Providing Affordable Access to Higher Education through Year-Round Operation: A Case Study in Public Higher Education

Transfer Credit Evaluations: How They Are Produced, Why It Matters, and How to Serve Students Better

Transitioning from Quarters to Semesters: Changes in College Students’ Predicted and Perceived Motivation

Assessing the Impact of the Cambridge International Acceleration Program on U.S. University Determinants of Success: A Multi-Level Modeling Approach

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Providing Affordable Access to Higher Education through Year-Round Operation: A Case Study in Public Higher Education
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BY ALEXANDER P. OTT AND BRUCE S. COOPER

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Providing Affordable Access to Higher Education through Year-Round Operation

A Case Study in Public Higher Education
Time-compressed courses at state-supported universities have served a variety of purposes. It has been traditional to set scheduling policies that would make summer and winter sessions self-funding. They have not been viewed, however, as potential enrollment generators. This is an opportunity that can no longer be overlooked. This paper describes one state university’s efforts to enhance enrollment through year-round operation. Although Slippery Rock University faces unique constraints, much can be learned from its efforts.

The public higher education landscape in the United States has changed significantly over the past several decades. The most widely publicized change has been the steadily decreasing percentage of operating revenues from state support. This issue has been thrust into public view by states’ assaults in recent years on public university budgets. Current economic conditions have brought state budgetary issues concerning education funding to the crisis stage, though public universities have been facing reductions in the percentage of funding from their states for some time. By now it is well known that state spending on corrections, entitlement programs, and state employee pension funds is diminishing its ability to support public higher and K–12 education (Tandberg 2010).

The second change has been the increasing demand for access to public higher education. Altbach, Reisberg and Rumbley (2009) report an enrollment increase from 2000 to 2007 of more than 50 million students globally in the eighteen to 24-year-old cohort. High school graduates, their parents, and nontraditional workers increasingly perceive a higher education degree as a ticket to success. Employment statistics bear this out: The Bureau of Labor Statistics reported in June 2012 that the group including bachelor’s and higher degree holders had a seasonally adjusted unemployment rate of 4.1 percent compared to an overall civilian labor force unemployment rate of 12.5 percent (U.S. Dept. of Labor 2013). Yet increasing demand for access and increasing operating costs have caused the average tuition at private and public higher education institutions to increase faster than the average inflation rate (Archibald and Feldman 2010).

At a time when demand for access to higher education is at an all-time high, some regions are experiencing absolute decreases in population as well as demographic shifts in birth rates that negatively affect enrollment (Tucker 2012). In addition, many states are reducing their level of support for higher education, with the result that tuition increases have become one of the only means left for balancing budgets. In many states where tuition rates are controlled by state legislatures, universities are increasingly pressed to match annual revenues with expenditures. Many institutions are seeking to raise revenues and cut costs where they can.

The purpose of this article is to examine the potential for public universities to utilize year-round operations for revenue generation and cost containment by increasing the number of courses offered during summer and winter sessions and thereby increasing overall enrollment. Two factors have inspired the increase in time-compressed courses: (1) the ability to develop online versions of existing courses in order to improve access and (2) the identification of practical ways to support classes with low
enrollment so more courses can be made available. This
analysis is supported by a case study of Slippery Rock Uni-
versity (SRU) of Pennsylvania’s movement toward year-
round operation. SRU is one of fourteen state-owned
institutions in the Commonwealth of Pennsylvania. To-
gether, they make up the Pennsylvania State System of
Higher Education (PASSHE). PASSHE is the tenth largest
university system in the United States and the 43rd larg-
est in the world, with a system-wide enrollment in 2010 of
nearly 120,000 students (PASSHE 2011).

INNOVATIONS IN HIGHER EDUCATION

Because funding increases have become increasingly prob-
lematic, some institutions have found innovative ways to
produce more graduates without increasing their net costs.
One of the more interesting approaches is at Brigham
Young University–Idaho (BYU–Idaho), where a com-
plete third (summer) semester was added to the traditional
two-semester plus summer school model. Administrators
enroll the same number of students in all three semesters.
Faculty are compensated for the increased teaching load,
but other added expenses are minimal. This has resulted in
a 32-percent reduction in instructional costs per student,
even taking into account increased faculty compensa-
tion (Cota, Jayaram and Laboissiere 2011). BYU–Idaho’s
many innovations in course delivery, modular curriculum,
and other areas are detailed in \textit{The Innovative University:
Changing the DNA of Higher Education from the Inside
Out} (Christensen and Eyring 2011).

A less complicated approach to increasing revenue is to
find ways to increase summer school enrollments—and,
more recently, to develop winter terms between the fall
and spring semesters.

THE EVOLUTION OF TIME-COMPRESSED COURSES

In \textit{The American University in Summer Revisited},
Schoenfeld (1985) observes, “Among the more enduring
American news media myths is the implication that
each summer every college and university takes up the
campus sidewalks, so to speak, not to rise until autumn.”
Despite the widespread belief that very little happens on
American campuses in the summer, 1,300 accredited col-
leges and universities were already offering some type of
summer session by 1962. In 1993, the U.S. Department
of Education reported in its Institutional Characteristics
Survey that an estimated 3,027 out of a total of 3,800 U.S.
higher education institutions had a summer term. Today,
virtually every college and university offers some sort of
summer program. This trend has also spread to England,
Scotland, Canada, Australia, Mexico, and the Caribbean
(Howard 2003).

One of the longest-running debates over the use of
time-compressed courses pertains to such courses’ aca-
demic integrity. As long ago as 1927, Glenn Frank, then
president of the University of Wisconsin–Madison, said,
“Six weeks was too short a time in which to produce any-
thing of educational value” (Slichter 1927). Despite the
proliferation of the use of some variant of summer term,
Howard (2003) states, “Annual reports of summer pro-
gram deans/directors consistently mention that they face
challenges to academic excellence in the summer even as
they are asked to meet the changing academic needs of
learners in creative and innovative ways.” Howard (2003)
reports further that the annual meeting agendas of sum-
mer session associations (for example, the Association of
University Summer Sessions, the North Central Confer-
ence of Summer Sessions, the North American Associa-
tion of Summer Sessions, and the Western Association of
Summer Session Administrators) always include topics
related to the academic effectiveness of summer-term ses-
nions. Nevertheless, time-compressed sessions at U.S.
colleges and universities continue to increase in scope as
well as focus. This alone is fairly conclusive evidence that
time-compressed programs have academic merit. One study
of more than 45,000 students found evidence of higher
grades and increased learning in time-shortened courses
(Austin and Gustafson 2006). The researchers used
matched sets of prerequisite and follow-on courses and
then compared students’ performance in the follow-on
course on the basis of their enrollment in a semester-long
versus a time-compressed prerequisite course. Students
who had enrolled in the time-compressed prerequisite
courses earned significantly higher grades in the follow-on
course compared to their peers who had taken semester-
long prerequisite courses. Another study comparing the
rigor of time-compressed courses to that of semester-long
courses found that students enrolled in the latter studied
more per credit hour per week but that the workload in
any given class was more likely to be influenced by the in-
structor and the subject than by the length of the course.
(Lutes and Davies 2013). Other institutional surveys report students’ high level of satisfaction with the quality of their summer educational experience (Grobsmith 1997, Lee 1999).

The increase of time-compressed offerings has been fueled by demand as well as supply. During the past decade, student perceptions of their educational experiences have changed. As much as faculty and universities try to create lifelong learners, students today are very much career driven. Many students’ overriding question when they arrive on campus is “How soon can I get my degree?” This is especially true of the growing number of students in Pennsylvania who are transferring from community colleges to four-year institutions. The pattern of attending school during a nine-month academic year and working during the summer has been replaced with year-round part- and even full-time employment. If students work year round, it is natural for them to also want to attend school year round. Summer and winter sessions provide the opportunity for students to complete their education sooner than they otherwise would be able to. This can save them money and get them to full-time employment sooner. Students also perceive time-compressed offerings as a solution to the peak load problems they encounter during the regular school year. Courses that quickly enroll to capacity and/or that have high enrollments may also be offered during summer and winter terms. Students may need to balance their school workload against their employment schedule during the traditional fall and spring semesters. Students may find other advantages in time-compressed offerings, such as the opportunity to enroll at an institution closer to home when their primary college is not in regular session; to complete graduation requirements without returning for an entire semester; or to take a course as an alternative to summer or holiday idleness.

On the supply side, the university has provided time-compressed terms for a variety of reasons. In many cases, offerings have been a response to student demand. If the university does not respond to this demand, then students will enroll elsewhere. Faculty perceive shortened terms as a way of supplementing their annual income and of reducing their own boredom. Many colleges and universities use the opportunity to teach during summer or winter terms as a faculty recruitment tool. Time-compressed terms are also a way to use existing facilities and staff more efficiently, helping to offset the peak load problem. Rather than hiring more faculty and building more classrooms, existing resources can be utilized year round, spreading fixed costs over more units. The final benefit on the supply side is the potential for additional revenue generation through increased enrollment. This potential has been greatly enhanced by the growing popularity of distance education. This is due in no small part to technological advances that have made the offering of classes through learning management systems (LMS) both efficient and cost effective.

**ORGANIZATIONAL MODELS FOR TIME-COMPRESSED SESSIONS**

Organizational models for time-compressed terms typically are of three types: centralized, decentralized, and hybrid. Demetrulias (2005) describes a centralized model as a summer school program that is self-funded and administered by an autonomous summer session office. Decentralized organizational structures are more distributive: state-funded summer-term functions are performed by various collegiate units with dispersed accountability. Hybrid models typically are structured as centralized administration with decentralized academic functions.

Although data indicate a general ten-year trend of increasing numbers of decentralized programs, the largest number of shortened sessions continues to be described as centralized organizational structures (Demetrulias 2005). Johnson (2000) studied the fiscal practices of doctoral research universities: 57 percent of those studied used an allocative model to fund time-compressed terms; 38 percent funded such terms with self-generated income; and 5 percent used a decentralized approach in which revenue was directed to the academic unit responsible for its generation.

**SLIPPERY ROCK UNIVERSITY CASE STUDY: THE PROBLEM**

SRU is located in a region of the country experiencing both stagnant population growth and a demographic shift in birth rates that has negatively affected high school graduation rates (Tucker 2012). Traditionally, graduating high school seniors have represented the most important pool of potential SRU students. With this population decreasing, the university needed to identify other means of maintaining or increasing enrollment and credit-hour
production. One solution was to increase the number of courses available during summer and winter terms. However, two important issues had to be resolved in order to do so: First, more online offerings had to be identified. Second, courses with low enrollments had to be offered economically. How SRU met these two challenges is the focus of this case study.

Increase Online Offerings

PASSHE system administrators recognized the importance of developing online courses and realized as well that the pedagogical differences between face-to-face and online classes meant that significant work had to be done to effect such a change. PASSHE faculty were offered a one-time “development fee” to create and teach the first section of an online version of a course. Faculty responded to the incentive enthusiastically, with the result that a significant number of courses began to be offered online. In fact, SRU’s winter session (during the traditional break between fall and spring semesters) comprises only online courses.

SRU developed a training and certification program to help faculty migrate courses from a traditional classroom setting to a virtual environment and to familiarize them with the differences between online and face-to-face learning. The campus’s Center for Excellence in Teaching and Educational Technology administers the three-week online program. Faculty learn pedagogy and rudiments of course design and implementation specific to online delivery. Faculty must complete this certification successfully before they may teach an online or hybrid (i.e., partially delivered online) course.

Slippery Rock University prides itself on being a premier residential university. For this reason, it limits the use of online instruction to special programs and the summer term and winter session. PASSHE contracts with a learning management system provider that provides a course shell for all academic offerings. The collective bargaining agreement (CBA) with the faculty union includes specific language about faculty compensation for online teaching. The number of online or distributed education (DE) courses as a percentage of total university course offerings has increased rapidly over the past several years. Table 1 shows that in 2009–10, 170 courses—or approximately 5 percent of all undergraduate courses—were offered online; by 2012–13, the number had increased to 235 courses, or 6.5 percent of all undergraduate courses. In just one year, winter-term courses (all DE) accounted for almost half as many courses as the number offered in the summer (48 compared to 105 in AY 2012–13).

Overcoming Roadblocks to Low-Enrolled Courses

The organizational model for time-compressed sessions at SRU is a fairly complex hybrid model. The Office of Academic Records and Summer School administers the summer and winter terms. The executive director of academic records, summer school, and graduate studies typically makes recommendations concerning low-enrolled courses to the provost. The provost has final administrative authority regarding the number of courses offered campus-wide, how the academic unit will allocate them, and whether a specific course has sufficient enrollment for the course to be offered. A Summer School Advisory Committee assists the executive director in setting policy guidelines. The committee includes the executive director, an academic dean, and three faculty members.

Historically, the Office of Academic Records and Summer School used a formula as the basis for allocating courses to academic units: An academic unit received one undergraduate course for every eighteen students enrolled in the unit’s courses the previous summer term. For graduate courses, the allocation number was twelve. The rationale was that summer school was to be self-supporting—that is, it was to generate sufficient revenue to pay for all additional summer contracts at the university. This included faculty teaching the courses, chairpersons’ non-teaching summer compensation, and any additional summer contracts at the discretion of the provost. Occasionally, other summer contracts were issued for a variety of non-instructional purposes. Winter courses are a relatively new phenomenon at SRU, having first been offered in 2011. The data show that they have quickly become a significant part of SRU’s time-compressed course offerings.

Though not mandated by the CBA, an allocated course at SRU was considered ‘guaranteed’ once it was assigned to a faculty member to teach. This guarantee was independent of the course’s actual enrollment. In addition to guaranteed courses, each academic dean historically had also been given three courses to be allocated among academic units at his/her discretion. These additional courses were offered contingent on reaching enrollment of at least eighteen stu-
students. Not surprisingly, few contingency courses were successful because most high-enrollment courses were already built into the regular summer schedule.

SRU’s administrative model is decentralized as relates to the programmatic quality of summer offerings. Courses and programs to be offered during the summer term are subject to the same faculty-driven curricular approval process as fall- and spring-term offerings. Once a department chair receives a course allocation, he or she develops a summer schedule based on student needs, program needs, and faculty availability. The allocation formula has a built-in incentive in that next year’s course allocation is dependent upon this year’s enrollments. Assuming a desire to at least maintain if not increase the department’s course allocation, summer offerings are often predicated more on student demand than on other program goals. In other words, the departments have always believed that summer school is about the numbers.

