Taking Student Success Seriously in the College Classroom

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Why Classrooms Matter

Education plays a critical role in the economic health and competitiveness of our nation. Without an increasingly well-educated citizenry, the United States runs the risk of falling behind other nations in the global economy. Moreover, education is the cornerstone of our democracy. Jefferson said it best: "if a nation expects to live ignorant and free, it wants what never was and what never will be." Yet the evidence indicates that we are falling further behind other countries in our ability to graduate our college students.

For over 40 years access to higher education has improved, and college enrollments swelled from nearly 9 million students in 1980 to over 20 million today. But while enrollments have more than doubled, overall college completion rates have increased only slightly. Only about half of all college students in the U.S. earn a degree or certificate within six years.[i] For community college students the numbers are worse-- a little over a third earn a degree or certificate. The struggles of low-income and first-generation community college students are most troubling – only one-quarter of them complete a credential.[ii]

The facts are clear. Despite our success in improving access to college, we have been unable to convert those gains into higher completion rates, especially among the low-income students who most need the economic payoff that comes with a degree or credential.

It is not for lack of effort. Over the past 20 years, if not more, colleges, universities, states and private foundations have all invested considerable resources in the development and implementation of a range of improvement programs. Though several of these efforts have achieved some degree of success, most have not made a significant impact on college completion rates, for two reasons. First, most innovations have failed to reach significant scale. While a new program might produce favorable results for some students at a particular college, it means little if we do not expand the program to reach a critical mass of students. Second, most innovations fail to substantially improve the classroom experience—the one place where students connect with faculty and students to engage in learning.

This is critical when we consider the majority of students today lead lives that, just a few years ago, were considered unconventional, or "non-traditional." Most students today do not live on campus. A great many work while in college, especially those of low-income backgrounds, and attend part-time. They commute to class and once class is over, they leave to tend to other obligations, like work and family. For them the experience of college is the experience of the classroom. Their success in college is built upon their success in the classroom often one class at a time.

If we are to substantially increase college completion, especially among low-income students, we must focus on improving success in the classroom, particularly during a student's first year. We must be sensitive to the supports low-income students need to be successful in college, and lead efforts to dramatically improve their classroom experience. For working, low-income students these moments for teaching and learning are limited; we must make the most of these precious opportunities.

Attributes of Effective Classrooms

A long history of research has identified the attributes of classrooms in which students are more likely to succeed. These can be described by the terms expectations, support, assessment and feedback, and involvement. Unlike the attributes of students, these are within the grasp of institutions to modify if they are serious about enhancing student success.

Expectations
Student performance is driven, in part, by the expectations that faculty have for their students, and that students have of themselves. Student success is directly influenced not only by the clarity and consistency of expectations but also by their level.[iii] High expectations are a condition for student success, low expectations a harbinger of failure. Simply put no one rises to low expectations. A faculty member's expectations are communicated to students, sometimes implicitly, through syllabi, assignments, course management sites, and conversations. Students pick up quickly what is expected of them in the classroom and adjust their behaviors accordingly.

Support
It is one thing to hold high expectations; it is another to provide the support students need to achieve them. Without academic, social, and, in some cases, financial support, many students, especially those who enter college academically under-prepared, struggle to succeed in college.[iv] At no time is support, in particular academic support, more important than during the critical first year of college when student success is still so much in question and still malleable to institutional intervention. A key feature of such support is its being aligned to the demands of the classroom. That is the case because alignment of support enables students to more easily translate support into success in the classroom.

Assessment and Feedback
Students are more likely to succeed in classrooms that assess their performance and provide frequent feedback about their performance in ways that enable everyone – students, faculty, and staff alike – to adjust their behaviors to better promote student success in the classroom. This is especially true during the first year when students are trying to adjust their behaviors to the new academic and social demands of college life.

Involvement
A fourth and perhaps the most important condition for classroom success is involvement or what is now commonly referred to as engagement.[v] Simply put, the more students are academically and socially engaged with faculty, staff, and peers, especially in classroom activities, the more likely they are to succeed in the classroom. Such engagements lead not only to social affiliations and the social and emotional support they provide, but also to greater involvement in learning activities and the learning they produce. Both lead to success in the classroom.

Efforts to Enhance Classroom Effectiveness

Though still limited in scope, there are now a number of efforts to reshape the classroom by altering the way academic support is provided, improving the usability of assessment and feedback techniques, and restructuring patterns of student engagement in the curriculum and classroom. Several of these deserve special attention not only because of evidence that supports their effectiveness, but also because of their capacity to reshape the nature of classroom learning. These efforts embed basic skills within content courses, automate classroom assessment and early warning systems, develop basic skills learning communities, and develop programs for new faculty.

