

MAXIMIZING RESOURCES

FOR STUDENT SUCCESS

Competency-Based Education as a Potential Strategy to Increase Learning and Lower Costs

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JULY 2014

INTRODUCTION

Competency-based degree programs have enrolled and graduated students for decades, but only recently have they garnered much attention from the national media. In part, competency-based programs have received publicity because they emphasize the explicit demonstration of student learning. Controversial research suggests that many students are not learning much at many colleges and universities in the U.S. (Arum and Roksa, 2010). In addition, policymakers, researchers and other stakeholders increasingly realize that large segments of the American population are ill-served by traditional, residential postsecondary education, and that competency-based education may provide a better way to increase college access and completion. While Western Governors University, perhaps the best-known of competency-based institutions, was chartered almost two decades ago, several institutions and systems—such as Capella University, Southern New Hampshire University, University of Maine at Presque Isle, and the University of Wisconsin System—have recently announced their adoption of competency-based degree programs.

Competency-based education differs from traditional postsecondary education in that it explicitly emphasizes demonstration of knowledge for degree progression, rather than the accumulation of course credits through seat time. The difference between the two approaches is best illustrated by a phrase that proponents of competency-based education use to describe traditional higher education: “Time is fixed, while learning is variable.” A student in traditional higher education, say a business major, sits through a variety of courses. Because these are credit-hour-based, the amount of time the student spends on each course is roughly equivalent, as well as fixed (typically one hour in class per week over 15 weeks earns one credit). The amount learned, however, varies from student to student and from course to course. Most important, we are unsure what the student has learned by the end of his or her course of study. For example, with a 3.0 grade point average and a degree in business, we assume a student knows something about business. Exactly how much is unknown, because the grade point average does not tell us. In addition, we have no idea as to the student’s knowledge, skills and abilities in specific areas, such as understanding double-entry bookkeeping, or the ability to make a cogent presentation to an audience.

Conversely, when “learning is fixed, while time is variable,” what a student has learned during his or her course of study is much easier to discern. In a true competency-based program, students take as much or as little time as they need to learn the material. They make progress toward degree completion only by mastering individual competencies, rather than taking courses and accumulating credit hours. Competency-based programs emphasize mastery of competencies through demonstration, and each degree program is based on a specific list of competencies. Unlike with many traditional degree programs, we are more certain of how much a student has mastered, and in exactly what subject areas.

As with many areas of higher education, the phrase “competency-based” has been used in a variety of ways in the national discourse. Many people are generally referring to one of three types of postsecondary educational approaches when discussing competency-based education.

- 1) One is a traditional course- and credit-based system, with a focus on alternative assessments such as portfolios instead of examinations. Alverno College is one example of this approach.
- 2) Another approach is a system where students progress to degree by achieving mastery of competencies, taking as little or as much time as needed. Students achieve mastery by studying the institution's curriculum and are assessed using institutional assessments. Western Governors and the new programs recently begun by Southern New Hampshire and the University of Wisconsin System are examples of this approach, which we focus on in this paper.
- 3) The third approach involves prior learning assessment, where students take an assessment at college entry, such as an examination or construction of a portfolio, and are granted some sort of recognition for their knowledge that advances them toward degree completion (such as the awarding of course credits or competencies). The College Level Examination Program (CLEP) is probably the best-known example of this approach, although many schools have internal assessments for prior learning.

Some institutions offer students opportunities to combine elements of all three approaches.

Admittedly, the line between mastering competencies within an institution and prior learning assessments is blurry. Prior learning assessment is characterized by a demonstration of knowledge, skills and abilities gained elsewhere before beginning studies at an institution. Competency-based education allows a student to spend as little, or as much, time as needed to gain mastery of a competency, and then the student is assessed to determine whether he or she has mastered it. Clearly, there is little difference between assessing the student at entry, and allowing a student to take an assessment only a couple of weeks after entry: The central issue is whether the student can demonstrate mastery of a competency, regardless of where the competency was mastered.