Two problems developed that encouraged the provost to direct the Summer School Advisory Committee to reconsider the historical procedure. First, summer school enrollments began to decrease. Anecdotally, this was attributed to two factors: The first was a change in the number of credit hours students are allowed to transfer from community colleges. SRU is bound by PASSHE and state guidelines regarding community college transfer credits. In an effort to make education more affordable to Pennsylvania residents, the number of credits that can be transferred from community colleges to PASSHE schools was increased from the first 64 credit hours toward an undergraduate degree to an unlimited number. The only limits are that students must complete at least 48 credit hours of upper-level courses and take 30 of their last 45 credit hours at the institution granting the degree. Students quickly realized that they could take the same courses offered during the summer term at SRU at a community college near their home—and for a lower price. Another reason for decreasing summer enrollments at SRU was the availability of competing institutions’ online courses—courses that enabled students to work full time by not requiring that they attend class during part of the work day.

The second problem was the growing perception that summer courses were guaranteed once they were allocated. Out of concern for fairness, department chairs often at-

### Table 1.

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>All Courses</th>
<th>All DE Courses</th>
<th>Winter DE</th>
<th>Summer DE</th>
<th>Winter/Summer DE</th>
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<td>0</td>
<td>0.0</td>
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<td>96</td>
<td>0</td>
<td>0.0</td>
<td>32</td>
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<td>158</td>
<td>0</td>
<td>0.0</td>
<td>61</td>
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<tr>
<td>2009–10</td>
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<td>170</td>
<td>0</td>
<td>0.0</td>
<td>71</td>
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<tr>
<td>2010–11</td>
<td>3,745</td>
<td>184</td>
<td>0</td>
<td>0.0</td>
<td>93</td>
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<tr>
<td>2011–12</td>
<td>3,422</td>
<td>190</td>
<td>22</td>
<td>0.6</td>
<td>94</td>
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<tr>
<td>2012–13</td>
<td>3,603</td>
<td>235</td>
<td>48</td>
<td>1.3</td>
<td>105</td>
</tr>
</tbody>
</table>

Source: SRU Institutional Research
tempted to provide an equal opportunity to teach during the summer to all faculty members in the department who wanted to do so. But with supply based on faculty equity and demand based on student preference, there was often a mismatch. Some courses enrolled significant numbers of students whereas others enrolled as few as two students. The provost scrutinized this practice as it became increasingly apparent that the institution was paying faculty to teach courses that did not generate sufficient tuition revenue to cover the instructor’s salary. During summer 2008, the provost determined that courses were not guaranteed if no contract had yet been issued to the faculty member assigned to teach the course. The provost canceled several courses with low enrollments before the faculty contracts were issued. Department chairs, the faculty union, and faculty members teaching summer school reacted with concern to this significant departure from past practice.

THE SUMMER SCHOOL ADVISORY COMMITTEE RECOMMENDS POLICY CHANGE

In fall 2008, the Summer School Advisory Committee met to discuss issues related to summer school. The committee determined that it would be helpful to know what procedures the other thirteen PASSHE schools used. The executive director of Academic Records and Summer School designed and forwarded a twelve-question survey to the person in charge of summer school operations at each PASSHE campus. Administrators at eight of the fourteen PASSHE institutions responded to the survey. (The survey questions and responses are summarized in the appendix.)

The survey results made it clear that there is little standardization among PASSHE universities in the administration of summer term. All eight of the respondent universities use a hybrid model with varying degrees of centralized decision making. Only six of the eight institutions indicated that revenue generation was a concern when allocating summer classes. The survey results also helped clarify that the presence of a faculty union is significant.

After reviewing the survey results, the Summer School Advisory Committee made several recommendations to the provost. The first was to change the course allocation formula. Rather than base course allocation by academic unit on the previous year’s cumulative summer enrollment divided by eighteen for undergraduate courses and by twelve for graduate courses, the committee recommended an immediate reduction of the divisors to sixteen undergraduates and ten graduates. This modest change resulted in an increase of 35 courses across all academic units.

The second recommendation was to establish minimum enrollments of ten for undergraduate courses and eight for graduate courses in order for a course to be offered at full compensation. Going forward, no class would be considered ‘guaranteed.’ For any course not meeting the minimum required enrollment, the provost would have the option of canceling the course, prorating payment according to a per-capita compensation plan (referred to as Article 27 of the CBA), or offering the course as individualized instruction. (Article 27 states that faculty receive approximately 67 percent of the tuition revenue generated by the course up to a maximum of 125 percent of the overload rate as defined by the CBA.). The committee’s final recommendation was that academic deans should continue to be given three courses that could be allocated among the academic units in their area. These courses would be offered contingent on reaching the threshold enrollment of sixteen for undergraduate courses and ten for graduate courses. After the committee secured the faculty union’s endorsement of the proposal, the provost accepted the recommendations.

Winter Session

For the first time in its history, SRU moved to year-round operation with the offering of a winter session in 2011. Course offerings were limited to only those courses that had previously been offered online. Faculty compensation was provided according to Article 27 (which pays the faculty member 67 percent of the tuition). The revenue-generating potential of the winter session was clear: The university would bear no operating cost because teaching and learning would be conducted online and the university would receive a set amount of the revenue generated. In the inaugural 2011 winter session, a total of 1,231 undergraduate credit hours were generated; in 2012, the number more than doubled—to 2,799 undergraduate credit hours. Early enrollment data for 2013 indicated a 60 percent increase from winter session 2012.

Data Analysis

Tables 2 and 3 present the undergraduate enrollment headcount for the past seven academic years and the undergraduate credit-hour production over the same period.
Initially, there was concern that the elimination of guaranteed courses might result in some classes not being offered, with the result that enrollment and credit-hour production would suffer. This was a concern both in terms of potential lost revenue and lost opportunities for students to take courses during the summer. In summer 2009, after the changes in policy were made, headcount enrollment increased by 195, and the number of credit hours increased by more than 7 percent higher than the previous year. In summer 2010, headcount enrollment decreased by 95 students, but the number of credit hours increased by more than 250—a 1.6 percent increase. In 2011—the first year SRU offered a winter term—combined summer and winter headcount increased by more than 500 compared to the previous year’s summer-only headcount, and credit-hour production increased by 527 hours—a 3 percent increase. In 2012, combined headcount increased by 248 students, and credit-hour production in

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Fall and Spring Combined</th>
<th>Summer Session</th>
<th>Winter Session</th>
<th>Academic Year Total</th>
</tr>
</thead>
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<tr>
<td></td>
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<td>n</td>
<td>%</td>
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<td>2006-07</td>
<td>14,758</td>
<td>86</td>
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<tr>
<td>2007-08</td>
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<td>84</td>
<td>2,767</td>
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<tr>
<td>2008-09</td>
<td>14,908</td>
<td>83</td>
<td>3,005</td>
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<tr>
<td>2009-10</td>
<td>15,310</td>
<td>83</td>
<td>3,200</td>
<td>17.3</td>
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<td>2010-11</td>
<td>15,556</td>
<td>83</td>
<td>3,105</td>
<td>16.6</td>
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<tr>
<td>2011-12</td>
<td>15,428</td>
<td>81</td>
<td>3,270</td>
<td>17.2</td>
</tr>
<tr>
<td>2012-13</td>
<td>15,209</td>
<td>80</td>
<td>3,087</td>
<td>16.2</td>
</tr>
</tbody>
</table>

* Enrollment headcounts are based upon total registrations and may be duplicated. 
Source: SRU Institutional Research

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Fall and Spring Combined</th>
<th>Summer Session</th>
<th>Winter Session</th>
<th>Academic Year Total</th>
</tr>
</thead>
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<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>2006-07</td>
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<td>6.0</td>
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<td>2010-11</td>
<td>225,204</td>
<td>94</td>
<td>15,553</td>
<td>6.5</td>
</tr>
<tr>
<td>2011-12</td>
<td>224,155</td>
<td>93</td>
<td>14,849</td>
<td>6.2</td>
</tr>
<tr>
<td>2012-13</td>
<td>221,053</td>
<td>93</td>
<td>13,918</td>
<td>5.9</td>
</tr>
</tbody>
</table>

** Credit hour totals are by student level, not course level. 
Source: SRU Institutional Research
the time-compressed terms increased by 637 hours—a 4 percent increase overall.

Traditional fall and spring enrollment and credit hours peaked in 2010–11 and have decreased approximately 2 percent in the past two years. The increase in enrollment from summer and winter over the same period has offset the headcount decrease during the traditional instructional terms, and the decrease in total credit-hour production over the two-year period has been mitigated to -1.2 percent.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS FOR FUTURE RESEARCH

The evolution of year-round operation at U.S. colleges and universities has been a steady, if not somewhat slow, process. Forces of both demand and supply have overwhelmed long-stated concerns about the academic quality of courses taught in condensed time periods, but recent studies suggest that students’ knowledge retention is greater following shorter rather than traditional-length courses. Summer and winter terms complement the lifestyle and meet the expectations of the current generation of college students. They also bolster faculty compensation and enable more efficient use of facilities and staff. Perhaps most important, year-round operation offers the prospect of sustainable revenue centers—something most institutions badly need in today’s economy. The preceding analysis indicates that a hybrid model for inter-sessions best supports fiscal efficiency. The SRU case study highlights explicit policy changes implemented by one institution in order to maximize course offerings. This optimally serves the needs of today’s students and enhances revenue.

Distance education poses both an opportunity and a threat with regard to institutions’ year-round operation. The majority of students continue to prefer face-to-face education during the ‘regular’ school year, but they seem to feel differently about inter-session terms. Students are comfortable with technology and seek the freedom both to accelerate their work and to take online courses during the summer and winter breaks. Indeed, online courses are exceptionally well enrolled and appear to be the future of summer and winter offerings. Student demand is there. On the supply side, those who are concerned about the academic quality of the shorter inter-session term are doubly concerned about the quality of online courses in a compressed time frame. Market forces win: If one institution does not make online courses available between semesters, then others will. Institutions that offer such courses internally retain control over their quality. It is worth noting that accreditation agencies will focus increasingly on assessing the learning outcomes of online inter-session courses.

This case study describes one institution’s somewhat modest attempts to convert summer school and winter session into revenue centers. Given the precarious fiscal climate in which higher education finds itself, it is imperative that institutions do everything possible to contain costs and to enhance revenues. At least initially, SRU has helped minimize the impact of decreasing enrollments by adopting online courses and adding a winter term; it has even implemented an innovative faculty compensation model that doesn’t penalize faculty or students for courses with low enrollments.

With the creation of both the summer and winter sessions, new programs have been developed that only offer classes in these two terms. These new programs are often-times geared toward educators who have time off in late December/early January and summers. In addition, by offering courses only in these two terms, the university has been able to reduce the risk of losing money on under-enrolled sections, because regardless of the enrollment, the university is assured of making one-third of the total tuition revenue for each course through Article 27 of the CBA.

Opportunities for further research include exploring student motivations and decisions with regard to summer versus winter terms. Are students substituting winter for summer courses? After only two years, data at SRU suggest that students in fact may be replacing summer- with winter-term courses. (See Table 2: summer enrollments decrease as winter enrollments increase). A survey designed to elicit information about students’ intentions may enable greater understanding of this behavior. Now that year-round schedules are facilitated by technology, are students motivated to graduate in fewer than four years? Several accelerated degree programs being developed at SRU make use of fall, winter, spring, and summer terms. Will a shift toward year-round operation increase graduation rates? Some programs are considering combining undergraduate and graduate degree programs and allowing students to complete the degrees in a shortened timeframe. Is that practical? These are just a few of the questions that have begun to arise as a result of our brief
Leadership Lessons: Vision and Values for a New Generation

If the finest voices in higher education were gathered together in one room to discuss leadership, what would you learn? Leadership Lessons: Vision and Values for a New Generation took that notion to create a compilation of 22 articles on the topic of leadership, written by today's leaders in higher education. Filled with unique kernels of wisdom, each chapter shares the authors' visions and values in ways that inspire, motivate, and illustrate how to be an exceptional leader. Authors include many who have worked in the registrar's office for decades to others with varied backgrounds in theater, student activism and German literature. This is a book you will want to share with colleagues, friends and employees; all of whom will benefit from the lessons learned by these remarkable, wise and fascinating professionals.

AACRAO’s Professional Development Guidelines for Registrars: A Self-Assessment

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To order these and other AACRAO publications, call (301) 490-7651 or visit us on the Web at www.aacrao.org/bookstore.
experience of year-round operation. We are anxious to explore this new model of operation further.

REFERENCES

APPENDIX: Summary of Summer School Survey

What is the process involved in making summer course allocations, and who is responsible for course allocation to academic departments? At least five of the eight respondents indicated that historical or previous enrollment trends played a significant role in allocations. One institution indicated that a department’s summer schedule is dependent on faculty desire to teach. The other two respondents indicated that each academic dean makes his own decision about allocations. Most respondents indicated that they have a fairly centralized process for course allocation and a decentralized process for determining what is taught and who will teach.

Are summer courses guaranteed regardless of enrollment? Three institutions indicated that courses were guaranteed regardless of enrollment, and three indicated that courses were not guaranteed. One institution indicated that a course is guaranteed dependent on it having minimum enrollment by a specific date. The last institution indicated that it guaranteed only certain courses.

Must a course reach a specific minimum enrollment in order to be offered, and, if so, what is that level? Four of the eight respondents indicated that a minimum enrollment was required. Of these, only one had a specific minimum enrollment (twelve for undergraduate courses and seven for graduate courses); the other three indicated that the minimum changes from year to year.

Do faculty teach courses with low enrollments at a reduced salary, or are such courses canceled? All of the respondents indicated that they either did not have this option, or they allowed instructors to teach the course as an independent study (if warranted).

When are low-enrollment courses canceled, and who makes the decision to do so? This question applied only to the five institutions that do not have a guaranteed course policy. Of those, the decision to cancel is made at a predetermined date. The process varies by institution, but in each case, the academic deans are heavily involved.

What are the minimum enrollments required for contingency courses? Two institutions repeated that they offer only guaranteed courses. One institution indicated that it offered guaranteed courses but that each academic dean could allocate additional contingency courses to departments. Such courses must achieve enrollment of at least sixteen undergraduates or ten graduate students or they are canceled. A fourth institution indicated that its courses must enroll at least seventeen undergraduates or twelve graduates prior to May 1 in order to be considered guaranteed; otherwise,
Only one institution indicated that they are contingency courses. The other institutions did not specify any minimum enrollment for contingency courses.

**Is Article 27 of the CBA utilized in determining summer compensation?** Article 27 of the current CBA allows institutions to offer continuing education courses at off-campus locations and to compensate faculty by paying them a percentage (66%) of the tuition revenue generated by the course. None of the eight respondents indicated that it had utilized Article 27 to determine compensation for faculty teaching traditional summer school offerings.