Embedded Academic Support in the Classroom

To address the issue of basic skills in technical and vocational fields, specifically language skills, the Washington State Board of Community and Technical Colleges developed the Integrated Basic Education and Skills Training (I-BEST) initiative.[vi] It enables students to get academic support from basic skills instructors while earning credit toward a certificate or degree. As such, it challenges the conventional assumption that basic skill instruction should precede the beginning of college-level work. This is achieved through the collaboration of basic skills instructions and faculty who jointly design and teach college-level technical and vocational courses. As a result, students learn basic skills and program content at the same time from a team of faculty. Early results show that I-BEST students fare better on a variety of outcomes (e.g. credits earned, completion of workforce training), when compared with traditional students at the same proficiency level. [vii] While the program is more expensive to run, recent data show that students are nine times more likely to graduate.

Automating Classroom Assessment, Feedback, and Early Warning

There are a variety of assessment techniques that can be used to assess student learning and trigger academic intervention when necessary. Classroom assessment techniques like the "one-minute" paper and the "muddiest point" have been in practice for decades.[viii] What is new is the availability of technologies that allow us to easily capture and analyze more and different data in ways that can provide a clearer view into student learning.[ix]

The *Signals* project at Purdue University, for instance, identifies students who are "at-risk" of doing poorly in a course by analyzing data from mini-exams as well as how they use course materials in their learning management system. [x] Once identified, the system alerts faculty and then emails the student, urging them to seek help via available resources, such as office hours, study materials, and various academic support services. Though employed throughout the university, it has proven most effective for students in their first two years of coursework.[xi]

The Action Analytics Symposium has featured an array of these types of systems and strategies for the last two years. The conversations at these events have centered on bringing real-time assessment and insight as close to the learning moment as possible. Learning management software providers are working to imbed analytic tools in their software, providing both teachers and learners resources to better inform the learning journey and focus the classroom. Again, while these tools

may feel new, they are simply enabling teaching and learning strategies that the best teachers have used for decades—if not centuries.

Basic Skills Learning Communities: Aligning Basic Skills to the Curriculum
Learning communities connect one or more basic skill or developmental courses, such as writing, to other content courses, such as history, so that the writing skills being acquired in the developmental course can be directly applied to a credit-bearing course in history. In other cases, basic skills learning communities also include a student success or counseling course. In this and other ways, learning communities, such as those at DeAnza College and Valencia Community College, provide a structure that enables the institution to align its academic and social support for basic skills students in ways that enable students to obtain needed support, acquire basic skills, and learn content at the same time.[xii]

In their fullest implementation learning communities not only change the manner in which students experience the curriculum but also the way they experience learning. They do so by employing pedagogies of engagement, such as cooperative and problem-based learning, that require students to collaborate and become accountable for the learning of the group and classroom peers. In this way, students share not only the experience of the curriculum, but also of learning within the curriculum. By asking students to construct knowledge together, learning communities seek to involve students both socially and intellectually in ways that promote cognitive development as well as an appreciation for the many ways in which one's own knowing is enhanced when other voices are part of that learning experience.

Building Effective Classrooms: Enhancing Faculty Skills
These strategies as well as others that seek to enhance student classroom success ultimately depend on the skills of the faculty to effectively implement them. Yet the faculty who teach those classes, unlike those who teach in primary and secondary schools, are not trained to teach their students. This is not to say that there are not many talented college faculty who bring considerable skills to the task of teaching students. There are. Rather, college faculty are not, generally speaking, trained in pedagogy, curriculum, and assessment in ways that would enable them to be more effective with their students, particularly with those who are academically under-prepared.[xiii]

Colleges are, of course, not blind to the issue of faculty skills. For years they have invested in faculty development programs, yet little change is apparent because most programs are not well conceived, are voluntary in nature, and/or attract a small segment of the faculty.[xiv]

Fortunately this is beginning to change at a limited, but growing, number of colleges, such as Chandler-Gilbert Community College and Richland College in the Dallas Community College District. These institutions have established faculty development programs that require all new faculty to engage in activities in which they work with their colleagues to acquire the pedagogical, curricular, and assessment skills they will need to assist, in particular, students requiring basic skills instruction.

