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Curriculum Designed for an Equitable Pedagogy

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Abstract: Rather than viewing curriculum as linear, a post-modern, learner-centered curriculum design is a spiral or recursive curriculum. Post-modernism provides a much less stable foundation upon which to build a model of student learning, a model that recognizes and even celebrates individual difference and one that is supported by research on how people learn. We propose one such curricular approach through an examination of a Bachelor of Integrative Studies program.

Keywords: learner centered; pedagogy; curriculum

1. Introduction

As a result of various societal factors, one of which is the decline of unskilled manufacturing jobs coupled with a severe economic crisis, there is increasing pressure upon colleges and universities in the United States to become more accessible and equitable. An action plan was launched in 2006 to address the accessibility, accountability and affordability of higher education in the U.S. in response to findings such as 60% of U.S. citizens between ages 25–64 have no postsecondary education (Census Bureau, 2004) and of those pursuing a degree, 40% take at least one remedial education course which comes at a cost to tax payers of over \$1 billion yearly [1].

Various strategies have been used to address the complex issue of educating a public that has not previously had much interest or ability in pursuing higher education. Much of the burden rests with the community colleges, who in spite of many and varied approaches to the issue of accessibility, continue to have extreme difficulty in getting even 50% of those enrolled to complete a two year degree [2]. The National Center for Postsecondary Research has been conducting research in multiple states in the U.S. tracking the success rate of innovative programs aimed at student success and retention in community colleges, specifically a variety of linked-course learning communities. The findings indicate initial success with learning in the linked course experiences; however, the overall finding suggests that the learning community model may need to be carried throughout the entire curriculum if it is to have any long-term impact on graduation rates or total accumulated credits. In other words, the one-time experience does not have a lasting effect on student learning strategies.

The learning community is just one mechanism under the umbrella of constructivist pedagogy that has come to be known as learner-centered pedagogy, a term coined and attributed to Barr and Tagg [3]. For the past decade discussion of shifting toward a learner-centered paradigm has become the norm in higher education in the U.S. However, as illustrated by the limited successes with linked courses, while much progress has occurred in individual classrooms across the country in affecting this shift, less has been achieved at institutional levels. In this paper we will argue that the limited success of these constructivist pedagogical strategies is due to the overall design of curriculum, which has not yet changed to reflect a constructivist or learner-centered, equitable focus. Instead, it is a relic of a previous paradigm that prevents individual classroom innovation from reaching its full potential, and by extension, prevents students from achieving their potential through an accessible and equitable educational plan or curriculum.

2. Curriculum in the Age of Modernism

The modern era presupposed a stability to the universe that was reflected in our educational system. Hunkins and Hammill wrote about modernism saying that "life could be viewed as mechanical, that there existed a stable-state universe, that goals could be separated from the experiences designed to address those goals."[4]. Since Franklin Bobbit's 1918 work, The Curriculum, schools in the U.S. have modeled curricula according to principles of scientific management with the goal being educational efficiency [5]. This atomistic view of learning launched a factory model of education that still exists in large part today. Ralph Tyler refined Bobbit's work in 1949 with his Basic Principles of Curriculum and Instruction, a work that epitomizes the technical aspects of curriculum [6]. The Tyler Rationale as it came to be known is a cause-effect model. Doll (1993) commented that the Tyler Rationale was predicated on a positivist certainty, a rational and stable view of reality that lent itself to a mechanical view of learning [7]. In a factory model of education, students become the raw material that is molded or shaped according to quality controls. Each stage along the assembly line of education adds to the end product, the graduate. Presumably graduates emerge educated once all the discipline content has been added. The student in this model is passive, a receiver of knowledge, acted upon rather than actively participating in the learning process. In this model curriculum is rigid, unbending, a fixed collection of courses delivered in a linear sequence with little opportunity for electives or deviation. Content is owned by the discipline and disseminated to students who become acculturated by discipline specialists. John Tagg (2003) elaborated on this saying, "A 'college education' is the sum of the student's experience of a series of discrete, largely unrelated, three-credit classes."[8].

