Frequencies for Each Qualitative Code: Value (1)

Code	Frequency	Representative example	Representative example
V1: Intrinsic value/interest	7	"I'm trying to work with faculty on things that help the faculty, and I think that processing the assessment data that we've been getting is something that captures their imagination."	"Right now I'm involved in a really exciting project. What's exciting about it is that we're doing something that, ah, most institutions, or no other institution has started to do – assess the [discipline]. And, I think that's a real opportunity."
V2: Utility	33	"Well, the attitudinal assessment we did in the department actually led to some changes in the curriculum, and I made some changes in my personal teaching style based on that. So, it's been useful in changing instruction."	"That amazingly enough that process of developing that scale informed my teaching more than anything I have ever done."
V3: Attainment	1	"I also began following the [discipline-specific] education research literature, and it's taken for granted in a lot of places that, sort of, these more modern pedagogies that are being developed ...on how to teach [discipline] are better, but, really, it's a controversial statement in a lot of corners. And, um, dealing with scientists, having data can be very powerful and persuasive."	N/A
V4: Lack of intrinsic value	7	"If you just ask the regular person that's not involved at all, who doesn't understand it, I think they're going to say we have to do it. None of them really understand."	"I wish it was resources driven, I wish that it, that the reporting did something else, um, but I, I think that much of the initial impetus is the reporting piece."
V5: Lack of utility	41	"Not gonna say I got interested, but was sort of forced to where we had to do a good job."	"The people who have the hardest time understanding this is [sic] the ones that cannot see how assessment in general education touches their class."

Example Statements and Frequencies for Each Qualitative Code: Value (2)

Code	Frequency	Representative example	Representative example
V6: Lack of attainment	3	“The personal resources that I have tried to develop are probably twofold. One, creation of boundaries. I am not the test, I am not the assessment, I am not the report, I am not the workshop, right? I am, I am, I am me!”	“‘And, it tries to force my teaching into some kind of a box that can be measured.’ That’s my sense of the general faculty account of what assessment does. It forces me into coming up with something that can be quantified and ignores what I do to raise people’s spirits and aspirations.”
V7: Value (other)	6	“Each one of them have taught me an immense amount about assessment, about negotiating with faculty, um, and have taught me that being in a leadership position is really a partnership with the people that you work with not a dictation and that the biggest benefit that I have gotten from CARS is the partnership and the feeling that I have always gotten of legitimacy, right? Um, from that relationship. And I feel like I can talk about any aspect of [area] now more cogently, more ah specifically, um, than I ever could have before. And that’s a direct relationship with the development of a set of questions and attitudes and belief processes and thinking related to assessment.”	“It’s a non-entity, because we’re not involved. It happens before we show up.”
V8: Lack of value	16	“My sense is that the assessment done for [area] has not had much of an effect on the university or on the [area] faculty.”	“If the assessment were something that was required for graduation, it might be more relevant, but to me, it’s a waste of a day, it’s a party day. It’s a waste of a day to do that, when it’s not really utilized with respect to anything that has to do with a student’s college career.
V9: Extrinsic value	13	“At the program and institutional level, assessment is driven by administrators; at the [area], department and course level, it’s driven by the faculty.”	“Pay them a couple hundred bucks. Money motivates, tragically.”
V10: Situational value	6	“The closer it hits to home, the more it’s valued.”	“We’ve certainly not had any gen ed discussions in the department of [discipline]...we do about the major, but not gen ed.”

Example Statements and Frequencies for Each Qualitative Code: Cost

Code	Frequency	Representative example	Representative example
C1: Task-related effort	23	<p>“I think we spend too much time on it. All we do is ever talk about it, we don’t use it, it’s not important enough, I mean...in the big picture of a student’s academic career, assessment is less than one percent. It’s not that important, and I know that CARS, that’s what they’re all about, but across the nation when I go to other conferences and we talk about assessment, nobody knows how to use those results, and XXX doesn’t either. So I think we spend a lot of time and money on a process that doesn’t really inform us to the level that it changes what we do with students, and so, you know, you folks all have jobs, and that’s wonderful, but I just don’t see that it’s as important, I don’t see it garners the importance of [garbled] more than anything else. And we do spend a whole lot of time and money on assessment at this institution, and to what end? We’re not graduating students any faster, they’re not getting any more knowledgeable than anybody else, so what are we trying to prove with doing assessment? That’s my perspective.”</p>	<p>“And what I think that faculty hostility is about now tends to be more this is a lot of work and we’re not getting a lot out of it. Right? So I’m tired of talking about assessment right, you haven’t shown me anything that we’ve gotten from doing this, right. And even if I can point back to the early days of [major], it’s the sort of the ‘what have you done for us lately?’ Right? And OK that worked for [major], but how’s that going to work for [another major]? ... But I can say, do you know why we have the... kind of technology that we have? In [major]? It’s because of assessment! Right? So you know while I can point to things, they’re not pedagogical or curricular improvements that faculty are hungry for.”</p>
C2: Task-unrelated effort	6	<p>“I would *like* to use it more in my own day today with what I’m doing, but there’s sort of a finite pie problem here.”</p>	<p>“Faculty are pulled in so many directions. You’ve got to be a good teacher, which takes enormous amount of time. You’ve got to be a scholar, you’ve got to have a commitment to the university in terms of service. So, how do you give assessment a higher priority than it currently has? Which is pretty far down, okay?”</p>
C3: Loss of valued alternatives	11	<p>“I think we spend a whole lot of money on it, I really do, and I’m not convinced it’s money well spent. You know, could we spend that money elsewhere?”</p>	<p>“I think we put way too much focus on assessment at the general education level and less focus on student success, and that’s truly what we’re looking at, is student success. And that’s what we should be engaged in, not how they performed on a test that really doesn’t measure a whole lot of anything.”</p>
C4: Negative Psychological Experiences	3	<p>“And then doing the [area] assessment test was very painful.”</p>	<p>“Most everybody who has been on the [area]...committee has been on the committee for a long time and they remember the scars of when we did this before.”</p>