Some competency-based institutions might object to prior learning assessment being characterized as a form of competency-based education, because many prior learning assessments, such as the CLEP, result in the granting of course credits rather than competencies. Some competency-based programs have explicitly rejected the traditional course-credit system, but in a general sense there is little difference here. Both approaches reject the idea that a student must spend a certain number of hours in the classroom to progress through college, and instead emphasize that demonstration of knowledge and skills is what truly matters.

Competency-based education offers the intriguing possibility of a postsecondary innovation that can increase college access and completion, as well as lower the costs of college for students and the institutions. Breaking the link between learning and time provides the flexibility that many nontraditional students need. Emphasizing the demonstration of learning, rather than the process of learning, allows students to gain recognition of their competencies at entry as well as progress faster through school.

Not everyone agrees with the rosy picture painted by proponents of competency-based education. Amy Slaton (2014, p.1) sums up the view of many in higher education when she says: "At best, so-called competency- and proficiency-based higher education is a world of good intentions and uncritical enthusiasms. At worst, it

seems to be the fulfillment of conservative cost-cutting visions that will put our most enriching higher education experiences still further out of reach for many Americans.” Critics argue that competency-based education does not result in adequate learning on the part of students, compared with what they would have learned if they had attended a traditional degree program. In addition, because many of these programs are marketed based on their lower cost, they will attract more disadvantaged students. Because these disadvantaged students will not be receiving a “real” education, we will inadvertently create a two-tiered system of learning.

While there have been some studies of competency-based education in the field of medicine (e.g., Hatcher et al., 2013; Morcke et al., 2013), there is a dearth of research into competency-based education as it is currently being implemented in the U.S. at the undergraduate level. Thus, there is little literature to rely on, and instead we base this paper on interviews with institutional leaders from several public and private institutions that currently have competency-based degree programs, are in the midst of expanding existing competency-based programs, or are beginning to implement new competency-based programs.

Competency-based degree programs represent a sea change for postsecondary education in many areas, such as funding and student aid, assessment of student learning, and faculty roles and work life. Given the dramatic difference between the two approaches, it is not surprising that two of the most high-profile institutions involved with competency-based education either began with it at inception (Western Governors University) or established a unit separate from the rest of the university (Southern New Hampshire). This poses one of the greatest challenges for public four-year institutions considering the development and implementation of competency-based degree programs: How does an institution make the shift from traditional postsecondary education to competency-based education? We focus on three questions that any institution considering an expansion into competency-based education should consider.

- 1. *Why jump on the competency-based bandwagon?***
- 2. *Do competency-based programs lower costs, both at the institutional level and the student level, and if so, how?***
- 3. *What strategies have successful institutions used to implement their competency-based programs?***

WHY IMPLEMENT A COMPETENCY-BASED DEGREE PROGRAM?

Given the historical reliance of U.S. postsecondary education on credit-hour-based courses as the fundamental building block of the college degree, as well as the number of regulatory agencies and other groups that have authority over institutions and their degree programs, establishing a competency-based degree program is not a simple undertaking. This then raises the question of why institutions are moving in this direction. Indeed, so many institutions have inundated Western Governors University with queries about their approach that, twice a year, the university teaches a daylong seminar on implementing a competency-based program, with representatives from institutions across the country attending. From our interviews, we have identified three reasons why schools consider adopting this innovation.

First, *institutions view competency-based degree programs as appealing to the institution's potential applicant pool, and to potential employers of its graduates.* The students at many of these institutions tend to be less wealthy and older than traditional college students, and they often have families and are employed full-time, thus balancing many responsibilities as they earn their college degree. Due to their nature, competency-based programs allow scheduling flexibility that semester-based course-credit programs do not, and many students have an easier time fitting their studies into their schedules.