**Are summer contracts utilized for work other than teaching?** All respondents indicated that they use summer contracts for chairpersons’ compensation and for other non-instructional activities.

**What type of maximization objective does the institution have in making summer school allocations?** Four options were provided: profit maximization, revenue generation (but not necessarily profit maximization), break-even enrollment generation, and other. Four of the eight chose profit maximization but with the caveat of meeting the needs of students. Two chose revenue generation (but not necessarily profit maximization). One chose break-even enrollment generation. The last chose “other,” indicating that the academic deans are charged with meeting a net revenue target.

**What cost or non-cost constraints, other than faculty salaries, are considered when making summer school allocations?** Five of the eight either did not respond or indicated that they did not take into account any other constraints. One institution reiterated the need for each dean to meet a net revenue target. One institution mentioned additional instructional costs such as equipment or field trips. The remaining institution indicated that it requires departments to distribute summer teaching on an equitable basis.

**How does the institution determine the break-even point or necessary profit margin for each class considering differences in faculty salaries?** One institution indicated that each department reviews overall versus individual courses. There is an incentive to make summer school profitable because 10 percent of the profit is returned to the department. Three respondents indicated that they use some type of spreadsheet analysis in making this decision. Two did not respond. One institution repeated its commitment to the faculty union not to cancel classes because of faculty salaries. The last respondent indicated that it does not use individual class profitability as a deciding factor.

**How do non-curricular courses (workshops) fit in with summer school offerings?** Only one institution indicated that workshops play a significant role in overall summer offerings.

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RESEARCH HAS FOUND THAT APPROXIMATELY ONE-THIRD OF UNDERGRADUATES TRANSFER FROM ONE COLLEGE TO ANOTHER AND THAT TRANSFERRING IS BECOMING INCREASINGLY COMMON. IN THIS STUDY, THE AUTHORS FOCUS ON THE TRANSFER CREDIT PROCESS, RESEARCHING HOW ACADEMIC CREDIT IS EVALUATED AND WHEN IN THE ENROLLMENT PROCESS STUDENTS RECEIVE A DEGREE-SPECIFIC TRANSFER CREDIT EVALUATION. THE AUTHORS UNDERTAKE A COMPARATIVE CASE STUDY OF SIX PRIVATE, NONPROFIT, FOUR-YEAR COLLEGES IN NEW YORK STATE—THREE THAT PROVIDE “EARLY” TRANSFER CREDIT EVALUATIONS (THOSE GIVEN PRIOR TO THE STUDENT’S REQUIRED ENROLLMENT DEPOSIT) AND THREE THAT PROVIDE “LATE” TRANSFER CREDIT EVALUATIONS (THOSE GIVEN ONLY AFTER THE REQUIRED ENROLLMENT DEPOSIT). THE AUTHORS ENCOURAGE INSTITUTIONS TO PROVIDE ALL ADMITTED TRANSFER STUDENTS A DEGREE-SPECIFIC TRANSFER CREDIT EVALUATION PRIOR TO REQUIRING THEIR ENROLLMENT DEPOSIT; SUCH INFORMATION IS ESSENTIAL FOR TRANSFER STUDENTS TO MAKE AN INFORMED ENROLLMENT DECISION.
it Evaluations

HOW THEY ARE PRODUCED, WHY IT MATTERS, and HOW TO SERVE STUDENTS BETTER

THE PROBLEM

For a student transferring from one college to another—as from a community college to a four-year college—transfer credit represents time and money (Bell 2004). It represents the time and money the student spent earning credit up to the point of transferring as well as the time and money that will be required to complete a degree at the college to which she transfers. Given the value of transfer credit, students are advised to use transfer credit acceptance and credit applicability to intended degree as factors in their decisions regarding which four-year college to attend (Dunn 2004; Gonsler and Halberstam 2009; Silver 2009; Stainburn 2011).

Unfortunately, many colleges provide degree-specific transfer credit evaluations only after students commit to attend the institution by making a nonrefundable deposit—typically of several hundred dollars—to hold their place in the incoming class (American Association of Collegiate Registrars 2001; Ashby 2003; Knoell and Medsker 1965; Stainburn 2011). Colleges that require a financial commitment from students before providing a degree-specific transfer credit evaluation are essentially telling transfer students, “Buy now! We’ll tell you later what it will actually cost you.”

Difficulties in the transfer process take on heightened significance as a result of the prevalence of transfer students in undergraduate higher education in the United States. The National Center for Education Statistics followed a nationally representative sample of college students for six years, beginning with their initial enrollment, and found that 32 percent of the students transferred from their initial institution to another (Berkner, He and Cataldi 2002). Other studies have found the total transfer student percentage to be much higher, depending on how “transfer student” is defined (Handel and Williams 2012). Thus, transfer-related difficulties—such as not receiving transfer credit evaluations in a timely fashion—could affect between one-third and one-half of students who pursue a college degree.
Not only are transfer students a significant percentage of the total undergraduate population in the United States, but the percentage is increasing (Adelman 2005, Cutright 2011, Jacobs 2004b, McGlynn 2006). The Spellings Commission notes that “more students than ever before have adopted a ‘cafeteria’ approach to their education, taking classes at multiple institutions before obtaining a credential” (U.S. Department of Education 2006, p. xiii). A recent report on transfer students notes that the “traditional” full-time, eighteen to 22-year-old students who attend a single college for four years “no longer dominate college classrooms” (Center for American Progress 2011, p. 3). This increase in the percentage of transfer students may relate to the growing financial incentive associated with attending community college prior to transferring to a four-year school (Gonsher and Halberstam 2009; McGlynn 2006).

Public two-year colleges are the “most likely post-secondary entry point for economically disadvantaged students, minority students, and first-generation college attendees” (Gutierrez 2004, p.199). Transfer students from community colleges thus are more likely to be lower income and members of a minority group than are students who begin their college studies at a four-year institution (Bowen, Chingos and McPherson 2009; Chang, Altbach and Lomotey 2005; Cuseo 2003; McPhee 2006). As a result, difficulties in the transfer of credit—including the practice of withholding the degree-specific transfer credit evaluation until a student makes a nonrefundable enrollment deposit—negatively affect those who are already at a disadvantage in their pursuit of a college degree.

PURPOSE OF THE STUDY

The purpose of this study is to investigate, analyze, and compare early and late transfer credit evaluation processes at six private, nonprofit, four-year colleges in New York State. For the purposes of this study, a college that provides a degree-specific transfer credit evaluation to a student before requiring an enrollment deposit has a process characterized as “early.” In contrast, a college that requires...
a student to make an enrollment deposit before it provides a degree-specific transfer credit evaluation has a process characterized as “late.”

LITERATURE REVIEW

No literature was found that focuses primarily on the transfer credit evaluation process and its effectiveness for students. Further, no literature examines the transfer credit evaluation process from the perspective of those who participate in the process—e.g., transfer admission counselors, transfer credit evaluators, and transfer academic advisors. Given the relative paucity of research in this area, this brief review of the literature focuses primarily on the theoretical justification and process orientation of the present study. We then summarize several key areas of transfer research that relate to transfer credit evaluation processes and that provide key variables for this study.

Theoretical Justification and Process Orientation

This study was motivated by a concern that transfer students may not always be treated fairly and equitably during the transfer process. John Rawls’ (1971) social justice theory provided the theoretical justification for this concern, grounding the study in a philosophical conception of social justice. In Rawlsian social justice, equality of opportunity is essential to creating a truly just society. Because education is linked to social and economic opportunities (see, for example, Baum, Ma and Payea 2010; Schultz 1961; U.S. Department of Education 2006), barriers to education—including lack of clarity regarding transfer credit—undermine opportunity. Further, transfer students often must overcome social and economic disadvantages given that they are more likely than traditional students to be from a minority group, to be first-generation college students, and to be poor (Bowen, Chingos and McPherson 2009; Cuseo 2003; McPhee 2006).

Although the motivation for this study was justice for transfer students, the study itself focused on processes—specifically, transfer credit evaluation processes at six colleges. Robert Birnbaum’s (1988) application of bureaucratic theory to colleges (characterized here as “collegiate bureaucratic theory”) was particularly helpful. Birnbaum (1988) focuses on issues that seem likely to arise in a study of process: Where on the organizational chart does the process fall? What is the division of labor in the process? Who has final authority in the process? What is the standard operating procedure for the process? These questions are classically bureaucratic (Birnbaum 1988) and are likely to apply to the transfer credit evaluation process.

The theoretical frameworks provided by Rawls (1971) and Birnbaum (1988) played essential roles in orienting this study: Rawlsian social justice provided the overall framework for the importance of the study; Birnbaum’s bureaucratic theory provided an important perspective on the transfer credit evaluation process itself, helping the researchers understand and illuminate the elements of the process.

Transfer Literature

The literature on collegiate transfer issues dates to the 1960s, when researchers began to focus on transfer students’ experience as they transitioned from two- to four-year institutions (Knoell and Medsker 1965). Although this early research did not identify the acceptance of transfer credit and the transfer credit process as significant issues, subsequent research elevated the importance of these topics. Transfer credit acceptance took on some political importance in the 2005 congressional debate over the reauthorization of the Higher Education Act (Dervarics 2007) as the Government Accountability Office undertook a major study of the acceptance of transfer credit in relation to college accreditation (Ashby 2005). Transfer credit acceptance is described (though at times tangentially) in the literature on transfer articulation (Roksa and Keith 2008). The transfer advising and counseling literature sometimes addresses transfer credit acceptance and transfer credit evaluation, though again, often only tangentially (Bell 2004; Gordon and McDonald 2004; Marling and Jacobs 2010). Some scholarship on technology in the transfer process has explored the transfer credit process (Holaday and McCauley 2004) but with a focus on new technology and not on the people involved in the process or the process itself.

Even though little of the research reviewed directly addressed the topic of this study, it nevertheless helped the researchers better understand the topic and identify variables that relate to the transfer credit evaluation process. All of the variables in the study—bureaucratic structure, technology, personnel, articulation agreements, policy, and quality of transfer student service—were derived from the literature.
RESEARCH DESIGN AND METHODOLOGY

This study compares colleges that have effective transfer credit evaluation processes with those that have ineffective processes. The researchers chose the six colleges for the study carefully, purposely selecting three with effective processes and three with ineffective processes. Effective processes are defined as those that provide the degree-specific transfer credit evaluation to a prospective student early—i.e., before the student is required to provide an enrollment deposit. Ineffective processes are those that provide the degree-specific transfer credit evaluation to a prospective student late—i.e., only after the student provides a deposit. Ineffective processes deprive students of information that is essential to their making an informed choice about which college to attend; they constitute a violation of Rawlsian social justice.

The central research question in this study is as follows: How do effective transfer credit evaluation processes differ from ineffective transfer credit evaluation processes? Implicit in this question are the following two questions: What common themes, if any, exist among effective processes? What common themes, if any, exist among ineffective processes?

In order to answer the research question, this study focuses on six variables related to the transfer credit evaluation process. Five of these variables—bureaucratic structure, technology, personnel, articulation agreements, and policy—relate to how and why the process functions as it does and potentially play a role in the effectiveness of the process. The last variable, quality of transfer student service, is an outcome of the transfer credit evaluation process. One premise of this study is that students who receive the transfer credit evaluation late are disadvantaged because they receive degree-specific transfer credit information only after they submit their deposit. One could reasonably expect these students to be frustrated with the transfer credit process and to communicate their frustration to staff (e.g., transfer professionals) who are involved in the process.

The research design reflects the likely relationships among the variables in this study. (See Figure 1.)

Data Collection and Sample

This study relied on three main data sources: interviews, document review, and a focus group. As Berg (2009) points out, using multiple forms of data to verify findings improves studies by allowing researchers to "obtain a better, more substantive picture of reality" (p. 5). Interviews are the most common qualitative research technique (King and Horrocks 2010) and were the main source of data for this study. Documentary evidence is “likely to be relevant to every case study topic” (Yin 2009, p. 101) and plays an important role in this study by supporting its rationale and providing evidence that corroborated interview data. Focus groups can play many roles in qualitative research, including that of reviewing data gathered from other sources (Berg 2009), as in this study. The findings of this study were stronger than they would have been had only one method been used.

For the interviews, two participants (usually a transfer admission counselor and a transfer credit evaluator) were chosen from each of the six colleges in the study. Consistent with qualitative research practices, these participants were chosen purposefully because they were likely to provide rich data as a result of their involvement in the process that was the focus of the study (Yin 2009). All play a role in the transfer credit evaluation process (Holaday and McCauley 2004), making them more likely to have valuable insights into the process and its effects on transfer students. The interviews were focused (Yin 2009)—also known as semistandardized (Berg 2009) or semistructured (King and Horrocks 2010)—in that the questions were prepared in advance (though they may be reordered during the interview).

Three categories of documents were identified to serve as a source of data for this study: The first includes official college print publications—primarily college catalogs and transfer-oriented admission brochures that might include information about transfer credit. The second category includes any type of publicly accessible, online material (including social media sites) produced by or directly relating to the college in the study. The third includes any college-produced paperwork (such as acceptance letters and actual transfer credit evaluations) targeted at individual transfer students.

Preliminary answers to the research question were formulated after collecting and analyzing data derived from interviews and documents. A focus group was convened to review summaries of the data and tentative conclusions. Focus group participants included transfer professionals.
from institutions that were not part of the study; their participation helped broaden the study beyond the six institutions that were the primary focus of the research.

Data Analysis

Data were organized in four ways: First, the interview and document data were sorted by institution into a flowchart detailing the steps in the transfer credit evaluation process. Second, the interview and document data were organized by institution into categories based on the variables in the study. Third, these data were compiled and analyzed by variable across institutions, both within and between the early and late categories. (See Table 1.)

The fourth and final level of data sorting and analysis involved the focus group’s review of the institutional flowcharts and the summary data across institutions by variable. The principles of collegiate bureaucratic theory (Birnbaum 1988) provided the focusing lens.

Limitations

This qualitative comparative case study was limited by the role of the researcher in data gathering as well as by the relatively small number of private institutions that were investigated. As a result of these limitations, two main issues arise that are typical of qualitative research projects: (a) the potential for researcher bias; and (b) concerns about the generalizability of findings.

Because the researcher is “the primary instrument for gathering and analyzing data” in qualitative research (Merriam 1998, p. 20), the opportunity for researcher bias is significant. This potential for bias can be combated in several ways, including by collecting multiple forms of data “to obtain a better, more substantive view of reality”—a process called triangulation (Berg 2009, p. 5). Data for the present study were collected from three sources: interviews, document analysis, and a focus group.