Book Review

Gap Year: How Delaying College Changes People in Ways the World Needs.

Joseph O'Shea. Baltimore, MD: Johns Hopkins University Press, 2013. 200 pp. ISBN-13: 978-1421410364. Paperback, \$29.95.

REVIEWED BY:
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Global citizenship is a term that commonly circulates in academic and popular discourse. Its usage often conjures images of hopeful transformation. If individuals could just imagine themselves as citizens of a larger international or even global community, the political and social ills (e.g., poverty, conflict, environmental degradation) that result from narrow national interests could be reduced, or so the logic goes. This trickle-down theory of intrapersonal growth underpins Professor Joseph O'Shea's defense of and advocacy for the expanse of extended study abroad programming in *Gap Year: How Delaying College Changes People in Ways the World Needs*.

O'Shea's lithe (183 pages with references), straight-forward account is divided into two parts. The first offers a descriptive summary of stories participants in O'Shea's qualitative study relayed to him about their gap year experiences. In the second part of the book, O'Shea situates these stories within educational, psychological, and philosophical theories of education to build an integrated theoretical and empirical framework that explains the impact of gap year experiences for participants. He then utilizes this framework to make suggestions to gap year program planners regarding the design of gap year programs. I proceed by following the same format as O'Shea, commenting first on the design and findings of his empirical study and then moving to his theoretical analysis.

How do gap years pedagogically help people to learn and how do gap years help people become full members of civil society?

Prior to devoting five chapters to the reportage of gap year experiences in which O'Shea lets participants speak with minimal authorial mediation, he provides a brief introduction to his study and states plainly the problem that he hopes to address with his research: (a) Little has been done to examine the effects of the rising popularity of gap year programming in the United Kingdom, the United States, Australia and elsewhere; and (b) there is debate and mounting critique about the benefits of participation in such programs. In other words, "Although gap years have gained in popularity, their efficacy is unclear" (p. 7). Two primary and interrelated research questions frame O'Shea's study: How do gap years pedagogically help people to learn and how do gap years help people become full members of civil society?

O'Shea asserts that knowing what happens both during and after gap years will help educators better design gap year programming. Doing so, in turn, will help to address "the challenges of our time" through cultivating "smart, critical, and innovative thinkers...who use their talents to help others" (p. 1). In short, the gap year serves as an education intervention that can "contribute to growth in how young adults make meaning of themselves, their relationships, and the world" (p. 2).

Gap years are traditionally undertaken by volunteers from developed countries between high school/secondary school and matriculation to college or university. Participants live for nine to twelve months in a developing country (in urban or rural locales) and volunteer with a non-governmental organization (NGO), typically in either the education or public health sectors. The 400 participants in O'Shea's study took part in a gap year through Project Trust, a prominent UK-based international gap year provider. O'Shea collected data from three different sources: (a) Participant observations and interviews with approximately 180 students before and after their gap year experiences; (b) in-depth one to three hour interviews with 31 students who had completed their gap years and were currently in college; and (c) 400 gap year students' end-of-year reports. Their placements represented a broad spectrum ranging from a remote village in Guyana to downtown Buenos Aires, Argentina.

O'Shea identifies *change* as the overarching theme that characterizes both participants' rationale(s) for taking a gap year as well as their experiences during their gap year. In his empirical chapters entitled "Changes in Themselves," "Changes in Relationships," "Changes in Civic and Religious Perspectives," and "Changes in Ways of Thinking and Future Plans," participants report "wanting to experience poverty rather than watching it on TV" (p. 17) and through this experience "question [their] beliefs--why we are the way we are; why we do the things we do" (p. 81). Some report feeling changed "because I lived as a local. I saw the world from a villager's perspective" (p. 37). Others express skepticism about the authenticity of "seeing as a local," stating, "You try to be like common people here, but it's not the same if you have a return ticket; you can press the escape button and rewind" (p. 110).