Because of their age, many of these students begin college with significant work experience. Their experience allows them to use prior learning assessments, or quickly master some competencies; traditional programs would usually require them to take coursework to earn the same progress toward degree completion. Institutions see competency-based programs as allowing students to graduate more quickly and at a lower cost, which, not surprisingly, proves a great attraction for lower-income students. Many of these students have also accumulated credits at a variety of institutions, and traditional institutions may decline to accept many of their credits, particularly if time has passed since the student took the course. With an emphasis on prior learning assessment and mastery of competencies, these students can quickly progress regardless of whether their previous credits are formally transferred into the institution.

Because these institutions typically serve older, lower-income students, many of whose academic experience is well in the past and whose academic records may be spotty, their students often seek a college degree with the sole purpose of enhancing their careers. Many competency-based degree programs are designed with specific industries in mind, often in consultation with local businesses as to what they seek when they hire. Earning a competency-based degree is thus attractive to the type of student the institution typically attracts, not only because of its lower cost and flexibility but because it enhances career prospects.

Competency-based programs may also attract students in regions where the number of high school graduates is declining and competition for new college students is increasing. These institutions realize they are not Ivy League universities, and as the number of high school graduates declines, they will face fiercer competition to enroll students. To maintain enrollments, these institutions will have to enroll students who may not fit the typical

college-bound profile. In addition, some school districts are implementing competency-based education at the high school level. These students will be comfortable with the competency-based approach to education, and will likely seek out similar types of programs at the postsecondary level. With their flexibility, student mentoring and focus on education to enhance workforce development, competency-based programs are seen as key to successfully enrolling and graduating these types of students.

Second, and related to the first point, *competency-based degree programs are viewed as congruent with an institution's historical mission*. Institutions adopting the competency model are not at this juncture residential, research-focused universities; they are institutions with a strong emphasis on undergraduate teaching and student learning, often with nontraditional student populations. If an institution plans to adopt an educational innovation that is potentially disruptive to its current approach, adopting one that is closely aligned with what it is already doing is a sensible strategy.

Competency-based degree programs emphasize intense student-faculty contact, consistent with the institution's current emphasis on teaching. These programs often assign an individual coach or mentor to each student, who then checks in with the student periodically, as often as once a week, and is there to intervene and help the student with any problems. These programs strongly emphasize learning; students cannot progress through the program unless they can demonstrate that they have mastered the competencies. Such an emphasis on student contact and student learning outcomes as the core mission is appealing to schools that have traditionally viewed themselves as teaching institutions.

Third, *competency-based programs show promise as a strategy to improve efficiency during a time of limited resources*. As one leader commented, traditional institutions employ faculty members within a "cottage industry," a reference to an industrial system in which individual families produce goods within their own homes rather than in factories. In the context of higher education, the cottage industry occurs because each faculty member designs his or her own course materials and assessments, teaches the material in his or her own way, advises a small group of students, and grades student assessments.

Because competency-based programs are not course- and classroom-based, these tasks can be broken apart and scaled up. At some competency-based institutions, there are two roles for the faculty. One group of faculty members serves as full-time coaches and mentors to students, advising them as they progress through college. The second group teaches the curriculum, and student contact focuses on content-related matters rather than general advising. Because competency-based programs may not have traditional courses, but instead groups of students working on a particular competency at various stages of learning, the faculty can interact with a larger number of students compared with the traditional classroom-based course.

One hallmark of students attracted to competency-based degree programs is their desire for flexibility, so these programs are often offered online as distance education programs. Institutions interested in competency-based programs often have an existing information technology infrastructure that supports online education, so

moving toward competency-based education is not as challenging for them as it might be for some institutions. In terms of scale, online education requires significant information technology investments but not investments in buildings and in-person amenities, allowing increased student enrollments at a lower cost than with a new residential degree program.

HOW DO COMPETENCY-BASED EDUCATION PROGRAMS AFFECT COSTS?