The issue of generalizability “has plagued qualitative investigators for some time” (Merriam 1998, p. 207). The
The question is whether it is possible to apply the findings from a single qualitative case study to a larger universe of somewhat similar cases. As part of the effort to address the concern about generalizability, a multi-case comparative study was used in this research project. Researching multiple cases and varying the characteristics of the cases demonstrate potentially greater applicability of findings (Bogdan and Biklen 2007). That is, if a specific finding appears in several cases, it is less likely to be an anomaly than if it were found in only one setting.

Despite using a multi-case study, the problem of generalizability does not disappear, in part because the researchers must decide which cases to include and which to exclude. Deciding to exclude certain cases undermines the ability to expand from the findings to a broader group of cases. For example, in this research study, the researchers chose to limit the study to private, nonprofit institutions of relatively low admission selectivity. Public institutions were intentionally omitted, as were more selective institutions. These choices were logical given that public and more selective institutions have very different enrollment needs than do private, nonprofit institutions of relatively low selectivity, but they do limit the potential applicability of the study’s findings.

The associated limitations of bias and concerns about generalizability remain, despite steps taken to mitigate them. Researchers and readers alike should be aware of these limitations when reviewing the findings and deciding how and even whether to apply them to other cases.

**FINDINGS AND ANALYSIS**

Of the variables in this study, only two divided exactly between early and late institutions: quality of transfer services and policy. That is, only in these two areas did all early institutions show similar findings and all late institutions show similar findings. The clear division in the quality of transfer services variable demonstrated that the concerns motivating this study—that late institutions do

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**Table 1.**

*Sorting Grid Based on Variables by College*

<table>
<thead>
<tr>
<th>Institution</th>
<th>Bureaucratic Structure</th>
<th>Technology</th>
<th>Personnel</th>
<th>Articulation Agreements</th>
<th>Policy</th>
<th>Quality of Transfer Service</th>
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<tr>
<td>Earlsville College</td>
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<td>Latham College</td>
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<td>Laynette College</td>
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</table>

* Each institution was assigned a pseudonym to preserve its confidentiality as well as that of the individuals who participated in the study. Given the importance of distinguishing “early” from “late” colleges in this study, the pseudonym of each early college begins with the letter E and that of each late college begins with the letter L.
a disservice to transfer students—were justified, at least in the context of the institutions in this study. The clear division on the policy variable speaks to its being key in distinguishing early from late processes.

Three variables—bureaucratic structure, technology, and personnel—revealed some patterns that seem to distinguish early from late institutions (especially when comparing the institutions at the extremes of the early and late categories). These variables may help determine how difficult or easy it is for a college to move from a late to an early process, though they seemed insufficient on their own to actually move a college from a late to an early process. One variable—articulation agreements—seemed to have little relationship to either early or late processes and was criticized nearly universally by participants.

Quality of Transfer Services

Institutions divided clearly according to the quality of transfer services variable. Participants at the late institutions expressed concern about the quality of transfer student service as it related to the transfer credit evaluation process, citing student frustration with the process. At Latham College, for example, students receive the transfer credit evaluation in two stages: The first is the institutional evaluation provided by the admissions office soon after acceptance. This evaluation is not degree specific, so a student does not know how many credits will count toward his intended bachelor’s degree program. The second stage, the degree-specific evaluation, is provided only after the student confirms his enrollment by making the required deposit and meeting with an academic advisor.

The associate director of transfer advising at Latham College described how difficult this two-stage process is for advisors: “We’re the bad guys…. We’ll really sometimes get students’ wrath,” as when she has to tell a student that although 68 credits transferred, “none of them count [sic]” toward the degree. Even though the phrase is likely to be hyperbole, the point is clear: Students feel frustrated when the institutional evaluation leads them to believe that more credits toward the degree will transfer than actually do—particularly as they learn the truth only after they’ve committed to attend the institution by paying a nonrefundable deposit.

In contrast, participants at the early colleges were confident that their institutions were delivering high levels of transfer student services and reported no student frustration. The transfer admissions counselor at Ervington College stated that students “seem very pleased” with the information they receive prior to enrollment. Of the process overall, she noted, “I just don’t see flaws.” The transfer credit evaluator at Ervington commented similarly: “I think it serves [students] very well.”

Notably, participants at all three late colleges expressed interest in shifting to an early process in order to improve student service. Two participants at early colleges criticized late colleges for being unclear in the transfer credit information they provide to their prospective students. The consensus among participants who offered an opinion was that early processes serve transfer students well while late processes serve transfer students poorly and should be corrected.

Bureaucratic Structure

Early and late institutions did not divide clearly according to the bureaucratic structure variable: both had a diversity of transfer credit evaluation structures, with no clear pattern indicating that certain bureaucratic structures were always associated with either early or late processes. Nevertheless, two notable findings did emerge. The earliest college—Ercot—administered the process primarily from one office (the office of admissions). (Ercot’s office of admissions recently took over responsibility for first-semester transfer advising from the student services department.) Ercot’s dean of transfer evaluations noted how centralization and specialization have sped the process: “This whole unit…which is under the auspices of the admissions office, does all of the admissions and evaluations processing,” and the process is “quicker than before; we get [the transfer credit evaluation] out very quickly to students so they can make a decision.”

At the latest college (Latham), academic departments exercised the most power in granting equivalencies and delayed the process the most. The process of referring transfer students’ transcripts to the pertinent academic department(s), tracking the referral(s), reviewing the returned document(s), and updating the evaluation took a considerable amount of time, from two weeks to well over a month. As Latham’s associate director of transfer admissions noted, the academic department chair has “two weeks to do the evaluation” but often can “take a month or more.”
Analyzing these findings using Robert Birnbaum’s (1988) collegiate bureaucratic theory leads to the following conclusion: Concentrating authority for the transfer credit evaluation process in one department (such as the office of admissions) can speed the process. However, given that institutions with early processes can have complicated bureaucratic structures (as at Earlsville College), it is not essential to concentrate the process in the office of admissions.

Technology
The researchers expected that the early colleges would be characterized by advances in information technology tools—e.g., document imaging, transfer course databases, and automated degree audits—whereas the late colleges would lag in their utilization of technology. (The assumption was that these technologies, if implemented well, can save staff time and make the process more efficient.) This hypothesis was borne out at five of the six colleges as the late colleges showed less utilization of these tools than did the early colleges. The transfer admissions director at ErUSTOM College noted, “Apart from the counseling of students, everything else is technology driven.” One institution—Earlsville College—was an outlier. Although the college was virtually bereft of technology, it managed nevertheless to provide degree-specific transfer credit evaluations early. Thus, at least at the six colleges studied, the integration of information technology tools seems to make the process more efficient within the category of early or late but is not sufficient by itself to move a college from a late to an early process. Like bureaucratic structure, effective use of technology aids but is not essential for an early process.

Personnel
Two aspects of the personnel variable seemed most relevant to process effectiveness: adequate staffing levels and relationships among key staff members in departments involved in the process. Of the six processes studied, three seemed significantly understaffed (those at Latham College, Laynette College, and Earlsville College). The inclusion of one early college in this group suggests that this variable, too, does not divide clearly between early and late processes; that is, it is possible to have an early process and yet be understaffed. It is noteworthy that key staff members at Earlsville College have a strong working relationship. According to the director of academic advising, she and the associate director of admissions “have a nice friendship, a good personal friendship.”

These two key staff members leverage their relationship across departments in a way that compensates for staffing insufficiencies. During peak periods, the evaluation function shifts from the office of advisement to the office of admissions, thereby helping the institution provide transfer credit evaluations early by increasing the number of staff who are working on them. Some minimum staffing level seems necessary for a college to provide evaluations early, but it does not seem to be a determining factor in shifting a policy from late to early. For example, Lakeside College seems adequately staffed but has not shifted from a late to an early transfer credit evaluation process.

Articulation Agreements
An articulation agreement is a written compact among two or more colleges that details how students may transfer from one participating college to another; often, such agreements stipulate how college credit earned at one institution will transfer to a degree program at another institution (Kintzer and Wattenberger 1985; Roksa and Keith 2007). Ultimately, articulation agreements are intended to smooth the transfer process. However, only one college in this study demonstrated that articulation agreements were of any significant advantage in terms of the efficiency of the credit transfer process. In fact, even in this case, the benefit was limited by challenges inherent in articulation agreements. The professionals who were interviewed agreed that articulation agreements are virtually impossible to keep current, are time-consuming to construct, and are of little value to students. Other institutions in the study found the agreements to be of virtually no value, and at least one participant from each institution found the agreements highly problematic. The associate director of transfer admissions at Earlsville College noted, “By the time that it’s agreed on, then it’s not agreed upon anymore because it’s outdated.”

Policy
Ultimately, providing a degree-specific transfer credit evaluation before a student submits his enrollment deposit is an institutional policy decision. Other process variables, such as tight bureaucratic structure, extensive use of technology, and appropriate staffing, can influence how quickly
a college produces a transfer credit evaluation. But if a college does not decide to provide the degree-specific evaluation prior to the enrollment deposit deadline, these other factors are not likely to result in an early evaluation. Quite simply, a college could produce a degree-specific transfer credit evaluation within 24 hours of admission and still be a late institution if, as a matter of policy, it held the evaluation until the student submitted her enrollment deposit.

This study suggests several reasons that a college might have a policy to produce degree-specific transfer credit evaluations late. At some institutions, process variables may play a role: bureaucratic inefficiencies, limited technology, and inadequate staffing make it unlikely that a college would commit to providing the evaluation sooner. Historical precedent also may play a role: If a college has traditionally provided the degree-specific evaluation late (as the three late colleges in this study seem to have done), then it is more likely to continue this policy unless some compelling reason prompts a change.

Enrollment could constitute a compelling reason. This study found evidence that an early transfer credit evaluation process may improve transfer student enrollment by reducing transfer credit ambiguity and enhancing student service. If the transfer student is happier with the service and information (such as degree-specific transfer credit information) provided after admission but before enrollment, then he may be more likely to enroll. A comparison of the colleges’ yield rates (i.e., the percentage of admitted students who enroll) supports this theory: Whereas early colleges had an average transfer student yield of 61 percent, late colleges had an average transfer student yield of only 46 percent. Ervington had the highest transfer student yield in the survey—71 percent—whereas Latham had the lowest, at 38 percent. Other factors certainly play a role in yield, but the yield comparison is notable and provides evidence that early schools make effective use of the transfer credit evaluation process as a recruitment tool.

Some late colleges may fear negative enrollment consequences as a result of shifting to an early process, particularly if they tend to award few transfer credits. Colleges that are conservative in awarding transfer credit may actually have an enrollment advantage by essentially concealing transfer credit applicability to intended degree until after the student has paid the enrollment deposit. The associate director of transfer advising at Latham suggests as much when explaining why her institution is unlikely to provide the degree-specific transfer credit evaluation prior to the enrollment deposit deadline:

[Advisement should] have a presence over in the admissions office—and this will never happen—when students are getting that initial credit evaluation; the degree applicability could be presented with the advisement person in a collaborative way. But then I honestly think they might lose students.

Policy, then, is a complicated variable: Early colleges seem to derive an enrollment benefit from their policies; this is substantiated both by the comments of study participants and the yield data comparison with late colleges. However, some colleges may be disadvantaged by shifting to an early transfer credit evaluation process, particularly if they are less generous than their competitor schools in the award of transfer credit.

**IMPLICATIONS OF THE STUDY**

This study offers evidence that colleges (minimally, the six in this study) could and should provide early degree-specific transfer credit evaluations. Transfer professionals in this study were unequivocal about the importance of providing such evaluations early. Participants at each of the three late colleges perceived their late evaluations as a process shortcoming and often reported student frustration. Participants at the three early colleges also perceived the practice of the late colleges as a shortcoming and criticized it as confusing and sometimes misleading students. One transfer admissions professional in the focus group commented, “I think some institutions have a catch-and-release policy: We got them, we got their deposit, and we got them to pay their first semester of tuition.” After the first semester, some students choose to transfer again or even drop out because they decide that the “lost” transfer credit—of which they become aware only after submitting their enrollment deposit and perhaps only after starting classes—is too great a loss. In an effort to provide high-quality transfer student services, the three late colleges in the study should change their transfer credit evaluation policies and processes so that the degree-specific evaluation is provided early—i.e., prior to the enrollment deposit deadline.

Generalizing findings based on qualitative research is problematic for reasons already discussed, but the data
gathered in this study should prompt institutions to review their transfer credit evaluation processes in order to determine whether they are serving students well. We expect that colleges with late processes will find that they are not. Given the role that transfer student degree attainment can play in improving national economic competitiveness and in maintaining the promise of economic and social mobility, any practices that make transferring more difficult should be reviewed and changed. The Obama administration has called for colleges and states to undertake such changes, noting that “the lack of a coherent, navigable, and transparent transfer process both increases the cost and time needed to earn a degree and diminishes the likelihood of completion” (U.S. Department of Education 2011, p.11). This study provides evidence that failure to provide a degree-specific transfer credit evaluation prior to the enrollment deposit deadline contributes to this lack of a coherent, navigable, and transparent transfer process.

Perhaps the most likely objection to our recommendation that all colleges provide degree-specific transfer credit evaluations to all admitted students prior to the enrollment deposit deadline is that this would be too much work. This objection was common in the responses to our commentary in the *Chronicle of Higher Education* (Ort and Cooper 2013). Apart from the fact that doing what is right sometimes requires more work, it is quite possible that colleges with late transfer credit evaluation processes may be able to accomplish the shift to an early process by making the process more efficient. Our study highlighted factors that can play a role in process efficiency (bureaucratic structure, technology, and personnel) and how the processes at early colleges often excel in these areas. Late colleges could learn from their early peers how to improve their processes, possibly without adding significantly to the workload of the individuals involved.

Transfer students encounter many challenges, often with little attention or support from college administrators, faculty, and researchers (Carey 2010, Handel 2010). One of the few books on collegiate transfer issues characterizes the transfer student as “the forgotten student” (Jacobs 2004a). This neglect extends to higher education enrollment structures and processes that were designed without transfer students in mind—including, at some institutions, the transfer credit evaluation process. Transfer students deserve better. After all, it is their time and money that are at stake.