Meeting the Challenges Ahead

Though the initiatives described in the previous section have the potential to substantially improve student classroom success, there is still much to do to transform that potential into lasting results that span campuses and institutions. Working together, there is much that faculty, institutional leadership, states, and philanthropy can do to achieve that end.

Faculty

- Employ classroom assessment techniques that provide feedback to them, support staff, and their students about classroom learning.

- Work together with support staff to develop early warning systems that trigger intervention in as close to real time as possible.

- Acquire a range of pedagogical skills that actively engage students in learning with others within the classroom.

Institutional Leadership

- Develop systems of data collection and analyses that provide faculty, staff, and administration the timely information they need to improve student classroom success.

- Develop systems of analysis that enable programs and their lead faculty to ascertain how courses in their program are aligned so as to provide a coherent sequence that allows students to successfully complete the program within a reasonable time. Nowhere is this more important than in the sequence of courses that make up the basic skills curriculum.

- Provide support and incentives for faculty and programs to invest in innovations to enhance classroom effectiveness.

- Take steps to ensure that all new faculty acquire the skills and knowledge they need to construct effective classrooms. In the same way that institutions must take student success seriously, so too must they take faculty development seriously.

State Leadership

- Provide support and incentives for classroom innovation in ways that move innovation beyond individual classrooms to reshape institutions. This is particularly important for first-year courses and the key gateway and basic skill courses that dot the higher educational landscape.

- Provide support and incentives for institutions to work together in ways that make improvement matter and move innovations beyond the borders of their individual campuses.

- Support the development of new faculty development programs in both two- and four-year colleges that provide new faculty the skills and knowledge they need to construct effective classrooms.

Philanthropy

- Support, through the funding of empirically based demonstration projects, the development of new technologies to facilitate the work of faculty within the classroom so as to improve classroom effectiveness. Nowhere is this more important than in the way we go about addressing basic skills.

- Bring together knowledge of what works in enhancing classroom success and help promote conversations about innovations that break down the many silos in which they now take place.

- Work with states to promote the formation of consortia of institutions whose members work together to learn how to develop more effective classrooms and scale up their efforts beyond their individual campuses.

There are many challenges facing efforts to transform the college classroom in ways that have lasting and widespread impact on student success. Several that are most pressing are:

Implementation at Scale. It is one thing to start an innovative effort, it is another to implement it in ways that enables it to endure and reach classrooms more widely. We continue to struggle with the challenge of turning what works for a few classrooms or institutions into large-scale change that makes a difference for many. Unless we address issues of institutional capacity, support, and incentives, it is unlikely that we will move existing efforts beyond the isolated settings in which they are now found.

Dearth of Practical Examples. Though there is much promise to a range of innovations in classrooms, there is not the evidentiary base necessary to scale up our efforts to transform the classroom. Where evidence exists, it is typically of single, isolated cases that do not easily translate into the type of proof needed to support institution-wide and multi-institutions initiatives.

Knowledge Management. Knowledge of innovations remains fragmented. The silos within which conversations about classroom innovation take place hinder our efforts to move classroom improvements from the margins to the mainstream of educational practice. Moreover these closed conversations limit the types of cross-effort conversations out of which further innovation arises.

Efforts to increase student success in college are not new. States, institutions, and foundations have invested substantial resources trying to do so. But for all their well-intended efforts, student success in higher education has not changed substantially and the completion gap between high- and low-income students remains largely unchanged. This is because most efforts have ignored the college classroom, the one place where most students interact with their teachers and engage in formal learning activities. If students do not find success there, it is unlikely that they will succeed in college.

Past efforts, even when successful, have been isolated, sometimes idiosyncratic, and often not implemented beyond individual classrooms and institutions. Institutions must come together in an institutional learning community to learn as one how to adapt particular innovations to each of their campus and achieve a scale of change whose impact will be more broadly felt. In the same way we know that students learn better together, so too can institutions.

We need to develop a system of institutions within states that are well aligned– from classroom to campus–around student success; that provides incentives for improvements in student classroom

success at all levels; makes full use of technology and other innovations to enhance student classroom success; effectively engages and supports students in learning within and beyond classrooms; and is staffed of well-trained, well-supported caring professionals who work together to construct effective classrooms.

If we are serious in our efforts to enhance college success, much must change. We must focus our efforts on the classroom and reshape the work of faculty and the experience of students. We must build upon emerging initiatives, some of which have been described here, and use them to guide institution and statewide change. We must enhance the capacity of institutions to act, provide support for their actions and incentives that reward those who move effectively to improve student classroom success. Our students deserve no less. Our nation requires no less.