His follow-up interviews with participants once they have returned home are particularly demonstrative of the lasting intellectual and emotional dissonance many volunteers felt as a result of their gap year.

O'Shea particularly highlights students who had negative, or alternately, very influential experiences over the year. Doing so allows him to draw conclusions from the margins that call into question or alternately support his general findings (discussed in detail below). His follow-up interviews with participants once they have returned home

are particularly demonstrative of the lasting intellectual and emotional dissonance many volunteers felt as a result of their gap year. As one participant recalled, “Last week, I was at my college’s 500 year anniversary and I was wearing coat tails and spent 90 pounds on dinner and I thought, what the [expletive] am I doing. That could have paid wages for Consuelos for a year” (p. 110).

In the second part of his account, O’Shea brings together delimited theories of student development, transformational learning, civic education, and cosmopolitanism. O’Shea argues that independent of one another, these theories are unable to account for the ways in which particular shifts in participants’ viewpoints come about or how these shifts can be facilitated in educational settings. However, O’Shea considers these theories collectively and utilizes them to build an integrated framework he terms “civic meaning making” that explains participants’ experiences in gap year programming. We might think of civic meaning making as a two-step process that makes clear the ways in which gap year participants interpret their subjective realities (e.g., of themselves, others, and the world around them) but also how their interpretive frameworks can be changed through participation in gap year programming.

O’Shea finds empirically and theoretically that gap years foster civic meaning making as well as changes in civic meaning making along cognitive, intrapersonal, and interpersonal axes. Cognitively, volunteers demonstrate increased capacities in understanding a wide range of issues (e.g., international relations, development aid, structural inequality) as well as an increased ability to critically interpret these issues; intrapersonally, volunteers came to understand themselves independent of the perspectives of others; and interpersonally, volunteers expressed a greater capacity to develop relationships with people different than themselves (i.e., from a range of national and socioeconomic backgrounds).

While O’Shea’s study is focused on gap years as non-academic, experiential programming, administrators and educators in both K-12 and higher education might draw upon O’Shea’s findings and civic meaning making framework to design assessment models for their own programs (e.g., study abroad, service-learning). The categories O’Shea utilizes to detail changes in participants’ behaviors, values, and attitudes (e.g., changes in tolerance and understanding, changes in self-understanding) readily lend themselves to program facilitators as categories of reference to provide on-course and summative assessment to program participants.

O’Shea has provided an innovative model of integrated empirical and theoretical research that is useful for both academics and practitioners (a rare feat). His study also helps to explain, through rich and descriptive accounts of participants’ gap year experiences, how gap year programming works to change participants’ thinking in ways that resonate long after they return home. The question that remains unanswered lies in the very premise

of O’Shea’s account. How do changes in the thinking of gap year participants who hail from developed countries (and whose liberal arts education, O’Shea contends, is not able to sufficiently expand students’ worldview) subsequently change the problems of the world?

The categories O’Shea utilizes to detail changes in participants’ behaviors, values, and attitudes (e.g., changes in tolerance and understanding, changes in self-understanding) readily lend themselves to program facilitators as categories of reference to provide on-course and summative assessment to program participants.

O’Shea concedes that possibilities for future research include understanding the impact of gap year programming on the communities in which gap year participants volunteer. However, as it reads now, the needs of these communities *help* to give meaning to the lives of gap year participants while the “actual impact of the volunteers’ service to the gap year community may have been limited” (p. 144). O’Shea reports that “nearly a quarter of Americans now say they do not have a strong sense of what makes their lives meaningful” (p. 144). However, “Individuals with a purpose and meaning are more fulfilled and likely to support others in need” (p. 144).

We are left wondering what those needs are and how or indeed if gap year programming might be calibrated so as to address them. It may not sound as lofty to characterize gap year programming as occasioning changes that participants themselves need or that countries sending volunteers might need. However, these are in fact the conclusions that can be drawn from O’Shea’s study. What the world needs is for another study, or perhaps is another matter entirely.

Book Review

Building a Culture of Evidence in Student Affairs: A Guide for Leaders and Practitioners.
Marguerite McGann Culp and Gwendolyn Jordan Dungy
(Eds.). Washington, DC: National Association
of Student Personnel Administrators,
2012. 259 pp. ASIN: B00A7B2SIY

REVIEWED BY:

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The main argument of *Building a Culture of Evidence in Student Affairs*, edited by Marguerite McGann Culp and Gwendolyn Jordan Dungy, revolves around the evolutionary, not revolutionary, process of establishing a culture of evidence. They advocate that the change be one of gradual development, not sudden upheaval. Throughout the book, the main discussion reinforces the point that designing and creating a culture of evidence is an ongoing process. As Kuh, Gonyea, and Rodríguez (2002) point out, assessments that use evidence-based data tend to provide information that can be reliably used by administrators to inform their decisions. Therefore, building a culture of evidence should not be seen as a one-time initiative, but is part of the regular business process of the student affairs division. This book's design supports this premise and helps practitioners by offering tutorials that guide the development of evidence-based assessment.