**REFERENCES**


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**About the Authors**

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A number of U.S. higher education institutions are converting from quarter- to semester-based academic calendars; in fall 2012, seventeen Ohio institutions did so. Over a two-year time period, college student samples were recruited from a large, public, urban, Midwestern university that was undergoing a transition from a quarter-based to a semester-based calendar. Results indicate that during their last year on the quarter calendar, most students favored that system and predicted little to no change in their motivation heading into semesters; but after their first year on the semester calendar, their favoritism of quarters decreased. This mixed methods study assessed college students’ favoritism of quarters and semesters; their predicted and perceived changes to their motivated behaviors; and their self-reported motivation. Even though most students perceived little to no change in their motivation after the conversion to the semester calendar, there was a noticeable increase in the percentage of students who reported having adopted maladaptive behaviors and becoming de-motivated. Despite this increase, a statistical increase in students’ self-efficacy toward their coursework was also observed. Implications of these findings and directions for future research are discussed.
decision making about such a conversion; yet research indicates that achievement motivation may greatly influence students’ learning outcomes. Motivation is defined as the process whereby goal-directed actions are instigated and sustained (Schunk, Pintrich and Meece 2014). Therefore, it is worth considering that an institution’s change of its academic calendar may alter its students’ “goal-directed actions.” The conversion from three ten-week quarters to two fifteen-week semesters has the potential to change how students manage their time and/or their confidence in their ability to maintain their energy and focus throughout a fifteen-week academic term. Students who become fatigued (or de-motivated) as a result of the change may behave in a manner that is maladaptive to their learning and/or to the institution’s mission. At the same time, students who perceive that a fifteen-week semester will provide them with more time to master course content may adapt their learning strategies (e.g., time management, self-regulation, etc.) accordingly. Thus, even though the decision to convert from a quarter- to a semester-based calendar may rest primarily on issues related to institutional finances, student transfer protocols, and/or curriculum changes, the decision can have significant implications for student-motivated behaviors.

TRANSITIONING FROM QUARTERS TO SEMESTERS

CHANGES IN COLLEGE STUDENTS’ PREDICTED AND PERCEIVED MOTIVATION
The literature suggests that faculty members favor semesters whereas students (undergraduates in particular) appear to favor quarters (Pyle 2007, 2009, 2012). Explanations for the difference include the notion that undergraduates may favor quarters because they are shorter and provide more opportunities to quickly obtain grades to demonstrate their competence (i.e., employing performance orientations). Faculty may favor semesters over quarters because they allow more time to delve deeply into content so that mastery can take place. (For more on how extended instructional time can be used to promote adaptive [mastery] goals, see Schunk, Pintrich and Meece, 2014, p. 206.) Historically, opportunities to master course content have resulted in desirable learning outcomes for students (Anderman and Wolters 2006) whereas a focus on grades, competition, and test performance has been associated with shallow cognitive processes (Sinha and Kumar 2000).

In this mixed methods study, we investigate students’ favoritism toward semesters and quarters at an institution undergoing semester conversion in addition to the predicted and perceived changes of their motivated behaviors (defined in this study as strategies and approaches to academic work). Finally, we compare students’ self-reported motivation during their last year on the quarter system to that during their first year on the semester system.

LITERATURE REVIEW

Converting to Semesters

Semester calendars are more common than quarter calendars at U.S. higher education institutions (Smith 2012). The vast majority of students who enroll in higher education in the United States experience a consistent academic calendar—typically a semester calendar. Nevertheless, one-third of undergraduates transfer from one institution to another at least once before earning a degree (Gonzalez 2012); and some students transfer to institutions with different academic calendars. For such students, the process of converting credit hours can be complicated, especially when required courses for a degree have incompatible credit hours. For example, a student who needs three credit hours of biology at an institution that operates according to a semester calendar will have satisfied only two-thirds of the required credit hours if he has taken biology at an institution on the quarter system; raising the question of how the student should earn the last third of the credit hours he needs. (For more on definitions of credit conversion and credit hours, see Titus 2012 as well as University of Cincinnati 2012c.)

As part of the University System of Ohio’s (2012) ten-year strategic plan, seventeen of the state’s colleges and universities converted their academic calendars from three ten-week quarters to two fifteen-week semesters (excluding summer sessions). As previously mentioned, this decision was allegedly made to facilitate students’ transfer to other institutions within the system (Fingerhut 2010).

Three guidelines for semester conversion were established:

- An institution’s semester calendar will not violate any accreditation regulation, federal guidelines, etc.
- An institution’s semester calendar will facilitate the attainment of the University System of Ohio goals, including the transfer process.
- A semester credit hour will mean the same throughout the University System of Ohio (Fingerhut 2010, p. 1).

A semester is defined as no fewer than fifteen and no more than seventeen calendar weeks; Fingerhut (2010) reports that an academic year shall be at least 30 weeks in length. Although three ten-week quarters is equivalent to 30 weeks, reducing the number of academic terms from three to two reduces the number of courses in which students enroll and thus increases the amount of time dedicated to a particular course (Jokinen 2012a). Ultimately, the amount of time necessary to complete a degree program and graduate should be the same, as should be the amount of required seat time (i.e., the number of minutes of formal instruction).

Faculty and staff at institutions undergoing calendar conversions were required to submit new syllabuses and curriculum reviews to verify their accommodation of the change. The University System of Ohio made its proceedings accessible online as part of the effort to keep faculty, staff, administrators, and students informed about the conversion process (Ohio Faculty Council 2012). Many of the affected institutions launched websites that specifically

\[1\] Institutions that have recently undergone semester conversion have made pledges to their students that semester conversion would not delay their graduation or time to degree (see Wright State University 2014 for a sample pledge). Many administrators at the Ohio institutions that converted to semester calendars were optimistic about timely graduations and cited students’ planning with their academic advisors and visits to semester-conversion websites (see Jackson 2013, Pyle 2012).
ally answered students’ frequently asked questions about the conversion (see Ohio State University 2012, University of Cincinnati 2012a).

Numerous resources encouraged students who would experience the semester conversion to seek the help of an academic advisor in generating a plan to complete their coursework (see Reilly 2011). Students were reminded that the main academic advantage of the semester system is that it provides greater opportunities for collaborative research and for in-depth teaching and classroom projects. A semester calendar facilitates study-abroad options, student teaching, and other forms of experiential learning (University of Cincinnati, 2012b). From a motivation standpoint, “greater opportunities…for in-depth teaching and classroom projects” includes students’ engaging in course materials, mastering key concepts, and making meaningful connections with relevant course information during a fifteen-week rather than a ten-week term. Additionally, increased time for instruction allows students to engage more deeply in the content while simultaneously allocating more time for instructors to thoroughly teach, and review the material with their students. Schunk, Pintrich, and Meece (2014) suggest that increasing the amount of time in a course may promote mastery strategies that students can use to set goals, timetables, and make autonomous decisions, which in turn can result in desirable learning outcomes (also see Slavin 2006). Despite the advantages of extended instructional time that result from the shift from a ten-week to a fifteen-week term, approximately 68 percent of undergraduate students still expressed favoritism toward quarters after their university announced that it would transition to semesters in 2012–13 (Pyle 2007).

Mastery-oriented behaviors

Anderman and Anderman (2009) encourage educators to give students ample time to gain mastery of important topics and skills. According to Achievement Goal Theory (AGT), a social cognitive theory of motivation, efforts to learn or gain competence are referred to as mastery-oriented goals whereas efforts to obtain a high grade and demonstrate competence (often in comparison to others) are referred to as performance-oriented goals (Ames 1992, Linnenbrink and Pintrich 2002a). Mastery orientations are often touted for being most associated with adaptive learning outcomes including achievement, deep cognitive engagement, positive affect, and adaptive learning strategy use (Linnenbrink and Pintrich 2002a, 2002b; Peggy, Sullivan and Guerra 2007). Performance orientations have been associated with shallow processing strategy use, negative affect following failure, maladaptive coping, and less prosocial behaviors (Johnson and Nussbaum 2012, Sinha and Kumar 2000). This is not to say that performance orientations are entirely bad (see Durik, Lovejoy and Johnson 2009); many AGT scholars have found performance orientations to be predictive of high achievement and recall memory (Barker, McInerney and Dowson 2002; Kaplan, Gheen and Midgley 2002). Nevertheless, Linnenbrink and Pintrich (2002a, 2002b) explain that learners who utilize a mastery orientation are more likely to use deep processing strategies that result in more meaningful learning; performance-oriented students, by contrast, may use shallow processing (such as memorization) to complete a task and obtain a good grade or score. By converting from quarters to semesters, higher education institutions arguably foster a mastery-oriented learning environment.

Purpose of the present study

In this mixed methods study, we assessed a sample of Midwestern university students’ favoritism toward quarters and semesters, the students’ predicted and perceived changes to their motivated behaviors, and their self-reported motivation/learning strategies during the conversion to a semester calendar. The research questions were:

- Does students’ favoritism of quarters or semesters change from their last year on quarters to the end of their first year on semesters?
- How do students on quarters predict their [motivated behaviors] strategies and approaches to their academic work will change when semesters begin; during their first year on semesters, how do students perceive their [motivated behaviors] strategies and approaches to their academic work to have changed from when they were on quarters?
- How do students in their last year on quarters and those in their first year on semesters compare in regard to their self-reported motivation/learning strategies?

Although this study is primarily qualitative, exploratory, and descriptive in nature, we offer some hypotheses for our research questions. With regard to the first ques-
tion, concerning students’ favoritism of quarters and semesters, we hypothesized that we would see a shift in their favoritism: Because Pyle (2007) reported on students at an institution that was also facing conversion to a semester calendar favored quarters, we expected that students in their last year on the quarter system would favor that calendar over a semester calendar. We also expected that after students experienced a year of a semester calendar, their favoritism would change. According to Jokinen (2012a, 2012b), administrators at many of the Ohio institutions that underwent semester conversion alleged that concerns about student enrollment and students’ attitudes toward semesters would moderate once faculty and students became familiar with, adjusted to, and experienced semesters. We therefore predicted that students would favor semesters by the end of their first year on the new system.

With regard to our second research question, concerning students’ predicted and perceived changes to their motivated behaviors during semester conversion, we hypothesized that students would demonstrate more mastery-oriented strategies/approaches to their academic work once they were on the semester calendar. We anticipated that students would realize that semesters provide greater amounts of time to focus on mastery of course material. Finally, with regard to the third research question, about students’ self-reported motivated strategies, we expected to see differences as a result of the change to fifteen-week semesters. Peggy, Sullivan, and Guerra (2007) as well as Linnenbrink and Pintrich (2002a, 2002b) reported that mastery orientations are strongly associated with adaptive learning strategy use (e.g., time management, self-regulation, effort management). Thus, with an expectation that fifteen-week semesters would result in greater mastery orientations, we expected to see differences in students’ self-reported motivation strategies as well as changes in the way they organized and managed their time as they adjusted to the new calendar.

The results of this study may have practical implications for other higher education institutions contemplating a transition from quarters to semesters. Results should inform administrators about the rate at which students begin to favor semesters over quarters. They should also inform student services personnel about how students will respond behaviorally and motivationally to a change in the academic calendar. Greater understanding of how student motivation might change as a result of such a transition should support the better preparation of students for similar transitions and/or determinations of whether motivational interventions are needed. Undergraduates’ continued favoring of quarters even after experiencing a year of semesters may encourage administrators and student services personnel to consider continued efforts to promote the mastery advantages of semesters. Alternatively, undergraduates’ adoption of mastery orientations within a year of a transition to semesters may encourage student services personnel to redirect their efforts toward maintaining rather than prompting students’ mastery orientations.

METHODS

Participants

We recruited student participants from a large, public, urban, Midwestern university; all were enrolled in the same School of Education research subject pool. Four student samples (two from the final year on quarters and two from the first year on semesters) provided data. From the final year on quarters (Year 0), a sample of 131 undergraduates (36 male, 94 female, 1 not specified) completed a questionnaire concerning their favoritism of quarters or semesters and responded to a question concerning their predicted changes to their motivated behaviors. Also from Year 0, a sample of 105 undergraduates (31 male, 74 female) completed the Motivated Strategies for Learning Questionnaire (MSLQ) (described below). Both the university and the subject pool experienced enrollment decreases during the first year on the semester calendar (Year 1), resulting in 50 undergraduates (21 male, 29 female) completing the questionnaire; a sample of 48 undergraduates (16 male, 32 female) completed the MSLQ.

All four samples were consistent in terms of participants’ average age, cumulative grade point average, year in college, and ethnicity. The average age of participants in each sample ranged from 20.5 to 20.8 years, with an age range from 18 to 59 years. The mean grade point averages (GPAs) of the sample groups ranged from 3.28 to 3.3 on a 4.0 scale. The samples were, on average, 91 percent Caucasian, 1 percent Hispanic/Latino, 7 percent black/African American, and 1 percent not specified; this was consistent with previous studies that utilized the same subject pool. Students who were seniors in Year 0 were screened...
out of the data because it was less likely that they would experience the semester conversion. This resulted in the majority of Year 0 students being sophomores (44%), followed by juniors (32%) and freshmen (22%). Sophomores accounted for approximately 60 percent of the Year 1 samples, followed by 30 percent juniors, and 10 percent seniors; freshmen were excluded from participation in Year 1 because it was unlikely that they had experienced quarters at the college level.

MEASURES

Favoritism and Predicted/Perceived Motivated Behavior Changes

An investigator-generated questionnaire was utilized to assess students’ favoritism of quarters and semesters as well as their predicted and perceived motivation changes. The questionnaire included both open- and closed-ended questions. Specifically, participants were asked whether they favored quarters or semesters. Also, they were asked to describe the advantages and disadvantages of the calendar they favored. Next, Year 0 participants were asked to describe how their strategies, test preparation, and general approaches to their academic work would change with the conversion to semesters; Year 1 participants were asked, “Did any of your behaviors or approaches to your academic work change from last year as a result of semester conversion?”

Motivation Assessment

The Motivated Strategies for Learning Questionnaire (MSLQ) measures student motivational characteristics and learning strategy use (Duncan and McKeachie 2005; Pintrich, Smith and Garcia 1993). It consists of a total of 81 items divided into fifteen subscales for intrinsic [mastery] goal orientation, extrinsic [performance] goal orientation, task value, control of learning beliefs, self-efficacy for learning, test anxiety, rehearsal, elaboration, organization, critical thinking, metacognitive self-regulation, time management, effort regulation, peer learning, and help seeking. The first six subscales are considered motivation scales; the latter nine are considered learning strategies scales. For this study, participants were instructed to use a Likert scale ranging from one to seven to rate the degree to which they agreed each item represented their motivation and/or learning strategy use for their college coursework.

PROCEDURE

In an effort to minimize participants’ response bias, different student samples were asked to complete each of the above-mentioned questionnaires separately. We wanted to guard against participants’ responding to MSLQ items in a “socially desirable” manner that would reflect their responses to the first questionnaire (about which calendar system they favored). Furthermore, we were most interested in assessing students’ predicted and perceived changes to their motivated behaviors rather than the motivation and learning strategy item information provided in the MSLQ. All participants from Year 0 and Year 1 were recruited from the same research subject pool; and all Year 1 participants were recruited for participation late in the second semester to ensure that they had all experienced at least one full semester. All participants were informed that the online questionnaire would take no more than 30 minutes to complete. Links to the questionnaires could be launched from the electronic subject pool website. Participants were asked to read an information sheet and to indicate their consent to participate by “entering” one of the questionnaires. All participants were thanked for their participation.