As with other issues around competency-based education, there is no explicit research into the cost structure of competency-based education, especially in comparison with traditional postsecondary degree programs. What follows is gleaned from our interviews, and as an overall conclusion, the effect of competency-based education on costs appears highly conditional. From the student perspective, cost savings depend on the type of program the student enrolls in and the pace through the program. From the institutional perspective, cost savings depend on exactly how the competency-based program is implemented.

STUDENTS

Claims that competency-based education can save students money fall into three areas: aggressive recognition of prior achievement by the student, tuition that is both low and based on time periods rather than number of registered courses, and the availability of online learning resources.

While almost all postsecondary institutions accept some type of transfer credit for students who have accumulated credit hours at previous institutions, competency-based education programs tend to be much more open to granting credit for prior achievement. This is a natural consequence of the philosophy underlying competency-based education: Demonstration of proficiency is the desired goal. As a consequence, these programs often recognize prior achievement explicitly, by generously accepting transfer credits, so students need to take fewer courses to obtain a degree. In addition, students who have become proficient in a variety of areas, either through prior coursework or work experience, can in turn rapidly establish those competencies without having to spend seat time in a course. Both approaches result in students spending less time in college, with lower tuition bills compared with traditional postsecondary programs.

Similarly, students can lower their overall amount of spending on tuition by rapidly progressing through the curriculum. Some competency-based programs price their tuition as an “all you can eat” model, in which students pay a set amount every semester (often defined as a six-month time period). Students can attempt as few or as many competencies as they desire during this time period. Conversely, if these students had enrolled in a traditional program that charged per credit hour, their tuition bills would be higher.

This flexibility, however, does come at a cost. Students save money under this approach only if they make significant progress toward their degree each semester. A student who struggles to complete one competency in a semester, for example, may end up paying more in tuition than a student who enrolled in a single three-credit-hour course at a traditional institution. The cost savings here depend very much on the competencies that students bring at entry to college, as well as student motivation and pace through the program.

Finally, some of the currently established competency-based programs are partially or entirely online. These programs are highly structured, and their learning management systems provide students with all of the material they need to establish proficiency. Students in these programs do not need to purchase textbooks, which can be a significant cost. The College Board estimates that students spend on average \$1,200 per year on textbooks (Baum and Ma, 2013), a significant amount of money, especially for low-income students.

INSTITUTIONS

Whether competency-based education can increase efficiencies for institutions is much less certain. This is due to the startup costs for these programs, and whether we think of cost savings in the short or long term. In addition, some institutions are implementing competency-based education with a traditional faculty model, while others have radically transformed the faculty's role, resulting in a much different cost structure.

Startup costs for new competency-based programs can be grouped into two somewhat overlapping areas: instruction and assessment, and back-office systems. On the instructional side, competency-based programs usually require a restructuring of the curriculum, as well as new assessments that are mapped to this curriculum. Institutions typically provide funding for the faculty to engage in this process, above and beyond normal compensation.

In terms of back-office systems, interviewees frequently noted that off-the-shelf student information systems, such as software for course registration, transcript generation and disbursement of financial aid, are structured for students enrolled in traditional, credit-hour-based systems. Schools struggled significantly in adapting these systems to their new degree programs, and in some cases designed their own systems in-house.

Together, these initial investments in curriculum, assessments and back-office systems can be a significant cost for institutions seeking to expand into competency-based education. These costs suggest that the decision to begin a competency-based program is not one to be taken lightly from a fiscal perspective, and that institutions that wish to be successful must commit to investing in these programs for the long run.

Besides startup costs, institutions face two choices in how to structure their degree programs. First, will the new degree program reside within existing structures in the university (such as a department), or will it exist as a separate unit? The University of Wisconsin's Flex Option is an example of the former, and Southern New Hampshire's College for America is an example of the latter. In the Wisconsin system, the competency-based

degree programs are situated within existing degree programs, with the same faculty as in the traditional degree programs. At Southern New Hampshire, the competency-based degree programs are offered through a stand-alone unit, in order to provide the programs with more autonomy. It is unclear whether either approach yields more savings, but restructuring the faculty role, as described below, is probably easier to do within a separate unit.