Building a culture of evidence should not be seen as a one-time initiative, but is part of the regular business process of the student affairs division.

The book also emphasizes the importance of building assessment capacity. A culture cannot be sustained if the members of that culture have not had the opportunity to learn the skills necessary to collect, analyze, and effectively use evidence. *Building a Culture of Evidence in Student Affairs* clearly identifies, with specific detail, how a student affairs division can accomplish the building of assessment capacity.

Overview

Building a Culture of Evidence in Student Affairs: A Guide for Leaders and Practitioners is written as a tutorial with a series of modules for the reader to use as a guide for topics related to the process of building a culture. The modules move in a thoughtful way from beginning the process through design and implementation, to more complex considerations and can be done in order; however, the meta-design allows readers to take an a-la-carte approach to the content, to use a module that best aligns with their professional needs and situation.

The book is divided into eight modules. The first four modules provide a primer to creating a culture of evidence:

Module one provides an introduction to the topic; module two is an introduction to culture of evidence topics; module three provides guidance to senior student affairs officers (SSAOs) on how to develop a culture of evidence on their campus; module four covers the roles of various types of learning, developmental and program outcomes in building a culture of evidence. The latter four modules provide a practical guide for how to implement a culture of evidence: Module five discusses various methods to collect data; module six provides a case study on how one institution built a culture of evidence; module seven gives an overview of how Council for the Advancement of Standards in higher education (CAS standards) can guide culture of evidence initiatives; and module eight provides a wrap-up to the book and a helpful tutorial covering essential topics for practitioners to build a culture of evidence.

A major strength of the book is its design; the book is clearly intended for practitioners. Each module contains quick tips from experts in the field, spotlights best practices, and includes extensive lists of print and electronic resources. The exercises at the end of the modules are likely to benefit readers by providing opportunities to apply the concepts that are covered in the module. Thus, the modules provide a practical approach to building a culture of evidence; but they do not insist on a strict theoretical framework.

Analysis

The book is unlike other texts that cover the topics of student affairs assessment and data. Unlike most books with multiple authors, the editors ensure that this book has one consistent voice. The consistency in style and format is refreshing. As a result, the reader does not have the sense of reading eight distinct essays on one broad topic, rather, the unity of voice emphasizes that each module relates to and compliments the other modules.

When compared to similar texts, this book is more practitioner-focused. The exercises at the end of each module are helpful for planning purposes. This book could be used to guide group meetings around the topic of developing a culture of evidence. It will provide valuable, concrete guidance to taskforces and committees charged with developing cultures of evidence.

The development of the book is one of its strengths. It is evident by the exercises and tips that the input gathered at an annual NASPA Assessment and Persistence Conference strongly influenced the editors. In particular, the strategies in module two for helping a student affairs leadership team build a culture of assessment are enlightening. The strategies speak to the current culture in student affairs. The discussion that contrasts differences between leading and managing was helpful. It provided the reader with a discussion of the theoretical aspects that inform leadership as it contrasts with the practical realities of managing a complex organization. Module 3 offered an unusual twist to the often-cited SMART goal definition. The focus on goals being assignable and

resource-conscious is an important factor that is often overlooked when organizational goals are developed. Module five provides a focused and comprehensive discussion of various methods for conducting assessment. This module could be a great resource in multiple settings beyond discussions around cultures of evidence. Assessment will be a key component of student affairs work. As student affairs professionals develop programs and services guided by outcomes, sound methods to assess those will be necessary.

The authors do a good job of focusing on the major audience, practitioners and chief student affairs officers, and writing for their perspective. This is not a text to be used in graduate level courses; it is a field guide for practitioners and leaders as they develop evidence-supported programs and services. Senior student affairs administrators will likely provide this book as required reading within their organization. Another strength is that the modules can, and should be used a-la-carte. Readers are not likely to peruse it from beginning to end, but will find it a strong resource and guide for specific situations. Not all organizations are in the same place when it comes to developing a culture of evidence and this book takes those differences into account.

As student affairs professionals develop programs and services guided by outcomes, sound methods to assess those will be necessary.