Underlying this approach to curriculum are five assumptions about student learning [9]. The first is that curriculum needs to be linear because learning is an additive process. The second assumption is that everyone learns in the same way and that if we deposit the information into students (to borrow Freire's banking analogy) then students will know the information and know it in the way it was presented to them. Assumption three is that time plays a critical role in learning. Tagg observed that our educational system is obsessed with time with the result being that time is the constant and learning is a variable. The credit hour, an amalgamation of the minutes in a course over the weeks in a semester, is the coin of the realm [8]. This measure determines degrees, majors, minors, faculty load, *etc.* In short, the assumption that the time it takes someone to learn something is indicative of one's intelligence drives the educational system as a whole. The fourth assumption is that error is negative. In a factory model, error is a mistake or flaw, something to be avoided at all cost. The fifth assumption is that knowledge is an entity that is owned and controlled. Discipline knowledge from one discipline does not transfer into another, thus when students change curricula, they lose credit hours.

3. A Constructivist/Postmodern View of Curriculum Design

Post-modernism provides a much less stable foundation upon which to build a model of student learning, a model that recognizes and even celebrates individual difference and one that is supported by research on how people learn. A curriculum designed according to a post-modern view of learning will challenge each of the assumptions of the modern era. Rather than viewing curriculum as linear, the design will be a spiral or recursive. The concept of a spiral design is not new. Although it is most often associated with Bruner (1960) who viewed learning as a reciprocal, active and social activity, the roots of the spiral curriculum go back to Dewey and Piaget [10]. Wiggins and McTighe (2005) describe the spiral curriculum as a curriculum designed around ever-deepening, recurring inquiries into ideas [11]. They recommend that curricula be designed around enduring questions, key performance tasks and rubrics. These become the blueprint of the design, and students in such a curriculum revisit these questions as their understanding of the key issues deepens. The three items around which the design is created, enduring questions, performance tasks, and rubrics, represent the three main foci of learner-centered design: the need for community and power-sharing, for learning to be relevant, and for ongoing formative assessment to monitor the process. The combination of these elements helps foster learner autonomy and develops learning skills that are transferrable and life-long.

The post-modern curriculum also acknowledges the individual nature of student learning and the importance that prior knowledge plays on an individual's understanding, and the role of sharing disparate views and understandings in the individual's learning process. As such, collaboration and active learning become key features. Doll (1995) described the postmodern curriculum as a "gathering or matrix of interrelated occasions" [12]. He saw the linear curriculum as a continuum of particles as opposed to the postmodern curriculum which is built on relations. In a design of this sort, students learn from multiple sources and places. Learning is not confined to information disseminated in a classroom setting. Reflection plays an important role as does ongoing assessment, both formative and summative in order for individuals as well as teachers to gage students' depth of understanding.

For individual learner-centered activities to have lasting impact, like the linked courses we referred to earlier, they need to be housed in an overall structure that reinforces the emphasis on learning and creates an institutional environment that is truly learner-centered.

4. A Model Curriculum

We undertook the challenge of designing a learner-centered curriculum, our bachelors of integrative studies (BIS), using constructivist design principles that challenge many of our longstanding rules of curriculum design. Tierney (1995) said that we cannot consider curricula divorced from the context in which they are situated [13]. Our program is situated in a career-focused university where the emphasis has been on employability upon graduation. The university was founded for the purpose of retraining displaced lumberjacks 125 years ago when the lumber industry in Michigan collapsed. The focus on jobs has been consistent since that time. We are at an interesting juncture because once again the Michigan economy is making it necessary for many adults to return to the university to reinvent themselves. Both returning adult learners and traditional aged students face a challenging future where jobs and the workforce in general change rapidly. It is difficult to make any guarantees to anyone regarding future employability because the landscape continues to shift. Rather than training for a job in a society that some say is becoming *dejobbed*, we emphasize to our students the need to demonstrate talents and abilities, multiple skills and adaptability, along with the ability to learn and transfer skills to new contexts, thereby emphasizing the important role of education in fostering accessibility to multiple career paths and options [14]. Our degree program is in many ways a return to the original mission of the university as articulated by our founder but designed for workers in a new century in an entirely new economy and social reality.

Learner-centered curriculum design begins with student learning outcomes, in other words, design is driven by assessment. Rather than designing a curriculum by considering the content to be delivered, a learner-centered design begins by designers articulating the outcomes, or competencies that students should be able to demonstrate at the end of the program as well as identifying how students will do so. This is what Wiggins and McTighe referred to when they called for design to be organized around enduring questions, key performances/tasks, and rubrics [11]. Katz (2010) points out that, "we know more than we used to about learning outcomes, but not enough. We know far too little, however, about how to put the knowledge we do have to practical use in transforming both our pedagogical technique and curriculum design to enhance student learning" [15]. When we set clear, demonstrable ways by which students will be asked to prove the achievement of the outcomes, then consistency between or among faculty members teaching a single course or across multiple sections of a single course increases. So while agreement on learning outcomes may be a challenge, the rewards of doing so are many. Ideally, teachers have learning outcomes in mind for individual units within a course as well as for the course as a whole. Likewise, programs need stated learning outcomes. If we have used ideal learner-centered academic plan design, the design of our academic plan is based upon student learning outcomes. So, we began the process by asking what knowledge, skills, and abilities do we want students to be able to demonstrate upon completion of our program and in individual courses?