Endnotes

[i] National Center for Education Statistics, 2003. Descriptive Summary of 1995-1996 Beginning Postsecondary Students: Six Years Later. Washington D.C., U.S. Department of Education, Office of Educational Research and Improvement, NCES 2003-151. Table 2.0A.

National Center for Education Statistics, 2010. Enrollment in Postsecondary Institutions Fall 2008; Graduation Rates, 2002 and 2005 cohorts; and Financial Statistics, Fiscal Year 2008: First Look. Washington D.C., U.S. Department of Education, Office of Educational Research and Improvement, NCES 2010-152.

[ii] Engle, J., A. Bermeo, and C. O'Brien, 2008. *Straight from the Source: What Works for First-Generation College Students*. Washington D.C.: The Pell Institute for the Study of Opportunity in Higher Education. p.14.

[iii] Reason, Terenzini, and Domingo (2006), for instance, study found that students who viewed their institution as more academically challenging were more likely to report greater gains in academic competence during the first year than similar students who saw their institution as less cognitively challenging.

[iv] The U.S. Department of Education reported that at least twenty-eight percent of all beginning college students in the 2000 academic year enrolled in at least one basic skills or "remedial" course in reading, writing, or mathematics. That percentage was twice as high in two-year colleges than in four-year institutions (42 percent and 20 percent respectively). But even these percentages may substantially underestimate the number of students in college who should take such courses since not all students who are referred to those courses actually take them.

[v] Tinto, V.1993. *Leaving College: Rethinking the Causes and Cures of Student Attrition.* Chicago: The University of Chicago Press.

[vi] For more information visit www.highereducation.org/reports/Policy_Practice/IBEST.pdf.

[vii] Washington State Board of Community and Technical Colleges. *I-BEST: A Program Integrating Adult Basic Education and Workforce Training*. Olympia, WA: Washington State Board for Community and Technical Colleges, Research Report No. 05-2, December 2005.

Jenkins, D., M., Zeidenberg and G. Kienzl. 2009. *Educational Outcomes of I-BEST Washington State Community and Technical College System's Integrated Basic Education and Skills Training Program: Findings from a Multivariate Analysis.* New York: Community College Research Center, Teachers College, Columbia University. CCRC Working Paper No.16.

[viii] Angelo, T. and P. Cross. 1993. *Classroom Assessment Techniques*: *A Handbook for College Teachers*. (2nd ed.) San Francisco: Jossey-Bass.

[ix] Murphy, L. and D. Wolff, 2005. "Take a minute to complete the loop: using electronic Classroom Assessment Techniques in computer science labs." *Journal of Computing Sciences in Colleges* 21(1): 150-159.

Becker, A. and M. Devine, 2007. Automated assessments and student learning. *International Journal of Learning Technology.* 3(1): 5-17.

[x] The interested reader should visit the Signals website: http://www.itap.purdue.edu/tlt/signals/.

[xi] Arnold, K. 2010. Signals: Applying Academic Analytics. *Educause Quarterly*. 22.

[xii] Engstrom, C. and V. Tinto, 2007. *Pathways to Student Success: The Impact of Learning Communities on the Success of Academically Under-Prepared College Students*. Final Report Prepared for the Lumina Foundation for Education, Syracuse University, Syracuse, New York.

[xiii] Grubb, N., and Associates. 1999. *Honored but Invisible: An Inside Look at Teaching in Community Colleges.* New York: Routledge.

Waiwaiole, E. and C. Noonan-Terry. 2008. The need to equip, prepared community college faculty has never been greater. *Community College Forum*, 14:20.

[xiv] The same can be said of the very few efforts that have focused on basic skills instruction. The most recent of these is the Strengthening Pre-Collegiate Education in Community Colleges (SPECC) project. Undertaken as a partnership between the Carnegie Foundation for the Advancement of Teaching and the William and Flora Hewlett Foundation, it was three-year effort involving eleven California community colleges whose goal was to improve the teaching of basic skill courses. It did so through the development of campus-based faculty inquiry groups whose members worked together to change how they teach basic skills. The project has had mixed results. Some campuses have made substantial changes to their practice. Others have not. Some changes appear to be sustainable, others less so. Furthermore like most efforts that are voluntary, faculty participation has been quite variable. Despite good intentions, the fact remains that such efforts have yet to put into place structures for faculty development that can endure and reach all faculty, not just some.