While this is a strong addition to the student affairs assessment and culture of evidence literature, there are four changes that could strengthen this book. First, the modules tend to cover too much material. In particular, module four would benefit from being split into two or three modules as the amount of material covered becomes overwhelmingly complex. Conversely, some of the topics in the modules could have used further development and extended discussion. For example, the role of faculty, discussed in module seven, could have been expanded to include methods for collaboration. Collaboration across an institution is an important aspect to developing a culture of evidence. This module would have been an opportunity to expand on that concept, which is mentioned in module one. Finally, there is some redundancy and slight inconsistencies around discussions of creating a culture of evidence. At least three of the modules (two, three, and six) define a culture of evidence; but while the definitions seem consistent from conceptual perspectives, there are slight contradictions regarding how a culture of evidence is defined and attained. If there is a second volume of this book, a deeper focus on how strong cultures of evidence in student affairs can have broader institutional implications is recommended.

This book has significant implications for the field of student affairs assessment. The accountability movement is a reality for student affairs and is a major concern when it comes to our programs and services. The editors tackled the crucial question “how do we know we are doing what we say we are doing?” This book provides student affairs professionals with tools to help them use data and evidence

to demonstrate how their programs and services contribute to student success and the attainment of institutional goals.

This book will be a pivotal resource for administrators who value data-informed decision-making. It provides a clear blueprint for how to develop an infrastructure to make this possible. Specifically, the editors and contributors advocate building assessment capacity at all levels of the organization. As student affairs professionals become actively involved in institutio higher education become scarcer, the need for development dollars will increase. This book provides

This book provides student affairs professionals with tools to help them use data and evidence to demonstrate how their programs and services contribute to student success and the attainment of institutional goals.

methods for demonstrating how student affairs units are good resource stewards; module six lays out the steps an organization can implement to demonstrate success in relation to national and organizational standards.

Finally, this book can be used to help practitioners learn how to develop evidence to demonstrate the role they play in creating meaningful and extraordinary educational experiences for students. The role of assessment and evidence gathering in higher education is to improve programs and services for students. I recommend this book to student affairs practitioners at all levels of the organization. Editors Marguerite McGann Culp and Gwendolyn Jordan Dugy have created an excellent resource for student affairs professionals.

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Book Review

Paying for the Party: How College Maintains Inequality.

Elizabeth A. Armstrong & Laura T. Hamilton.

Cambridge, MA: Harvard University Press, 2013. 344 pp.

ISBN-13: 978-0674049574. Hardcover, \$31.95.

REVIEWED BY:

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In *Paying for the Party: How Colleges Maintain Inequality*, authors Elizabeth Armstrong and Karen Hamilton argue the critical importance of the structure of both academic and social life in shaping students' experiences during college and social class mobility, or the lack of, after college. As the authors indicate, they did not set out to study social class in college. Rather, their initial study was focused on the college environment as a platform for studying sexuality. As the study evolved, however, the authors realized that the social classed-nature of the experiences of students in their study (and consequently, higher education in general) was too pervasive to ignore. As the authors acknowledged early on in the text,

I don't know how this project has become so much about class. Indeed, there was no escaping this fact as the study proceeded. We were greatly disappointed to find that the young women, similar except for class background, left college with vastly different life prospects (p. xii).

Throughout the course of the book, Armstrong and Hamilton artfully present findings from their five-year qualitative study that highlight the role that social class played in every facet of these students' lives in college and after their time at the institution ended.

Early in the book, Armstrong and Hamilton contextualize their work as existing within a larger societal paradigm that believes anyone can rise to the top if they work hard enough; this notion is the crux of the American Dream. Within this context, higher education is seen as a crucial outlet for upward social and economic mobility. Unfortunately, as the authors illustrate, "Students sometimes develop educational expectations and goals inconsistent with the class resources available to them" (p. 22). This reality seems to be left out of the larger picture about who is and is not included in higher education and who has access to social mobility through higher education.

This text is largely devoted to illuminating the ways in which social class background influences every aspect of the college experience from selecting the appropriate residence hall, choosing a major, navigating social life, access to dispensable financial resources, and availability of a backup plan through parental involvement. Armstrong and Hamilton argue that most higher education institutions have a largely unintentional sorting process that moves students

onto specific pathways. They dub these pathways *the party pathway*, *the mobility pathway*, and *the professional pathway*. An eye-opening finding from this study is the overwhelming social isolation of college students from lower socioeconomic status (SES) backgrounds. The students from lower SES backgrounds in Armstrong and Hamilton's study arrived at college knowing very few students, if any. This was in stark contrast to their peers from higher SES backgrounds who arrived on campus with a social network already in place. The authors discussed how these networks, or the lack of a social network, influenced experiences in college and post-college for all of the students in the study. In Armstrong and Hamilton's work, this social isolation for students from low SES backgrounds was captured in simple events like having another person to go to dinner with in the dining hall. One lower SES student expressed to the researchers how lonely she was in college and nearly broke down in tears as she shared her experiences with members of the research team.

This text is largely devoted to illuminating the ways in which social class background influences every aspect of the college experience from selecting the appropriate residence hall, choosing a major, navigating social life, access to dispensable financial resources, and availability of a backup plan through parental involvement.