When we developed the learning outcomes for the BIS program, we relied on some of the statements provided by the Association of State Colleges and Universities and the American

Association of College and Universities regarding general education outcomes [16]. From those we developed five general outcomes that we would expect of all graduates regardless of their chosen course/discipline preparation emphasizing our viewpoint that a learner-centered curriculum is language intensive both in writing and speaking:

- 1. Graduates will demonstrate exceptional communication skills as demonstrated by written pieces in the program portfolio, including a personal philosophy statement, a skills assessment statement, as well as selected pieces of writing that demonstrate specific competencies of the individual's academic plan and general education.
- 2. Graduates will demonstrate exceptional presentation skills both in an oral presentation in the electronic portfolio that demonstrates the individual's specific competencies as outlined in his or her academic plan as well the ability to articulate the interrelatedness of the separate disciplines within the academic plan.
- 3. Graduates will demonstrate self-assessment skills and the ongoing development of those skills in the program portfolio both in reflective journal assignments and semester assessment rubrics.
- 4. Graduates will demonstrate team building skills as demonstrated through cooperative learning experiences in the orientation and capstone courses as well as individual service learning experiences.

We ask students to develop, with our assistance, a minimum of three learning outcomes tied directly to their individual course plan; subsequently graduates will demonstrate discipline competencies including knowledge of content area as well as the ability to use the language of the specific disciplines demonstrated through selected works in the portfolio.

The key features that underpin our design are sharing power with the students by creating community, and infusing assessment throughout the process in order to create coherence and to monitor student progress toward achieving learning outcomes. Bernstein (1971) wrote that integrative design combines one's vertical knowledge with his or her horizontal knowledge [17]. By vertical he meant traditional academic knowledge and by horizontal he meant one's personal knowledge gained through experience. The point where these two intersect is where relevance is achieved and relevance is key to learner motivation.

The design of our curriculum is based upon this premise. The unifying element is the ongoing assessments that weave together the fabric of each individual's unique program design (see Figure 1).

The rise of studies like cultural studies, women studies, popular culture, minority studies, urban studies, *etc.* has given integrative design visibility. These interdisciplinary programs focus on a central theme examining the theme or problem from multiple disciplinary lenses. They tend to include arts and sciences disciplines like psychology, sociology, humanities, and literature. Our program, while housed in the college of Arts and Sciences, is not limited to those disciplines. In fact, a large number of students begin the program with an associate degree, often in a technical field.

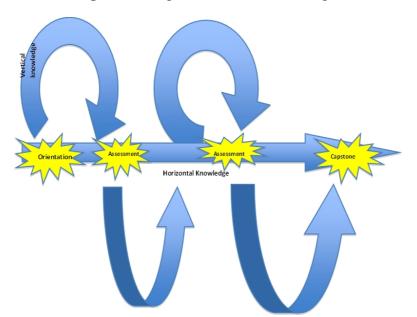


Figure 1. Integrative Curriculum Design.

The BIS asks students to focus on multiple capacities that they wish to develop and combine for individualized career paths. Most students enter the program with at least one year of college credits, if not more. The non-linear nature of the program is essential for these students, for their entry points all vary and the knowledge they bring with them differs widely. One course, the orientation/capstone experiences and general education core provide commonality among the various academic plans. Regardless of concentrations, minors, associate degrees that are combined to create the individual's program of study, the orienting and culminating experiences requires students to develop and demonstrate the programmatic learning outcomes in addition to the three (or more) individually developed learning outcomes that relate to their individual course of study.

The orientation to the program begins the ongoing assessment and reflection and requires students to build their academic plan. The three main written artifacts required include (1) a reflective piece called "the Road to the BIS", a narrative that outlines their learning and experiences, inside and outside the classroom (horizontal and vertical) that have led them to this degree path; (2) a philosophy statement in which they define integrative learning, and develop a full explanation of their individualized learning outcomes and how those intersect with their prior knowledge; and (3) the academic plan the outline of their learning outcomes and the coursework as well as other experiences that they will use to reach those outcomes. The plan is non-linear. Rather than focusing on an entry point that one builds upon in a steady progression to an end point, students pull together multiple knowledge sources and tie them together. To make an analogy, it is like creating a collage with a theme that emerges from the interplay of the parts. The challenge for the students is to discover the commonalities and interplay among their various areas of content knowledge.