Second, what role will the faculty play in the new competency-based programs? Institutions such as Wisconsin, Westminster and the University of Maine at Presque Isle have retained the faculty's traditional role, and with the exception of how the curriculum is structured, these programs appear similar to traditional postsecondary degree programs. Western Governors and Southern New Hampshire, on the other hand, have radically revised the faculty role by splitting faculty duties across several groups. At Western Governors, traditional faculty activities have been split among four groups.

- 1) Teams of faculty members and administrators design all of the curriculum and assessments, as well as provide information technology support. For example, instructional materials are posted on the web, and faculty members serving as course mentors do not need to design any curricular materials.
- 2) Student mentors meet with students regularly and make sure they are on track to graduate. These individuals serve as counselors more than anything else.
- 3) A group of faculty members serve as course mentors for specific topic areas, and spend their time conducting small-group learning and one-on-one tutoring, to teach students the material.
- 4) Grading of assessments is done by a fourth group, without faculty status, hired on a per-assessment basis. They are trained on grading rubrics to ensure that student assessments are graded correctly.

Unlike with traditional postsecondary education, each course/competency is taught the same way by different faculty members, using the same assessment, and different groups of faculty members specialize in their strengths (e.g., mentoring, teaching concepts) rather than doing a little bit of everything. In theory, this specialization leads to increased efficiencies, as each group focuses on one main task.

With most competency-based degree programs, there is no structured classroom time, so faculty members can spend more time with students rather than spending time lecturing; students spend quite a bit of time on their own and then interact with the faculty when they have questions. This allows the faculty to interact with more students than with the traditional postsecondary approach of faculty members teaching students within classrooms.

However, two institutions we interviewed have begun to believe that complete flexibility may be problematic in terms of increasing student success; some students have trouble maintaining adequate progress to degree without some sort of structure. These schools are beginning to offer more organized, small-group instruction (similar to a course), recognizing the need to find the sweet spot between too much flexibility and too little. Such additional instructional efforts will obviously lead to higher costs.

In sum, advocates of competency-based education assert that this approach will yield cost savings to institutions, but these savings will only be realized in the long run, given startup costs. In addition, to our knowledge there are no studies comparing the cost structures of competency-based education and traditional postsecondary education. If schools such as Western Governors are indeed achieving significant efficiencies by creating several separate roles for the faculty, this implies that schools implementing competency-based programs with faculty members in traditional roles may face higher costs compared with the Western Governors-type model. Whether competency-based programs with traditional faculty roles are more cost-effective than traditional postsecondary degree programs with traditional faculty roles remains to be seen.

IMPLEMENTATION LESSONS LEARNED

Based on our interviews, we have identified four main strategies that institutions have used to successfully implement competency-based degree programs.

First, *competency-based education was seen by stakeholders as generally congruent with the general mission of the institution, or departments within it adopting these programs.* These institutions typically viewed themselves as teaching institutions focused on student success, with a high level of student-faculty contact. The move toward competency-based education was easier because it was seen as continuing the institutional emphasis on teaching and learning outcomes.

Second, *institutions typically had strong support from a variety of external actors for their move to competency-based education.* Interviewees consistently mentioned that their main governing body supported the move toward competency-based education, and that members were typically enthusiastic about the approach. The only concern expressed was that institutional leaders had to ensure that members of the body were not too enthusiastic, lest they be seen by the faculty as too controlling and promoting a top-down approach to institutional change.

Although accreditors are sometimes viewed as stifling innovation in higher education, accreditors were generally supportive of competency-based initiatives. In large part, their support was the result of the programmatic focus on student learning. One of the accreditors' chief concerns is whether institutions are actually giving students a meaningful credential; it is relatively easy to demonstrate student learning with a competency-based approach. In addition, competency-based initiatives that focused on converting existing degrees, rather than creating new ones, had fewer issues with accreditors. New degree programs typically receive greater scrutiny from accreditors than changes to existing programs.