Paying for the Party, overall, provides readers with a missing piece in the literature on the experiences of students who are first-generation and from low-income backgrounds. Higher education literature has traditionally focused on this unique population of students by exploring how parents' income or occupational prestige influences how students spend their time in college (e.g., students from lower SES backgrounds tend to work significantly more than their higher SES peers and tend to be less involved in extra-curricular activities on campus). Armstrong and Hamilton, however, add complexity to the literature on social class in higher education by illustrating the less tangible and measurable ways in which social class impacts the lives of students from low SES backgrounds.

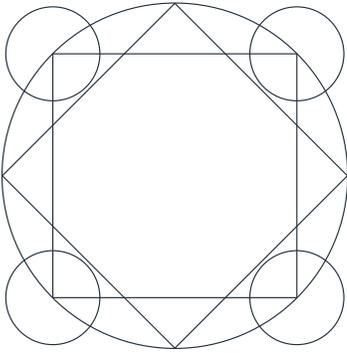
***Paying for the Party*, overall, provides readers with a missing piece in the literature on the experiences of students who are first-generation and from low-income backgrounds.**

There are a few key strengths of this text that readers should note when considering *Paying for the Party*. First, this book is in an exemplar of qualitative, ethnographic research in higher education and represents more than simply a fascinating and compelling story. Methodologically, readers can view this text as a primer for allowing participants' stories to drive a qualitative study in spite of researcher assumptions and a priori understandings. Further, the authors provide

multiple appendices that go into detail describing their research processes and important ethical considerations over the course of their research; both of these resources offer insight into the research process and can be instructive for other researchers. Another strength of Armstrong and Hamilton's book is the way in which it adds complexity to the study of social class in higher education. As the authors indicate, they want to highlight how "messy" social class really is in the lives of individuals, and in this case, in the lives of college students. Although the vast majority of research on students from lower social class backgrounds uses proxies such as parental income, parental education, or parental occupational prestige, these authors reveal other social class markers that emerged in their work such as divorce, chronic illness, death of a parent, or loss of a job. Further, the overwhelming majority of the research on social class or related phenomena (e.g., being from a low-income family or of the first generation in one's family to attend college) explores various forms of capital that influence what a student knows about navigating the college environment; however, as Armstrong and Hamilton indicate, there are many of other social class markers and artifacts (e.g., language/speech, clothing, accessories, hobbies, interest in a party culture) that play an integral role in how students from lower social class backgrounds experience college.

Methodologically, readers can view this text as a primer for allowing participants' stories to drive a qualitative study in spite of researcher assumptions and a priori understandings.

This text indeed has the potential to expand educators' understanding of students from a variety of social class backgrounds. Notably, this book is a telling indictment of higher education's complicity in allowing students from lower social class backgrounds to endure further marginalization during the college years, particularly at large, public research institutions like the one featured in this study. The party pathway described in the text clearly dominated at the institution in the study and likely dominates on many college campuses across the country. This pathway and the social network it offers are not accessible for all students. Overall, this text provides a wake-up call for educators to pay more attention to the student culture and institutional practices on campus that ultimately isolate students from lower social class backgrounds rather than help them achieve the upward social mobility that higher education has long promised.

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Assessing High Impact Practices Using NVivo: An Automated Approach to Analyzing Student Reflections for Program Improvement

Critical reflection allows students to synthesize their learning and deepen their understanding of an experience (Ash & Clayton, 2009). A recommended reflection method is for students to write essays about their experiences. However, on a large scale, such reflection essays become difficult to analyze in a meaningful way. At Roanoke College, we have developed a system to automate the qualitative coding process using a software analysis tool (i.e., NVivo). This inductive approach allows us to identify patterns in student learning that indicate effective and ineffective aspects of applied learning experiences. It provides a more nuanced and rich approach to the analysis of student learning outcomes in order to ensure the quality of our programs through continuous improvement.

Ash and Clayton's (2009) article on high impact educational practices (HIPs) describes the benefits of using student reflection essays as assessment tools and gives detailed prompts for eliciting reflective writing. Their DEAL model includes three key parts: Describe, Examine, and Articulate Learning. The prompt that is given to students provides scaffolding for a deep reflection by asking students to describe a key experience using only factual information; examine the experience from three perspectives (academic, civil engagement, and personal); and, articulate their experiential learning and how it might influence future goals.

At Roanoke, using the DEAL model provided a framework for students to create deep reflections rather than write only surface descriptions. The reflections have revealed what students learn from high impact practices. However, using critical reflection essays to assess an institution-wide program is difficult, given the length and personal nature of student essays. Initially, the program faculty attempted to score sample essays using the DEAL Model Critical Thinking Rubric (Ash, Clayton, & Moses, 2007) but found the rubric did not capture student voice about learning; therefore, they turned to an inductive analytical approach, which allowed them to identify themes that emerged organically from student essays and captured the nuance of student experiences.