DATA ANALYSIS

This mixed methods study relied on quantitative and qualitative data. Average scores were calculated for each of the MSLQ subscales, and participants were coded by the year of their participation (Year 0 = 0; Year 1 = 1). Descriptive statistics, correlations, and independent sample t-tests were derived from the quantitative data. Chi-square analyses were utilized to assess favoritism toward quarters versus semesters. Two raters coded the qualitative data about predicted and perceived motivation changes by analyzing themes. Both raters were blinded from knowing whether participants favored quarters or semesters; were familiar with the characteristics and assumptions of prominent motivation theories; and had coded qualitative themes of motivation for other studies.

RESULTS

Favoritism

In Year 0, approximately 77 percent of participants favored quarters, \( \chi^2 (1, 130) = 37.7, p < 0.005 \). Yet in Year 1, only 52 percent of participants favored quarters while 48
percent favored semesters, \( \chi^2(1, 50) = 0.08, p = 0.78 \); thus, toward the end of the first academic year on the semester calendar, students’ favoritism toward quarters and semesters was approximately equal. The decrease in the percentage of students who favored quarters from Year 0 to Year 1 indicates a shift in students’ attitudes regarding the conversion to a semester calendar. (See Table 1 for students’ perceptions of the advantages and disadvantages of quarters and semesters.)

**PREDICTED/PERCEIVED MOTIVATED BEHAVIOR CHANGES**

All Year 0 participants were asked, “How are your strategies, test preparation, and general approaches to your academic work going to change with the conversion to semesters?” Two raters used a sample of participants’ responses to generate a key for coding responses. Responses that identified more time and opportunity to learn and/or to go deeper into course materials were coded as mastery oriented; those that stressed performing well on exams/assignments and shallow learning strategies (such as memorizing) were coded as performance oriented; those that identified becoming more lazy, procrastinating more, or studying less because assignments would be more spread out over a semester were coded as de-motivated; responses that expressed no anticipated changes were coded as no change; and all others—for example, those that were ambiguous or expressed uncertainty regarding what change might occur were coded as “other.” After independently coding all responses with an interrater reliability score of 0.92, both raters met to justify their codings until 100 percent agreement was reached.

Approximately 37 percent of Year 0 students did not expect any of their strategies to change, 29 percent said they would likely adopt a mastery orientation, 18 percent thought they would want to focus more on their exam performance, 7 percent believed they would become more lazy and/or procrastinate more, and 8 percent provided other/ambiguous responses. The results indicated that many students did not expect to change their motivated strategies as a result of the change in academic calendar from quarters to semesters, \( \chi^2(4, 129) = 45.6, p < 0.005 \).
Yet the 29 percent who thought they might adopt mastery-oriented strategies should not be ignored. With the majority of Year 0 students favoring quarters, administrators should be reassured that students’ ability to acknowledge that semesters might be advantageous for employing mastery-oriented strategies suggests that they might not be entirely pessimistic toward the shift to a semester calendar. An unexpected finding is that 7 percent of student respondents thought they might become lazier and/or procrastinate more upon implementation of a semester calendar. This percentage is small, but student services personnel may want to research this population further to determine whether interventions could enhance their academic experiences. It is worth noting that 88 percent of this de-motivated Year 0 population favored quarters.

Data for Year 1 participants were coded in a similar fashion as those for Year 0 participants; however, participants who could be coded as having a mastery orientation were more specific about their use of time and adaptive learning strategies. Statements included “I got to know my professors more and became more involved with my classmates,” “I understood more of the lessons that we were taught during the classes and also was able to receive one-on-one attention from my professors,” and “I did make sure I was much more organized with my notes and handouts so I could keep everything together.” None of the Year 1 participants responded in a performance-oriented manner—i.e., in a way that stressed a greater desire to focus solely on getting high scores/grades. A far greater number of responses regarding Year 1 as opposed to Year 0 focused on adopting maladaptive behaviors/characteristics: Statements included, “It is harder for me to stay focused…I’m checking out mentally,” “I have more time to procrastinate,” and “I skip more classes and dislike my classes exponentially more.” With the exception of not seeing any responses that could be coded as performance oriented, we maintained codes for mastery oriented, de-motivated, no change, and other.

Approximately 44 percent of responses were coded “no change,” 29 percent “de-motivated,” 23 percent “mastery,” and 4 percent “other.” As for Year 0, the results for Year 1 indicate that many students experienced little to no change in their motivated behavior, \( \chi^2 (3, 48) = 15.5, p = 0.001 \). Although a sizable proportion of Year 1 participants stated that they adopted adaptive and mastery-oriented behaviors, the increase from 7 percent of Year 0 participants to 29 percent of Year 1 participants commenting on de-motivated behaviors/characteristics is dramatic, concerning, and unexpected—especially knowing that Year 1 participants favored semesters to a greater degree than did Year 0 participants. Note that of this Year 1 “de-motivated population,” 78.6 percent had favored quarters.

Self-Reported Motivation

Year 0 and Year 1 students’ self-reported motivation and learning strategy MSLQ scores were compared. Independent sample t-tests in which Year 0 and Year 1 were designated as the grouping variable and average scores for all MSLQ subscales were designated as the dependent variables indicate a statistically significant difference between the self-efficacy of Year 0 and Year 1 students, \( t(148) = -2.87, p = 0.005 \). Specifically, Year 1 students had significantly higher self-efficacy scores (\( M = 5.98, SD = 0.84 \)) than did Year 0 students (\( M = 5.52, SD = 0.93 \)). No other significant differences on MSLQ subscales were observed. (See Table 2, on page 34, for all MSLQ means and standard deviations by year.)

Discussion

In this mixed methods study, we assessed the favoritism toward quarter and semester academic calendars, predicted/perceived changes to motivated behaviors, and self-reported motivation and learning strategy use by undergraduate students at a large, public, urban, Midwestern university undergoing semester conversion. We found that, consistent with Pyle (2007), a greater percentage of students favored quarters over semesters prior to semester conversion. However, after experiencing a year on the semester calendar, the percentage of students who favored quarters was not significantly different from the percentage who favored semesters. This finding indicates a shift in students’ attitudes toward the semester calendar after experiencing it for a year. Although many administrators, faculty, and staff might prefer a more significant shift toward favoring semesters, our finding provides important baseline information. Institutions considering semester conversion should be advised of the likely change in students’ favoritism of a semester calendar, of their perceived advantages and disadvantages of quarter and semester calendars, and of ways in which to market the conversion (for example, by promoting mastery benefits) to students.
Greater percentages of students in Year 0 and Year 1 predicted and perceived no change in their motivation than did those that predicted and perceived adopting mastery orientations and becoming de-motivated. Our hypothesis that students would predict and perceive their adoption of mastery orientations was not supported, but the results are novel and informative nevertheless. In fact, despite the shift in favoritism, we were surprised by the increase in the percentage of students who predicted being de-motivated in Year 0 to those who perceived being de-motivated in Year 1. Motivation literature suggests that lengthening the time of instruction from ten to fifteen weeks can yield mastery benefits (Anderman and Anderman 2009; Bude et al. 2011; Schunk, Pintrich and Meece 2014), but a sizable proportion of Year 1 students reported becoming bored, procrastinating more, and even skipping classes occasionally. The majority of these de-motivated Year 1 students had favored quarters, which may indicate their protest against or at least their resistance to the conversion to semesters. Student services personnel at institutions considering semester conversion may want to consider strategies that promote students’ adoption of time management skills and effort regulation, especially for students who may show some resistance toward semester conversion.

Finally, with regard to differences between Year 0 and Year 1 students’ self-reported motivation and learning strategies, we believe that the results of our independent samples t-tests were also novel and informative. Specifically, we observed a statistical difference only in Year 1 students’ higher self-efficacy toward their coursework as compared to Year 0 students’. This may indicate a positive change in students’ motivation as self-efficacy has been reported to be one of the strongest predictors of academic achievement (see Pajares and Urdan 2006, Usher and Pajares 2008). Although we had hypothesized that differences in MSLQ subscales would indicate Year 1 students’ adopting mastery-oriented behaviors and strategies such as time management and intrinsic goals, the increase in self-efficacy is promising. After all, our hypothesis for this third and final research question was contingent on finding more Year 1 students perceiving that their academic motivation had shifted toward mastery orientations during their year on a semester calendar. Given that we did observe changes in perceived motivation such that de-motivated behaviors were more

<table>
<thead>
<tr>
<th>MSLQ Subscale</th>
<th>Year 0 (n = 105)</th>
<th>Year 1 (n = 48)</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Intrinsic</td>
<td>4.97</td>
<td>1.09</td>
<td>4.97</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>5.81</td>
<td>0.86</td>
<td>5.62</td>
</tr>
<tr>
<td>Task Value</td>
<td>5.67</td>
<td>1.04</td>
<td>5.60</td>
</tr>
<tr>
<td>Control Beliefs</td>
<td>5.69</td>
<td>0.81</td>
<td>5.68</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>5.52</td>
<td>0.93</td>
<td>5.98</td>
</tr>
<tr>
<td>Test Anxiety</td>
<td>4.22</td>
<td>1.36</td>
<td>4.29</td>
</tr>
<tr>
<td>Rehearsal</td>
<td>5.04</td>
<td>0.92</td>
<td>4.83</td>
</tr>
<tr>
<td>Elaboration</td>
<td>4.75</td>
<td>0.94</td>
<td>5.03</td>
</tr>
<tr>
<td>Organization</td>
<td>4.54</td>
<td>1.19</td>
<td>4.76</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>4.09</td>
<td>1.17</td>
<td>4.31</td>
</tr>
<tr>
<td>Self-Regulation</td>
<td>4.52</td>
<td>0.79</td>
<td>4.67</td>
</tr>
<tr>
<td>Time Management</td>
<td>4.96</td>
<td>0.85</td>
<td>5.13</td>
</tr>
<tr>
<td>Effort Regulation</td>
<td>4.99</td>
<td>1.06</td>
<td>5.18</td>
</tr>
<tr>
<td>Peer Learning</td>
<td>3.76</td>
<td>1.54</td>
<td>3.49</td>
</tr>
<tr>
<td>Help Seeking</td>
<td>3.82</td>
<td>1.30</td>
<td>3.60</td>
</tr>
</tbody>
</table>

Note: Some MSLQ items for learning strategy subscales were reverse coded according to Duncan and McKeachie (2005) prior to generating the average scores reported above.
abundantly reported in Year 1 than in Year 0, it was surprising to see that the only MSLQ difference was between Year 1 and Year 0 students’ self-efficacy—and that it was Year 1 students who reported higher self-efficacy. With the increase in the proportion of de-motivated students, it could have very well turned out that Year 1 students reported lower ratings for things like intrinsic goals and/or time management.

According to Cao (2012), procrastinating learners report high performance-avoidance goals, low mastery-approach goals, and low task values. Additionally, Cao cites the work of Wolters (2003), who reported finding that procrastination, was negatively associated with self-efficacy. So our findings of an increased proportion of de-motivated (i.e., procrastinating) students in Year 1 and a higher reported mean for self-efficacy is unique. One explanation could be that despite becoming more easily bored and/or procrastinating more on their coursework, students’ experience of fifteen-week semesters rather than ten-week quarters promoted a sense that more time was available in which to achieve a desirable outcome. Students who performed well on the quarter system—perhaps cramming for exams and working on shorter timelines/deadlines—may have perceived the longer fifteen-week semester as less challenging. Another explanation is that course instructors may not have challenged their students adequately once the semester calendar was adopted—and/or they prolonged their instruction without changing their syllabuses from a quarter to a semester timeline. Finally, it is also possible that these findings naturally occur when an institution converts to semesters—or they may be a fluke. (This is unlikely, however, given that all other MSLQ scales and comparisons were consistent from Year 0 to Year 1.)

**LIMITATIONS AND FUTURE DIRECTIONS**

Very little research exists regarding the assessment of student motivation during semester conversion, yet many institutions across the United States have considered this transition (see Mayberry 2009, Smith 2012). For this reason, we believe that our novel findings may help establish a useful foundation for decision making at institutions considering semester conversion. Of course, we recognize the limitations of this mixed methods study and offer recommendations for improving upon this line of research. The generalizability of our findings is limited, so we encourage future researchers to assess larger and more diverse student populations (perhaps with varying academic majors, transfer status, demographic characteristics, and/or grade levels). Replicating our study is necessary to determine the temporal and ecological validity of our findings. We also encourage the assessment of faculty motivational and instructional characteristics because such data can lend insight into how faculty might enhance students’ self-efficacy.

We decided early on to minimize response bias by recruiting different samples for our questionnaires; yet we suggest that future research collect data on students’ motivation using only one sample so that correlations between favoritism and self-reported motivation and learning strategy use can be analyzed. And although we were limited by identifying individual students with whom to follow up from Year 0 to Year 1, we encourage researchers to consider a more traditional longitudinal design. Finally, although it appears that more institutions are converting from quarters to semesters (Smith 2012), we encourage researchers to seize on opportunities to assess students’ motivation during other calendar changes—perhaps from semesters to quarters or with altered start and end dates of the academic calendar.

**IMPLICATIONS**

The results of this mixed methods study have practical and theoretical implications for institutions considering or experiencing calendar conversions, specifically from quarters to semesters. From a theoretical standpoint, this study provides a foundation upon which future research can build; it thereby helps to ground a theory of student motivation during semester conversion. One of the advantages to semester conversion that the University of Cincinnati (2012b) promoted was that semesters provide greater opportunities for “in-depth teaching and classroom projects.” Our findings not only support this but also confirm other perceived advantages and disadvantages of quarters as well as semesters. Our findings of an increased proportion of Year 1 students reporting being de-motivated yet also observing a statistically higher self-reported self-efficacy in Year 1 than Year 0 are significant. Literature concerning self-efficacy primarily touts its relationship to other adaptive learner characteristics (e.g., achievement, mastery orientations, etc.) (see Wolters 2003). However,
our results suggest that self-efficacy can remain high despite students’ perceived boredom and procrastination. Thus, self-efficacy theorists (see Bandura 2012; Usher and Pajares 2008) may consider taking note of our findings to explain rare circumstances in which self-efficacy and maladaptive characteristics like boredom can coexist.