We believe that technology, specifically online learning tools, can be used to circumvent some of the barriers to learner-centered design that traditional curriculum design of the instructional paradigm present. Specifically, online tools can break the time-bound barrier and place-bound barrier of the instructional paradigm as well as provide creative means for conducting ongoing assessment. Our orientation course is conducted in a fully online environment for three reasons. First, some students are not physically able to attend classes on campus; second, it is a way for us to build community; and third, it is a way for us to conduct ongoing assessment. Building community in a program where no two students take the same courses is a challenge, and for that reason we have employed online tools to compensate. The orientation and capstone classes are conducted simultaneously in one course shell in order for the capstone students to serve as mentors to new students. The students complete different assignments but take part in discussions together. This configuration also provides the opportunity for the orientation students to see the completed portfolios of the capstone students so they have an idea of where they are headed.

The capstone experience requires the students to complete and present their portfolios. In the portfolio the student demonstrates his or her attainment of the various learning outcomes. The completed philosophy statement and a professional development plan for the future are also requirements.

We conduct advising in an online environment as well as face to face. This provides the opportunity to conduct semester-by-semester assessments and for students to exchange dialog regarding their courses and their progress. Another feature of this online environment is a blog on their current learning experiences.

The open design of the BIS offers students a tremendous amount of control and autonomy. They essentially create their own learning outcomes and program with the assistance of the program coordinator who assures that it is integrative by design. The degree requirements ---120 credits total with at least 40 at the 300 level or higher, an orientation/ capstone course experience, and a coherent degree plan that does not replicate any existing degree---are limited to the rules of the instructional paradigm we could not break.

5. Growth through Assessment

We believe that one of the strengths of our program, beyond its accessibility, flexibility, and autonomy, is its emphasis upon assessment. We view assessment as an opportunity for growth, and our students engage in continuous self-assessment, as well as multiple forms of formative and summative assessments, the goal being to make the process of learning intentional. It might seem strange to some that we would include assessment as a program strength and see it as a benefit rather than an onerous imposition, but we believe that formative assessment helps teachers and students to know where they are. Self-assessment helps students in two primary ways: it helps them become more self-conscious, or intentional, about their learning; it plays a central role in developing learner autonomy.

Self-assessment and reflection are both important, when we are talking about learner autonomy and promoting an equitable learning process for the student. Wasserman and Beyerlein (2007) draw a distinction between these two forms of assessment [18]. Self-assessment involves studying one's own performance in relation to strengths/improvements/insights; whereas, reflection involves reviewing a period of time to search for significance based on new learning. Reflection focuses on reconsidering what things mean and thinking about why one understood something that way at that time. Self-assessment, on the other hand, focuses more sharply on evaluating one's performance. The assessment tools that we will present offer students the opportunity to do both. We employ both forms assessment.

Learning is about change, and while students will usually say that they are going to college in order to learn something or to get a degree in a specific discipline, they rarely say they are going to college to change themselves, which, in truth, is the goal of an accessible and equitable education. Indeed, if the education process is successful, they will be different people when they emerge from the experience, and reflection will help them to recognize and accept that change. This is much less true of the non-traditional students entering the program after spending time in the workforce or other non-academic setting. Many of these students are keenly aware of the need to change, or as they would say "reinvent themselves."

Assessment is also about monitoring and documenting change at the classroom, course, and programmatic levels though admittedly, the amount of course and classroom assessment available to us because of the individual nature of each student program is limited. Classroom assessments, the tools that teachers use to monitor whether learning is taking place in their course are generally formative. Course-level assessments are used to determine whether or not students have achieved the stated learning outcomes for a course. One way that we collect course-level assessment is through our ongoing reflective journal and advising discussion board that is conducted through a blackboard course management system. Students share perceptions of different classes on a discussion forum. In order to prevent this discussion forum from becoming a forum for complaining about professors or work, students are required to list the learning outcomes for the course and discuss specifically the projects and assignments that helped them achieve those goals. They are asked to discuss the specifics of what they learned rather than the enjoyment factor.