Identifying themes in student essays is time-consuming and became infeasible when Roanoke College's experiential learning programs grew to include hundreds of students. Although we considered returning to survey assessment or analyzing only a sample of essays, we decided instead to utilize NVivo software and develop an automated approach to qualitative analysis.

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NVivo is qualitative analysis software that allows researchers to follow a variety of qualitative coding strategies and increase their speed with tools for organizing qualitative sources and themes. Additionally, NVivo provides many functions for quickly searching essays for specific phrases, analyzing data, and creating figures and graphics. While traditional applications of NVivo can be employed to save time while analyzing reflection essays, we developed a system using the software’s text search query function that completely automates the process. We developed our system using 171 research reflection essays written by students. Then, given the early success of our automated coding process, additional NVivo search queries were developed to analyze the other high-impact practices in the experiential learning program at Roanoke College (i.e., internships, service-learning, and study-away).

Method

Our automated system uses a framework of syntax developed to work with NVivo’s text search query function. Before developing syntax, the different research themes were organized, and fourteen themes (identified in Table 1) emerged organically from the student essays. When identifying and organizing themes, care was taken to be specific, knowing that themes could later be combined, so that no data would be missed when automatically searching.

While traditional applications of NVivo can be employed to save time while analyzing reflection essays, we developed a system using the software’s text search query function that completely automates the process.

Table 1

Research Essay Themes

Category	Theme
Collaboration with others	Relationship with advisor Collaboration with peers Collaboration with staff and other experts
Gained skills/knowledge of field	Applied coursework Graduate school/career preparation Improved presentation skills
Personal growth	Increased confidence Overcame obstacles Increased self-efficacy Improved time-management
Other	Presenting served as a learning experience Encountered obstacles and frustrations Wants to continue research Struggled with time-management

We have found that when our automated system is coupled with a person who checks the search query results, we are able to identify all themes with complete accuracy.

While identifying the themes that emerged in the essays, an inventory of the word combinations used to describe each theme was organized. This inventory was later developed into a framework of syntax. We began developing the framework using a sample of 49 of the 171 student essays, which we first coded manually using a grounded theory approach (Strauss & Corbin, 1998). Once the essays were manually themed, each theme was analyzed for the syntax students used to describe it. The text search query function within NVivo was then used to search for the syntax corresponding with each theme until the query function yielded the same results as found in manual analysis. A text search query was developed for each corresponding theme. An example of a theme and its corresponding syntax is shown in Table 2.

The results of the text search queries were compared to the manually identified themes. Once we ensured the results of the text search query were accurate for the first sample of 49 essays, we ran a new sample of student essays through the queries. At first, the queries were inaccurate, frequently missing themes and falsely identifying other themes that were not present. The accuracy of each query was improved by following a process of manually coding essays, running the essays through the queries, assessing the accuracy of the queries compared with the manual coding, and making small changes to the queries to increase accuracy. This process was repeated until all 171 research essays were analyzed both manually and automatically using the queries. The text search queries became increasingly

Table 2
Example Theme and Syntax

Theme	Query
Relationship with advisor	"Dr. & question"~15 OR "Dr. & thanks"~9 OR "Dr. & excellent"~15 OR "Dr. & amazing"~9 OR "working & closely"~3 OR "one-on-one" OR "worked & closely"~9 OR "discussing & Dr."~8 "advisor & explained"~9 OR "Dr. & mentor"~9 OR "professor & closely"~5 OR "Dr. & collaboration"~9 OR "Dr. & collaborate"~9 OR "Dr. & collaborated"~9 OR "Dr. & collaboratively"~6 OR "Dr. & support"~9 OR "Dr. & understanding"~9 OR "Dr. & helpful"~9 OR "advisor & collaboration"~9 OR "collaboratively & Dr."~5 OR "met & weekly"~5 OR "learned & mentor"~5 "help & mentor"~5 OR "Dr. & meetings"~5 OR "Dr. & always"~5 OR "one & professor"~4 OR "faculty & guide"~8 NOT "rather & Dr."~5 OR "support & advisor"~9 OR "Dr. & together"~9 OR "Dr. & guidance"~9

accurate each time an additional set of essays was analyzed, until no themes were missed with the automated coding. In order to further improve the accuracy of our system, text search queries were skewed so that the searches identify all themes present in the essays, along with extra essays where themes may not be present; this allows for the possibility to review query results and filter out any wrongly identified themes. We have found that when our automated system is coupled with a person who checks the search query results, we are able to identify all themes with complete accuracy. A summary of the process for developing each query is visually outlined in Figure 1.

Implications

The NVivo query approach led to increased efficiency in the assessment of most HIPs included in the experiential learning program at Roanoke College. Developing the system required an undergraduate student assistant to work full-time on this project for three weeks. The automated system is currently being used to effectively analyze undergraduate research, internship, and service-learning essays. A student assistant can automatically analyze reflection essays, run analyses on the data, and write a report on the findings in approximately one to two days.