Local businesses were also enthusiastic about competency-based programs, given the clarity in knowing exactly what competencies college graduates possess when applying for a position. Local businesses were especially supportive in cases where they were asked what competencies should be in a specific degree program that workers in their industry typically pursue.

For some institutions, the U.S. Department of Education was perhaps the most difficult external actor during the implementation process, because of the many complexities surrounding competency-based education and financial aid. Disbursement of federal student aid is based on time, using credit hours as the basis for its formulas, so competency-based education poses a unique challenge. One approach was for an institution to nest its competency-based program within the traditional credit-hour system, but this results in a less-flexible degree program. Some institutions applied under the “direct assessment rule,” which allows institutions to propose their own plan to the Department of Education for disbursing federal student aid. However, this is an arduous process that can take a considerable amount of time to gain approval, and it is not entirely clear what is required for a successful application.

In addition to financial aid in general, some institutions implementing competency-based degree programs also serve a large number of veterans. Veterans’ benefits is a highly regulated area that must also be negotiated when implementing competency-based programs. Early, thorough and persistent consultation with the relevant federal regulators is highly recommended.

Third, while external actors were generally supportive, *faculty support within the institution was probably the most challenging to navigate*. While some faculty members view competency-based education as an innovation, others are skeptical, with concerns about program quality, faculty roles under the new system, and administrative motives for pushing competency-based education (saving money through corporatization of the institution, versus enhancing student learning). Institutions have taken three approaches to implementing their competency-based programs, depending on their circumstances.

Some implemented on a program-by-program basis, for a variety of reasons. One institution originally intended a full-scale implementation but met with great resistance from the faculty. Instead, it opted to implement a few programs at a time, beginning with program areas whose faculty members were supportive and excited about a competency-based approach to higher education. Such an approach can help when faced with faculty members who are resistant to competency-based education. A successful program in a single area can demonstrate to other faculty members that a competency-based approach will work at their institution. The successful program will also provide faculty advocates for competency-based education, who can then help spread the word on campus about their experiences and what a competency-based approach has done for their students.

An alternative approach is to create a separate unit within the university. Southern New Hampshire’s College for America is an example. According to its president, the main reason for this approach was to provide more autonomy for the new unit and to encourage innovation. Institutional leaders were worried that the new unit would be too constrained if it was implemented as part of the main institution.

Finally, some institutions embarked on a wholesale implementation. The University of Maine at Presque Isle decided to become completely competency-based (although its courses are being converted over the next several years, rather than all at once, due to the workload, development and implementation challenges the conversion poses for the faculty).

Given potentially strong resistance to an educational innovation that faculty members may worry could radically change how they teach, how they interact with students and their power within the institution, how do successful institutions gain faculty support for their competency-based efforts? Interviewees noted that the faculty must be convinced that change is needed, competency-based education is the best path forward, and program quality and faculty control over the curriculum will be updated and perhaps strengthened under the new system.

Successful institutions achieve faculty support by explaining why competency-based education is a necessary change for the institution. Institutions making the transition to competency-based education exerted considerable effort to engage with the faculty about the need for change. Institutional leaders pointed to the changing nature of the higher education marketplace, with growing competition for students and the need to uniquely situate the institution in terms of attracting and retaining students. Leaders also emphasized the similarities between competency-based education and the institution's traditional focus on teaching and assessment of learning. While policymakers view competency-based education as a disruptive innovation for higher education, in institutional discussions it tends to be explained as an extension and refinement of the institution's current approach to higher education.

Faculty members commonly object that a competency-based degree is really a second-class degree, in that the quality of the degree, and what the student learns, is deficient when compared with the institution's current degree programs. The lack of a structured classroom environment, as well as the frequent focus on workforce success, leads some faculty members to view competency-based education as not really an education in any meaningful sense. Because many of these institutions serve lower-income students, some faculty members worry that the lower-quality competency-based programs will be targeted to poorer students, resulting in a two-tier educational system.