A second piece of the semester-by-semester self-assessment is a reflective journal that is also submitted through the blackboard course management system. They maintain a journal that is organized around the programmatic learning outcomes as well as their individual learning outcomes. Each semester they add and revise the previous semester entry. We ask them to do this using track changes so that we can more easily monitor changes.

A third, less private, ongoing assessment is the BLOG defining integrative learning which they return to each semester and revise and refine as a cohort.

A well balanced assessment plan also monitors programmatic change. Just as individual students should use assessment to monitor their growth and achievement of learning outcomes, faculty members and administrators can monitor program strengths and weaknesses through ongoing assessments. The authors of *College Learning for the New Global Century: A Report from the National Leadership Council for Liberal Education and America's Promise* make a good point when they write, "Students should know from the time they enter college that they will be expected to complete milestone and culminating projects—'authentic performances'—to demonstrate both their progress in relation to essential outcomes and their ability to use the learning outcomes in the context of their chosen fields" [16]. The authors recommend that programs provide diagnostic, interim, and capstone experiences for students to see their progress on expected outcomes. Regular assessment of student learning, at the beginning, middle, and end, indeed throughout the academic plan, is a hallmark of learner-centered programs.

Keeling *et al.* (2008) also write that "the purpose of higher education is not simply to process students through a series of stages, checking off their satisfaction of a sequence of requirements; these measures do not alone speak of the achievement of the institution's mission and goals. Operational

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effectiveness does not necessarily equal overall institutional effectiveness; students can pass their courses, accumulate enough credit hours to graduate, and get a degree without necessarily achieving the broad learning outcomes the institution, the public, parents, and students desire" [19]. Assessment enables programs to document what students have gained individually and what the program provides collectively.

A learner-centered curriculum must demonstrate that the program provides its graduates with demonstrable knowledge, skills, and abilities. More importantly, perhaps, in learner-centered curricula, is that students be able to identify what they have learned, where they have grown, and what they are able to do. The capstone course requires students to develop an electronic portfolio (aka website) that is used as a tool for gaining employment and as a programmatic assessment tool. At the end of each semester the portfolios are evaluated using a rubric that outlines the learning outcomes for the program. All portfolios are reviewed initially by the program coordinator then by other faculty and the program advisory board. They are also linked to the program website thus making them public documents. This raises the stakes for the students and increases the sense of relevance to the assignment, making it what Wiggins and McTighe would call a "key performance" [11]. The combination of direct and indirect assessments provides multiple perspectives on the learning that is taking place with the hope that the multiple measures support rather than refute each other. The use of multiple measures for assessment also keeps with our post-modern approach to curriculum design. Rather than any single perspective taking precedence, we acknowledge the need for multiple perspectives that enhance and deepen our understanding.

We also employ most of the standard measures of program performance including student enrollment and retention data, graduate exit surveys, alumni surveys, and employer surveys. These data reveal that the program has quadrupled in size in the past five years as has the graduation rate. Student retention is high and graduate exist surveys show high satisfaction with the program. The majority of our graduates have achieved their goal of entrance into graduate school, new employment positions, or promotion within their current position of employment. Employers are satisfied with our graduates and perhaps the most resounding positive is employers who have supported other employees in gaining entrance to our program.

We recognize that the success of our program is not solely because of curriculum design. We have the advantage of a high percentage of adult learners who are highly motivated to succeed. Many have extensive learning experiences to draw upon. But the openness and flexibility of the curriculum design are attractive to these individuals and as adults, who have learned to be responsible for themselves, they are ready to be responsible for their own learning. They take ownership of their program design and the completion of the bachelor degree is not simply the attainment of a piece of paper they needed for employment purposes but instead it represents a personal accomplishment and for some the attainment of a life-long goal. That being said, though, we believe that it is the constructivist elements of the program that creates the environment for success. Our traditional aged students by virtue of stepping away from a prescriptive curriculum/program are taking a risk but a risk that demonstrates a willingness to take responsibility for their learning and to a great degree shift their thinking from "what do I want to be" to "what do I want to be able to do." That represents a shift in paradigms. Rather than thinking that the prescribed program equals entry to a specific job, a view that empowers the program rather than the student, the shift in focus to the learning outcomes, empowers the learner and focuses the student on the demonstration of his or her skills and abilities rather than checking off courses on a list.