Although effective for several HIPs, the methodology did not produce reliable results for study-away reflection essays. When analyzing study-away reflections, we followed the same approach outlined in Figure 1 but found the results of the queries to be consistently inaccurate. We believe this is because students participating in study-away programs at Roanoke College were required to reflect, but they were not given a structured prompt (e.g., Ash & Clayton's [2009] DEAL model). This lack of structure led to inconsistent and often vague reflections that were difficult to analyze with text queries. Therefore, we recommend that those trying to emulate our automated analysis provide their students with structured prompts.

Initially, we had concerns that in automating the process, the integrity and authenticity of the reflection essays would be lost. We recognize that the automated approach does not replace a manual and in-depth analysis of student essays for a deep understanding of individual student growth; however, from an assessment standpoint, increasing the speed of qualitative analysis allows for more responsive program improvements based on student learning data. Prior to automated coding, student assistants analyzed qualitative data at the end of each semester, and there was not enough time to review the data and implement changes before the beginning of the next semester. Additionally, because qualitative data is coded using consistent text search queries, more comparisons can be made across programs. Furthermore, an efficient approach to qualitative analysis eliminates the need to analyze only a sample of essays, a practice that will likely result in missed opportunities for improvement.

Based on our findings, we believe our automated system is applicable to institutions and programs interested in analyzing reflection essays for assessment purposes. However,

An efficient approach to qualitative analysis eliminates the need to analyze only a sample of essays, a practice that will likely result in missed opportunities for improvement.

Automated qualitative analysis holds promise for institutions of all sizes, even large universities where qualitative assessment practices may seem impractical.

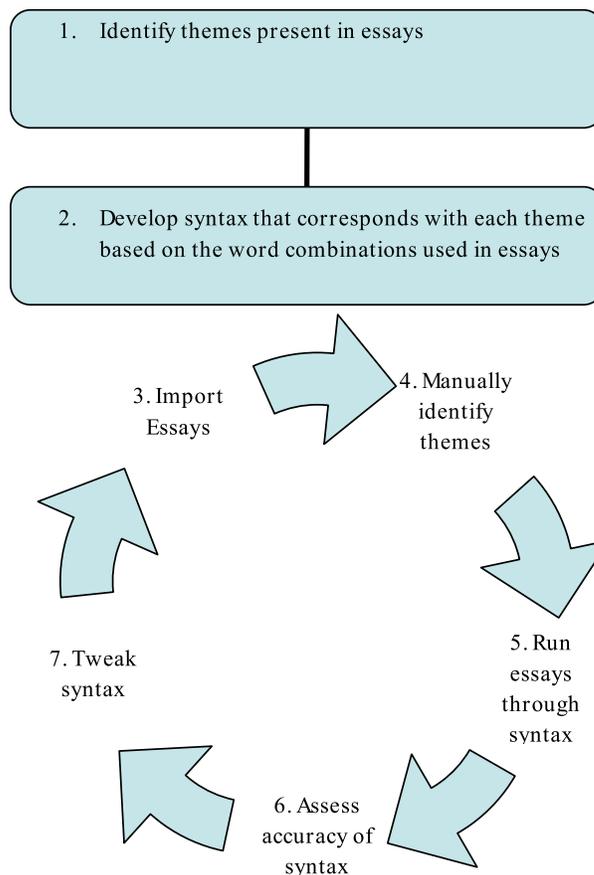


Figure 1. Developing a framework of text search queries. Repeat steps 3 through 7 until text search queries are completely accurate.

student reflection essays must be structured by prompts, and researchers must develop a unique system of themes and corresponding syntax specific to the experience. Automated qualitative analysis holds promise for institutions of all sizes, even large universities where qualitative assessment practices may seem impractical. The automated system is highly adaptable, with the query method working well for most high impact practices at Roanoke College.

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RUMINATE: INTEGRATING THE ARTS AND ASSESSMENT



ENCLOTHED COGNITION

Spring-Autumn (Singapore)
 Photographs by Qozop, 2013
www.qozop.com

Overly focusing on the debate of “qualitative versus quantitative” frames the methods in opposition. It is important to focus also on how the techniques can be integrated; such as in mixed methods research. More good can come of social science researchers developing skills in both realms than debating which method is superior.

–James Neill
 University of Canberra
 Centre for Applied Psychology

Encloded cognition is the term used to describe the influence clothing has on the psychological processes of the individual wearing them (Hajo & Galinsky, 2012). Through his camera lens, artist Qozop challenges stereotypes by having pairs of relatives appear in each other’s outfits of traditional Asian clothing or contemporary fashion. The result is a series that brings what might be two seemingly conflicting perspectives together in the same frame to foster understanding and appreciation.

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