Concerns about quality are met with a discussion about the central facet of competency-based education: mastery of competencies. Although they do not assign grades, institutions that currently have competency-based degree programs usually define mastery-level as a B+, both for student transcripts and to conform to federal financial aid regulations. Given the emphasis on mastery, and if mastery is seen as a B+, then institutions implementing competency-based education will actually be raising standards, as many students can graduate with less than a B+ grade point average within the traditional credit-hour-based system. The argument about quality is most easily met when faculty members are given control over the development of the mastery assessments; they cannot complain about a decrease in quality when they are in charge of determining what constitutes student learning.

Given the changes that a true competency-based program will bring, as well as the wide perception in the U.S. that faculty influence over institutional decisionmaking has been declining for several decades, many faculty members are understandably nervous about proposed changes to their programs. Successful institutions transitioning to competency-based education emphasize that the faculty will maintain control over the curriculum, redevelop the curriculum to fit within a competency-based framework, and develop the assessments of mastery. This approach fits with the long tradition of shared governance between administrators and faculty, as well as historic faculty control over curriculum at most institutions, which greatly eases faculty concerns about

the overall quality of competency-based degree programs. In addition, it counters concerns that a new contract-based faculty will be hired to replace the traditional faculty, as might be the case if a separate unit were created.

As part of the discussion with faculty about competency-based education, successful institutions find champions of competency-based education among the faculty, and let them help make the argument for the transition. The overall approach successful institutions take is collaborative, rather than top-down.

Fourth, *institutions provided significant funding to develop and implement the competency-based degree programs*. Revamping the curriculum and developing new assessments is an extremely time-consuming process, and providing funds to support the faculty in this endeavor with special stipends was cited as key by interviewees. Creation of a competency-based program involves defining every competency, developing valid and reliable assessments of mastery, and communicating details of these new programs to accreditors. All of this takes time, and successful institutions provide additional funds for the faculty to take on this additional burden. Some institutions were able to secure funding from outside sources, such as foundations, while others provided internal funding.

Besides the faculty, providing operational support for these programs proved to be a surprising challenge. Most student database systems, such as those provided by Peoplesoft, are designed with traditional academic programs in mind, with semester- and credit-hour-based courses as their basis. Significant effort is required to revamp these systems to support students in competency-based education programs, particularly in the area of financial aid. Even simple issues can prove to be a challenge. For one institution, moving toward a competency-based approach required reprogramming of its registration system, because it had a 40-character limit for course descriptions on transcripts. Competencies, however, cannot be described with only 40 characters. This was one of many operational issues that were unforeseen before the institution began its transition to competency-based programs.

RECOMMENDATIONS FOR IMPLEMENTATION

Regional public institutions seeking to convert to the competency-based model have several issues to consider. A primary consideration is the mission of the institution; moving toward a competency-based approach may be more difficult for those institutions that emphasize scholarship as well as teaching. The heavy focus on teaching, which is central to the competency-based model, could be seen as a step backward at institutions that in recent years emphasized research efforts in order to enhance prestige. These efforts typically involve changing the faculty reward structure to more heavily weight research activities, as well as hiring faculty research stars; faculty members who thrived under this system may be unhappy with the move toward competency-based education. On the other hand, research-oriented institutions that move into competency-based education, such as the University of Wisconsin-Milwaukee, will provide their faculty with ample opportunities for investigation and publication on one of the more compelling topics in education today.

Institutional leaders should ensure that their major governing bodies support the move toward competency-based education. This was a central theme in our interviews. Given that members of these bodies often have a business background, they are generally supportive of competency-based efforts, but clearly the institution will have a difficult time moving forward without their strong support.