Our findings have practical implications for those at institutions considering and/or experiencing semester conversion. The findings can be used to inform decision makers, administrators, public relations, and student services personnel of students’ favoritism and perceived advantages/disadvantages of quarters and semesters. An institution’s public relations department can utilize the advantages (see Table 1) to better tailor its resources to promote semester conversion. Student services personnel can utilize the findings to inform the identification of better ways of preparing students for semester conversion and/or for the tailoring of strategies for fostering students’ adoption of time management, effort regulation, and self-regulatory skills once a semester calendar is implemented.

Many U.S. institutions may be considering converting from academic quarters to semesters. This study provides important information about student attitudes and motivational characteristics during such a transition. Institutions planning to convert to semesters should be explicit and vocal about the mastery benefits of doing so; students may accept the transition more readily when mastery benefits are emphasized and when help from student services personnel facilitates their adoption of time management and self-regulatory skills that may aid in combating boredom and/or procrastination. Participants in the current study have completed a year on the semester calendar. Increases in the proportion of students favoring semesters and identifying increases in self-efficacy lead us to believe that the institution’s efforts and transition have been successful; students at this institution may reap even greater rewards in the form of higher academic achievement as it is well-documented that increased self-efficacy strongly predicts adaptive learning outcomes (e.g., academic achievement, mastery learning, etc.) (Usher and Pajares 2008).

REFERENCES


About the Authors

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ACKNOWLEDGMENTS: We would like to thank Drs. Heather Dawson (Virginia Commonwealth University) and Gale Sinatra (University of Southern California) for their support and encouragement of this study.
THIS ARTICLE FOCUSES ON THE RESEARCH BEING CONDUCTED BY CAMBRIDGE INTERNATIONAL EXAMINATIONS (CAMBRIDGE) TO ENSURE THAT ITS INTERNATIONAL ASSESSMENTS PREPARE STUDENTS AS WELL AS OTHER ACCELERATION PROGRAMS FOR CONTINUED STUDY IN U.S. COLLEGES AND UNIVERSITIES. THE STUDY, WHICH BUILDS ON PREVIOUS FRESHMAN GPA DATA MODELING WORK USING DATA SUPPLIED BY FLORIDA STATE UNIVERSITY, IS DESIGNED TO INVESTIGATE THE IMPACT OF THE CAMBRIDGE PROGRAM ON VARIOUS ASPECTS OF UNIVERSITY ENGAGEMENT.
This study is part of an ongoing initiative to evaluate the predictive validity of the Cambridge acceleration program in the United States. Establishing predictive validity by relating high school performance to later academic performance has a long and established heritage in U.S. educational research (see, e.g., Burton and Ramist 2001; Cohn, Manion and Morrison 2007; Culpepper and Davenport 2009; Kobrin et al. 2008; Lentning 1975; Sadler and Sonnert 2010). The long-term purpose of the Cambridge research agenda is to highlight the effectiveness of Cambridge assessments at predicting students’ preparedness for and continued academic success at U.S. universities as evidenced by first-year college and cumulative grade point average (GPA) as well as other performance outcomes. Tertiary-level academic success as used here is determined by the persistence of a student with a specific GPA within the university.

The first phase of research used data collected from three cohorts of students enrolled at Florida State University (Shaw and Bailey 2011a, 2011b). The data included information about each student’s performance at high school, ethnicity, gender, and first-year university GPA. Multi-level modeling was used to investigate the relationships among the variables and to determine which were the best indicators of academic success at university while taking into account the effects of individual high schools. Findings suggested that the Cambridge acceleration program compared favorably with other acceleration programs in the United States, including Advanced Placement (AP) and the International Baccalaureate (IB).

This second phase of research, based on new data provided by Florida State University (FSU), attempts to address the impact of the Cambridge and other acceleration programs.
programs on various aspects of university engagement. Student participation in undergraduate research, for example, is one of several indicators of college success. The inclusion of research in the undergraduate curriculum has been widely endorsed by U.S. educators and policy makers (Boyer Commission 1998; Hu 2012; Kuh 2008). Undergraduate research is also associated with greater student retention/persistence (Banta 2004; Craney et al. 2011; Inkelas et al. 2012; Lopatto 2006; Russell, Hancock and McCullough 2007). Consequently, this study entails expanding the freshman GPA data modeling work of Phase 1 to include a longitudinal study comparing degree completion by Cambridge, AP, and IB cohorts at FSU. The likelihood of students’ pursuing additional undergraduate educational, professional, and research opportunities is also modeled, and findings are compared across the AP, IB, and Cambridge cohorts.

**U.S. ACCELERATION PROGRAMS AND THEIR IMPACT ON COLLEGE PERFORMANCE**

The successful transition from high school to postsecondary study is contingent upon a student being college ready (Conley 2010, 2011; Camara 2013). College readiness is receiving ever greater focus in the United States as college aspirations rise and public policy promotes college readiness for all (Duncan and Martin 2010; U.S. Department of Education 2006a, 2006b, 2010). U.S. students and universities must consider all available indicators for success in higher education, including the offer of college-level coursework to high school students. High school acceleration strategies thus are seen as one of the main policy mechanisms for increasing college enrollment and fostering tertiary-level success as they can have positive effects on cognitive strategies, content knowledge, and learning and behavioral skills and techniques.

**HIGH SCHOOL ACCELERATION PROGRAMS**

**Advanced Placement**

Since its inception in 1955, Advanced Placement has become the most common and rapidly expanding acceleration mechanism in the United States. The College Board claims that the AP program can offer students advantages in terms of college success; that the program not only facilitates the narrowing of achievement gaps but also enriches students’ high school experiences; and that high schools prepared to offer AP can be thought of as ‘gold standard’ institutions (see Challenge Success [2013] for an evaluation of the four College Board claims for AP). AP examinations are offered in 37 subjects across languages, science, and social science. Schools in all states and some schools outside the United States offer AP courses. Between 2004 and 2009, the College Board (2009) reported that the number of students taking AP courses increased dramatically—by almost 50 percent—to 1.6 million. There is every indication that the number will continue to increase. Recognition of this credential is almost universal among U.S. universities.

**Impact on College Performance**

Students who hold AP qualifications have been shown to outperform those who do not in both first-year college performance and college completion (Curry, MacDonald and Morgan, 1999; Dougherty, Mellor and Jian 2005; Mattern, Shaw and Xiong 2009; Morgan and Maneckshana 2000; Morgan and Ramist 1998). After controlling for a number of background variables—including academic ability and prior course history and performance, Sadler and Sonnert (2010) demonstrated that students who pass AP exams in the sciences earn significantly higher grades in biology, chemistry, or physics in college than those students who failed the exams. Two recent large-scale impact studies have examined the long-term impact of AP on measures of college success. Hargrove, Godin, and Dodd (2008) examined the student performance data of AP students and a non-AP comparison group for five cohorts of Texas public high school graduates through to their fourth year of college. In total, data for 222,289 students from a range of backgrounds attending a number of Texas universities were collected. Results revealed significant “evidence of benefits to students who participate in both AP courses and exams in terms of higher GPAs, credit hours earned, and four-year graduation rates” (Hargrove, Godin, and Dodd 2008, p. 1). In a second, related study, Keng and Dodd (2008) compared the performance of AP students to that of non-AP students on a number of college outcome measures. Exams representing ten subject areas were examined in this study of 24,941 students in four entering classes at the University of Texas at Austin. Keng and Dodd (2008) confirmed the findings of the Hargrove, Godin, and Dodd (2008) study: AP students performed
at least as well if not better than non-AP students on most college outcome measures. Students who had used their AP credits in order to embark upon advanced college courses achieved higher grades in those courses than those students who first took college introductory courses instead of any of the ten individual AP exams.

When the confounding effects of self-selection by students (with more able students joining AP programs) and inter-school differences (with better resourced schools more likely to adopt the AP program and to have it taught by more experienced teachers) are taken into account, however, the picture is more complex (Klopfenstein and Thomas 2005; Pack, Ponte, Sigel, Braun, and Powers, 2005). Klopfenstein and Thomas (2009), for example, found no relationship between AP experience and either first-year college grades or retention to the second year after controlling for these factors. Other studies have also attempted to control for a number of background variables, such as family income, socioeconomic factors, and parental education (Duffy 2010; Geiser and Santelices 2004; Klopfenstein and Thomas 2005) and have reported no significant relationship between students’ having taken AP courses and students’ first-year performance.

International Baccalaureate

The International Baccalaureate (IB) Diploma originated outside the United States in the late 1960s and has become prevalent in U.S. high schools in the past ten years (Bunnell 2010). The program prepares students for tertiary study by developing their critical thinking skills, ability to learn independently and in groups, communication skills, and sense of self-identity and culture. The curriculum comprises six core courses, each chosen from one of the following categories: primary language, second language, individuals and society, sciences, mathematics (within which computer science is an additional elective), and the arts. (See <www.ibo.org/diploma/curriculum/>.) Typically taught over a two-year period, the IB claims a program of learning and assessments that prepare eleventh and twelfth grade students for success at university and beyond. The IB works with more than 3,000 schools in more than 140 countries to offer IB programs to approximately one million students. The IB has gained recognition and respect from the world’s leading universities and now is recognized by U.S. universities as being similar to the AP.

Impact on College Performance

The efficacy of the IB as a pre-university acceleration program has been investigated by Panich (2001). In a study of the university performance of IB students, Panich (2001) matched three cohorts of IB graduates (1998 through 2000) attending FSU with students entering with comparable SAT verbal and math scores. Comparing groups of students with no IB background, students with IB experience, and students with an IB diploma, Panich (2001) concluded that IB diploma students achieved the highest average first-year university GPA while students with IB experience but no diploma achieved the lowest. In a study designed to explore IB students’ postsecondary outcomes, Taylor and Porath (2006) canvased the views of former IB students. These students had completed their secondary education at two public high schools in British Columbia between 1996 and 2000. Students believed that the critical thinking skills they learned in the IB course together with the development of non-cognitive study skills such as time management equipped them well for university studies. Duevel (1999) asked college registrars representing twelve universities to comment on IB students’ perseverance and attainment. Just over 90 percent of IB diploma holders earned bachelor’s degrees, and nearly as many earned their degrees in five or fewer years. In the same study, just over half of all IB graduates reported attending graduate school and claimed that their participation in the IB had a positive impact on their college experience. Investigating the benefits of the IB Extended Essay for University Studies at the University of Virginia (UVA), Inkelas et al. (2012), using a mixed-methods case study approach, explored the ways in which the extended essay (up to 4,000 words) helps to prepare students for their studies in terms of academic performance, retention, willingness to engage in more research, and future plans. Findings suggested that former IB students studying at UVA were significantly more likely than their AP counterparts to indicate preparedness for postsecondary coursework involving research.

A study of the Chicago inner-city IB program found that students who took the IB were more likely to attend a four-year college and demonstrated higher two-year persistence rates (Coca et al. 2012). IB students reported that they felt academically prepared, but research uncovered a deficit in transition knowledge and skills that suggested that, in this area, the IB program had not compensated
for the effects of students’ disadvantaged backgrounds. A second, related study of the Chicago program found that the IB increases high school graduation and college enrollment rates (Saavedra 2011).

Cambridge International Advanced Level

Cambridge International Advanced Subsidiary Levels (AS Levels) and Advanced Levels (A Levels) are a global set of examinations administered by Cambridge International Examinations (Cambridge). (See <www.cie.org.uk/qualifications/academic/uppersec/alevel>.) The levels develop learners’ knowledge, understanding, and skills in in-depth subject content and encourage independent, logical thinking. Cambridge offers a choice of 55 subjects that schools can offer in almost any combination. Schools can build an individualized curriculum, and learners can choose whether to specialize in a particular subject area or to study a range of subjects. Cambridge International A Level is typically a two-year course, and Cambridge International AS Level is typically a one-year course.

Students can also earn a Cambridge AICE Diploma by passing a prescribed number of Cambridge International AS- and/or A-Level examinations, including one from each of three subject groups: mathematics and sciences; languages (foreign and first); and arts and humanities. In the United States, Cambridge AS- and A-Level examinations are sometimes referred to as ‘Cambridge AICE’ or ‘AICE’ examinations. The Cambridge AICE Diploma program was successfully piloted between 1997 and 2000 in Florida, where it continues to receive legislative support and funding. Students who pass the AS- and A-Level examinations may be awarded entry- or intermediate-level university course credit by examination. Yet recognition by U.S. universities is not universal. (As with IB, Cambridge is widely recognized outside the United States.)

Impact on College Performance

A comparative study of the effects of the AS/A-Level program on first-year GPA at FSU found that on average, students’ prior participation in acceleration programs resulted in better GPAs than their peers’ non-participation in any such programs (Shaw and Bailey 2011a, 2011b). In particular, the study revealed that after controlling for gender, race, and SAT score, Cambridge students achieved a higher GPA, on average, than IB students and students who had not previously earned college credit. On all of the models tested, there was no evidence of any statistical difference between Cambridge and AP students.

A growing body of qualitative evidence demonstrates the impact of the Cambridge International AS-and A-Level programs on teaching and learning (Shaw 2011). Data have been collected using a range of impact elicitation techniques, including perceptual questionnaires, semi-structured interviews, focused discussion groups, and lesson observations. More than 700 Cambridge students and their teachers took part in the study at five high schools in Florida and West Virginia. In addition, opportunistic data from 17 former Cambridge students studying at universities in Florida and Minnesota were collected. The students were at various stages in their postsecondary programs and were studying across a range of disciplines. The research provided evidence that the Cambridge program:

▪ is challenging, particularly when compared with other intellectually stimulating acceleration mechanisms;
▪ encourages good study habits;
▪ includes courses that motivate and satisfy students because of their focus and the range of relevant activities (particularly interactive, communicative ones),
▪ skills (particularly writing and speaking), and
▪ materials (inspired by the content of the Cambridge examination itself);
▪ fosters eclectic pedagogical and methodological approaches;
▪ provides positive effects on pedagogic practice and course materials; and
▪ successfully prepares students for postsecondary programs of study (particularly freshman studies).

The literature clearly addresses the broad claim that certain acceleration strategies establish a college-level standard in U.S. high schools. A second claim is that the standard promotes greater academic success and college graduation rates for those students who choose to utilize various acceleration strategies (including dual enrollment and early college enrollment). Even a cursory review of the literature suggests that much more research must be undertaken if such claims are to be fully substantiated.
RESEARCH QUESTIONS

The questions underpinning this study focus on the Cambridge acceleration program. (The term 'AICE' is used here as a generic label for the Cambridge AS and/or A Levels.) The study was designed to determine answers to the following questions:

- Is there a relationship between participation in AICE and university performance (as measured by cumulative FSU GPA) after accounting for attainment at the end of high school (as measured by SAT scores) and other background variables (e.g., gender, race, etc.)?