6. Implementation

In a report on learner-centered curriculum reform initiatives Jones (2002) emphasized that faculty preparation is essential [20]. Just like the learning environments that we have described for students, the environment for faculty embarking on these opportunities require opportunities to explore and to fail without consequence. The curriculum changes that Jones described were focused on pedagogical changes that faculty adopted in their individual classrooms. Addressing the actual structural design of the curricula is a larger issue that requires collaboration. Participants need to understand that for a curriculum to be learner-centered, learner-centered pedagogy within individual classes is needed along with a curriculum design that places those courses in a learner-centered context or framework. Therefore, the approach to such reform requires two simultaneous efforts: a focus on pedagogy within the courses and the redefinition of the curriculum design. Many institutions have already made significant advances in introducing learner-centered pedagogy and many successful strategies have been coordinated through faculty centers and many fine books are available to guide the process. The Professional Organizational Development (POD) Network is also a useful resource, providing workshops, conferences, consultants, and other resources for faculty development [21].

The second faculty development effort must focus on curriculum design in regard to programs and majors. We will not pretend that persuading faculty to adopt radical changes in their thinking about curriculum is an easy sell. Implementation is really all about persuasion and in persuading two terms used repeatedly by researchers on curricular change to determine the success of innovative programming are compatibility and profitability. Compatibility is seen as the degree to which the program fits the norms, values, and goals of the institution, the culture. Profitability refers to the gain individuals will experience as a result of making a change. The first step in persuading participants to be open to new ideas is to reduce threat associated with change. Various studies have reported on the implementation process of curricular change [22-25] emphasizing the need to understand and respect the institutional or college culture. Understanding culture is part of showing that one understands the opposition's worldview.

In gaining acceptance of our bachelor of integrative studies (BIS) we tried to emphasize the cultural compatibility of the program. As we noted earlier, The BIS program is situated in a career-focused university where the emphasis has been on employability upon graduation. At first the idea of an integrated degree program would seem in conflict with traditional programming that prepared students for specific jobs in the fields of technology, allied health, business, and social services. However, we were able to demonstrate that our focus on helping students become employable with multiple skill sets was in keeping with the Founder's vision. Perhaps most important, though, was highlighting the fact that the BIS self-designed academic plans could not replicate existing programs. That caveat was essential to reducing the threat of a new program that might draw someone's students away. The reduced sense of threat is a key starting point, but in addition to that, faculty need to sense that there is some profitability to the new venture.

Profitability, the degree to which the program benefits the campus, is essential for successful implementation. In the example of the BIS implementation, the new program was perceived as a profitable addition to the curriculum. Faculty members immediately recognized the opportunity that the degree offered to individuals who, as working adults, had very specific objectives in terms of what they needed to learn and who otherwise might not be able to find a good match with existing programs. The program also promised to become a recruiting tool for students who had left the university without completing their bachelors and entered the workforce, but now needed or wanted a degree in hand. A further benefit was its potential for retaining students on wait-lists (usually up to two years) for two-year applied associate degree programs in the College of Allied Health. The BIS offered them the opportunity to gain a bachelor's degree and remain engaged with the university while waiting for their specific career focus in allied health. Further, it served as a means of retaining students who could not find the program that suited them: it enabled them to build multiple skill sets; and, because in building individual programs, students often use existing minors and certificates, it proved profitable across campus as a program that increased other program minors. So the benefits to the campus were many.

Both compatibility and profitability must be present for success. Burkhardt (2006) summarizes as follows: "Strategic engagement and translation must operate at the cultural or symbolic level and the economic or structural level both internally and externally in order for the innovation to be owned as compatible and profitable within the larger institution" [26]. Put more simply, people support what they invest in. They need to take ownership and remain invested and engaged.

7. Conclusions

Our BIS program is an experiment in learner-centered curriculum design, and it is a work in progress. We continue to assess and make changes as needed. Surveys of our graduates indicate high satisfaction with the focus of the degree and their ability to get hired or promoted after completion. One student wrote, "I believe the BIS program is an incredibly valuable degree option. It allowed me to complete my undergraduate degree requirements when there were no other options open for me. Because of the BIS, I have been able to complete a graduate degree and have secured a position that I truly enjoy. The BIS degree was a lifesaver for me!" Not all programs can or should be this open; however, if we are to begin to truly shift to learner-centered equitable institutions, we must reconsider the design of our curricula and where possible create learning environments that are authentic, collaborative, and driven by assessment. Our assessment should also reflect the post-modern view of education by planning for multiple perspectives, multiple measures that include reflection and self-assessment as a means of fostering learner autonomy and subsequently student success.

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