Institutions should also seek support from major businesses in the region, especially if the institution has a strong regional focus. Because students at many regional public institutions come from nearby areas, and their alumni tend to remain in the region, asking prominent businesses what they seek in a new hire can be helpful in determining competencies for new degree programs. Strong support from local businesses may also help to convince the main governing body that competency-based education is the direction the institution should take.

In making the case for competency-based degree programs, provide a compelling reason for the change. Institutions that adopted a competency-based approach typically faced challenges in terms of student recruitment and declining resources. Many regional public institutions are operating in similar environments, but the case must be clearly made to faculty members that the change is necessary for the long-term survival of the institution, lest it be viewed as yet another educational fad foisted on the faculty.

One of the most important strategies for gaining faculty support is to ensure significant faculty control over the new programs. Regional public institutions are in the unique situation of transitioning from traditional postsecondary education to competency-based education; they do not have the luxury of building these programs from the ground up, unlike some other competency-based institutions. Public institutions also face more regulatory hurdles than private institutions, so that setting up a completely separate educational unit dedicated to competency-based education might be difficult to achieve. Given the long tradition of shared governance in public universities, competency-based programs will succeed only if faculty members believe that the quality of education can be improved by the change, and that the essence of their traditional roles will be largely preserved. Setting the general direction, and then working actively and collegially with faculty members as they determine the specifics of curriculum and assessments, will likely be the most successful approach for regional public institutions.

Finally, do not underestimate the resources required to develop these programs. In addition to compensating faculty members to participate in wholesale revisions of their degree programs, institutions must also factor in the costs of changing their operational systems. While competency-based programs offer the promise of long-term savings, they require a significant injection of resources in the short term to get them up and running.

RECOMMENDATIONS FOR INSTITUTIONS CONSIDERING COMPETENCY-BASED EDUCATION DEGREE PROGRAMS

- 1) Consider carefully and articulate the relation of competency-based education to the institution's mission. The more closely it can be tied to the teaching and research traditions and aspirations of the campus, the more institutional "owners" and supporters it will attract.
- 2) Ensure that the major shared governing bodies support the move toward competency-based education. A coalition of trustees, student government officers, and faculty leaders who see its potential can be powerful allies.
- 3) Seek the backing of significant businesses in the region. Having business leaders and other major regional employers advising the institution and its faculty about what new hires should know and be able to do can also be helpful in determining competencies for new degree programs.
- 4) Provide compelling reasons for adopting competency-based education. These might include such benefits as enhancing enrollment, developing new revenue sources, serving adult student taxpayers more effectively, addressing the workforce needs of the region and state, more sharply defining learning outcomes, and experimenting with new pedagogies in ways that will burnish the faculty's reputation for quality innovation.
- 5) Pledge that faculty will maintain control of the curriculum and assessments in the new programs. Competency-based education will succeed in most mature public institutions only if faculty members believe that the quality of education can be improved by the change, and that crucial decisions regarding content and testing will remain within the purview of their expertise.
- 6) Do not underestimate the financial resources required to build competency-based programs. In addition to investments in curriculum overhaul, the costs of adjusting operational systems such as financial aid, advising, and course registration, tracking, and certifying must be faced. A "venture capital" attitude toward up-front investment with the prospect of longer-term productivity gains is appropriate.

ACKNOWLEDGEMENTS

We thank the following individuals for discussing the competency-based programs at their institutions with us:

Deborah Amory, Empire State College

Aaron Brower, University of Wisconsin

John Ebersole, Excelsior College

Merodie Hancock, Empire State College

Sally Johnstone, Western Governors University

Paul LeBlanc, Southern New Hampshire University

Bryan Levin-Stankevich, Westminster College

Saray Lopez, Westminster College

Bob Mendenhall, Western Governors University

Ray Rice, University of Maine at Presque Isle

Linda Schott, University of Maine at Presque Isle

Cid Seidelman, Westminster College

Jerry Van Os, Westminster College

Rulon Wood, Westminster College

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