- Is there a relationship between participation in AICE and university engagement (as measured by participation in extra programs such as directed individual studies, honors program, honors in major, or study abroad) after accounting for attainment at the end of high school (as measured by SAT scores) and other background variables (e.g., gender, race)?

- Is there a relationship between participation in AICE and retention rate after accounting for attainment at the end of high school (as measured by SAT scores) and other background variables (e.g., gender, race)?

DATA AND MEASUREMENT CONSIDERATIONS

Context: Florida State University

The research utilized a case-study approach using opportunistic data collected from Florida State University (FSU). FSU is one of the largest and oldest of the eleven institutions in the State University System of Florida. Founded in 1851 and located in the state capital of Tallahassee, FSU is a comprehensive, national graduate research university with medical programs and very high research activity as determined by the Carnegie Foundation. FSU started the 2010–11 academic year with a student population of approximately 40,000 (with more than 8,500 graduate students) and recognition as a major graduate research institution with an established international reputation. Admission to FSU is competitive and is based on graduating from a regionally accredited high school with specific high school academic units, a cumulative weighted GPA, and test scores. The academic profile of the middle 50 percent of freshmen accepted in 2013 was weighted GPA of 3.9 to 4.7; ACT composite score of 26 to 30; and SAT total score of 1730 to 1960. Up to 45 semester hours of credit can be awarded on the basis of students’ achievement of qualifying scores on the AICE, AP, IB, or CLEP (College Level Examination Program).

Identifying and Accessing Data

The feasibility of identifying, collecting, and analyzing data in support of the claim that the Cambridge acceleration program provides a solid grounding for continued study at U.S. colleges and universities requires careful consideration (Hawkey 2006). The identification and acquisition of data relevant to this study proved to be an iterative, protracted process requiring extensive dialogue between researchers and the FSU admissions team.

Table 1 (on page 44) provides a list of generic data requirements with accompanying explanations. Table 2 (on page 44) lists all outcome variables and their definitions. The variables relating to the different acceleration programs measured the number of credit hours earned by each student undertaking the program. The number of hours earned depends on the subject and qualification, but it is usually three hours per qualification passed.

Table 3 (on page 45) shows the numbers of students in the Florida State University data set and their participation in secondary school acceleration programs.

METHODOLOGY AND ANALYSIS

Initial analyses entailed an exploratory use of descriptive statistics in order to plot a number of distributions (e.g., FSU cumulative GPA, number of hours of credits earned in each acceleration program). However, descriptive data analysis takes no account of background factors that may have an impact on performance at FSU and participation in extra programs. To account for these, a series of multi-level regression models was undertaken to assess the impact of AICE (as well as AP and IB) on university performance and engagement. Multi-level modeling is a way of finding a line of regression through different groups, nests, or hierarchies of data. Multi-level models have been used in several predictive validity studies to take into account the hierarchical structure of educational assessment data (see, for example, Bell and Dexter 2000; Shaw and Bailey 2011a, 2011b).

The models used for this study have three levels, with students nested in years (of matriculation), nested in high
### Table 1. Background Variables: Generic Data Requirements

<table>
<thead>
<tr>
<th>Variable</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>1 = white, 2 = black, 3 = Asian, 4 = Native American, 5 = Hispanic, 6 = unreported, 7 = Native Hawaiian/other Pacific Islander, 8 = Multi-Race/Ethnic for students who select more than one option</td>
</tr>
<tr>
<td>Gender</td>
<td>M = male, F = female</td>
</tr>
<tr>
<td>High School GPA</td>
<td>The high school GPA is recalculated by FSU’s admissions staff according to core academic coursework in English, mathematics, natural science, social science, and foreign language. College preparatory courses in those subject areas are considered on a 0 to 4.0 scale (F to A).</td>
</tr>
<tr>
<td>SAT Total</td>
<td>Total SAT score</td>
</tr>
<tr>
<td>ACT Composite</td>
<td>ACT score (FSU encourages students to take both the SAT and the ACT and considers the better test score when making admission decisions)</td>
</tr>
<tr>
<td>Matriculation Type</td>
<td>The type of student upon initial enrollment at Florida State, e.g., first-time freshman, early admission, graduate, dual-enrolled, Florida community/state college transfer</td>
</tr>
<tr>
<td>Matriculation Term</td>
<td>The term of initial enrollment at FSU (same codes as last term enrolled)</td>
</tr>
<tr>
<td>Matriculation Year</td>
<td>The year of initial enrollment at FSU (year of entry)</td>
</tr>
<tr>
<td>Last Year Enrolled</td>
<td>The last recorded year in which the student took classes at FSU (e.g., spring, summer, fall)</td>
</tr>
<tr>
<td>Last Term Enrolled</td>
<td>The last semester that a student took classes at FSU (e.g., spring, summer, fall)</td>
</tr>
<tr>
<td>FSU Cumulative GPA</td>
<td>The GPA earned on FSU coursework. (This standardized measure ranges between 0 and 4 and is recalculated for each student after each term.)</td>
</tr>
<tr>
<td>Type of Credit</td>
<td>The program followed, e.g., Cambridge AICE, AP, IB, or no credit</td>
</tr>
<tr>
<td>Credit Hours</td>
<td>Number of hours of credit earned for completion of a college course</td>
</tr>
</tbody>
</table>

### Table 2. Outcome Variables: For Use in Multi-Level Modeling

<table>
<thead>
<tr>
<th>Variable</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directed Individual Studies (DIS)</td>
<td>DIS is a course for which students register. It does not count toward the FSU honors program though it does provide an opportunity for undergraduate students to conduct undergraduate research for credit under the guidance of a faculty mentor.</td>
</tr>
<tr>
<td>University Honors Program*</td>
<td>A general collection of honors classes and seminars</td>
</tr>
<tr>
<td>Honors in Major**</td>
<td>Students have to attend certain major-related classes and seminars in order to obtain the honors in the major distinction. Honors in the major also includes a research/creative project component culminating in an honors thesis which students must defend in order to graduate with the honors distinction. The program also supports the creative endeavors of students in majors such as creative writing, dance, film, music, studio art, and theatre.</td>
</tr>
<tr>
<td>Study Abroad</td>
<td>These are students who have studied abroad at one of FSU’s international study centers.</td>
</tr>
<tr>
<td>Retention Rates</td>
<td>These are derived from the last term enrolled and matriculation data. Students with a last term enrolled prior to spring 2013 but without a graduation date are assumed to have left FSU before graduating.</td>
</tr>
</tbody>
</table>

*“Students have the option of enrolling in honors-only courses and attending special topic seminars. By completing the honors program and/or honors in a major, students can earn an honors medallion at a special ceremony and also have their transcript denoted with their honors achievement. The honors in the major program was developed to encourage students to explore their major discipline in greater depth by completing a research or creative project. Upon successful completion and defense of the honors thesis, students graduate with honors” (<http://admissions.fsu.edu/publications/honors/HonorsBrochure2012.pdf>).

**It is possible for students to complete the university honors program and not pursue the honors in the major (and vice versa or both).
schools. To fit the multi-level models, data based on the records of 30,144 students nested in six different matriculation years (2007 through 2012) nested in 1,926 schools were used.

An indicator of whether a student dropped out before graduating was calculated from the data; students with a last term enrolled prior to spring 2013 but without a graduation date were assumed to have left FSU before graduating. With a few exceptions, the university confirmed this assumption. Students may skip one semester without having to re-enroll, so a few students with a last enrollment term of fall 2012 returned in summer 2013. These students were identified in the data and a correction was made. It should be noted that it was not possible to know students’ reasons for not completing their courses of study at FSU (some may have transferred elsewhere), but this measure nevertheless is likely to be a good proxy for dropping out.

A substantial number of students (425) had the same matriculation and last enrollment dates, suggesting that they only attended the university for one term. As such, their cumulative GPA may not be particularly reliable. (Further models, excluding these students, were run, but this had very little impact on the outcomes of the models, so the results are not presented here.)

**FINDINGS**

Six models were tested in response to the study’s three research questions. Model 1 relates to the first research question; Models 2 through 5 relate to the second research question; and Model 6 relates to the third research question.

1. **Is there a relationship between participation in AICE and university performance?**

Table 4 (on page 46) presents the parameter estimates for each variable in Model 1 (performance at FSU). The estimate column refers to the effect of the particular variable on the outcome measure. For continuous variables (e.g., SAT total, AICE hours), it is the change in the cumulative GPA associated with a one-unit increase in the variable in question. For categorical variables (e.g., race, gender), it is the impact of being in that particular category in comparison to the reference category. The reference category is indicated in the table by having no values in the estimate column. Thus, according to this model, the effect of being black rather than white is to reduce cumulative GPA by 0.23 (on average).

Table 3.

<table>
<thead>
<tr>
<th>Acceleration Program</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>AICE only</td>
<td>148</td>
</tr>
<tr>
<td>AICE with AP</td>
<td>242</td>
</tr>
<tr>
<td>AP only</td>
<td>16,391</td>
</tr>
<tr>
<td>AP with IB</td>
<td>948</td>
</tr>
<tr>
<td>IB only</td>
<td>1,211</td>
</tr>
<tr>
<td>AICE + AICE with AP</td>
<td>390</td>
</tr>
<tr>
<td>AP + AP with AICE + AP with IB</td>
<td>17,581</td>
</tr>
<tr>
<td>IB + IB with AP</td>
<td>2,159</td>
</tr>
<tr>
<td>None</td>
<td>11,204</td>
</tr>
<tr>
<td>All</td>
<td>30,144</td>
</tr>
</tbody>
</table>

These effects are only estimated and are subject to some error that is quantified by the standard error column. The final column in the table (Probability) indicates the level of statistical significance. Its value denotes the probability that the estimated effect could have occurred by chance. A value of less than 0.05 indicates statistical significance. In each of the tables that follows, statistically significant effects are highlighted in bold type.

There is a significant positive effect for the AICE hours variable, meaning that there is an association between the number of AICE credit hours earned and performance at FSU. However, the effect is very small (0.0087). This means that an increase of ten AICE credit hours is associated with an increase in FSU cumulative GPA of 0.087. In comparison, the effect of the AP hours variable was 0.0156, meaning that an increase of ten AP credit hours is associated with an increase in FSU cumulative GPA of 0.156. An increase of ten IB credit hours is associated with an increase in FSU cumulative GPA of 0.059.

A further model was run, including an interaction term for AICE and AP hours, in order to determine whether students who took a mix of these two programs performed any differently. However, the interaction term was not statistically significant. This was the case for all of the models tested.
Is there a relationship between participation in AICE and university engagement?

Model 2 assessed the probability of undertaking directed individual studies (DIS). (See Table 5, on page 47.) The coefficients in Tables 5 through 9 measure the increase in the log odds associated with being in a particular category (compared with the reference category) or associated with a unit increase in the variable (for continuous variables).

There was evidence of a statistically significant effect of AICE hours ($p=0.0256$). The value of this coefficient ($0.02257$) is difficult to interpret, but it is possible to convert this into probabilities of some ‘typical’ students’ undertaking DIS. By holding the remaining variables constant, the effect of changing a specific variable can be observed. Probabilities are based on the typical student: a white male matriculating in 2007 with an SAT total score equal to the mean (1165) for different amounts of AICE credit hours.

Thus, according to the model, a typical student with zero AICE credit hours had a predicted probability of undertaking DIS of 0.065. This increased to a probability of 0.078 for a student with 9 AICE credit hours, to 0.094 for a student with 18 AICE credit hours, and to 0.113 for a student with 27 AICE credit hours.

Model 3 looks at the likelihood of undertaking the university honors program. (Table 6, on page 48, presents the parameter estimates for all the variables in the model.) Again, the AICE hours variable was statistically significant ($p<0.0001$). This effect was larger than in the previous model.
There was a stronger relationship between AICE hours and undertaking the university honors program than there was between AICE and directed individual study. However, the probability for a student with zero AICE hours was lower. According to the model, a typical student with zero AICE credit hours had a predicted probability of undertaking the university honors program of 0.050. This increased to 0.076 for a student with 9 AICE credit hours, 0.115 for a student with 18 AICE credit hours, and 0.170 for a student with 27 AICE credit hours.

Model 4 evaluates the likelihood of undertaking honors in the major. This model had difficulty converging, probably because of the very small numbers of students in this program. However, it was possible to get the model to converge by removing the multi-level structure. Table 7 (on page 48) presents the parameter estimates. Note that neither gender nor race was a significant effect, so the final model excluded these variables.

The AICE hours parameter estimate was very small and was non-significant, meaning that there was no evidence of a relationship between the number of AICE hours and the likelihood of undertaking honors in the major. Of the three acceleration programs, only AP showed a significant effect.

Model 5 considered the likelihood of studying abroad. Table 8 (on page 50) presents the parameter estimates for this model. There was no statistically significant association between AICE hours and studying abroad. Indeed, of all the acceleration programs, only AP had a statistically significant effect, and this was small.
### Table 6.
**Parameter Estimates for Variables in Model 3 (University Honors Program)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Standard Error</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-13.077300</td>
<td>0.281400</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>SAT Total</td>
<td>0.008382</td>
<td>0.000234</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>-0.183600</td>
<td>0.097860</td>
<td>0.0606</td>
</tr>
<tr>
<td>Asian</td>
<td>-0.041660</td>
<td>0.102600</td>
<td>0.6847</td>
</tr>
<tr>
<td>Native American</td>
<td>0.222100</td>
<td>0.198300</td>
<td>0.2627</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-0.146600</td>
<td>0.059830</td>
<td>0.0143</td>
</tr>
<tr>
<td>Non-Reported</td>
<td>-0.308200</td>
<td>0.165300</td>
<td>0.0623</td>
</tr>
<tr>
<td>Hawaiian/Other Pacific Islander</td>
<td>-0.399700</td>
<td>0.592500</td>
<td>0.4990</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>0.784900</td>
<td>0.042460</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matriculation Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>0.151100</td>
<td>0.079140</td>
<td>0.0564</td>
</tr>
<tr>
<td>2009</td>
<td>0.366900</td>
<td>0.073890</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>2010</td>
<td>-0.125400</td>
<td>0.075600</td>
<td>0.0974</td>
</tr>
<tr>
<td>2011</td>
<td>-0.457800</td>
<td>0.079540</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>2012</td>
<td>0.378900</td>
<td>0.079580</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>AICE Hours</td>
<td>0.050280</td>
<td>0.008187</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>AP Hours</td>
<td>0.063400</td>
<td>0.002324</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>IB Hours</td>
<td>0.034710</td>
<td>0.002795</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>

### Table 7.
**Parameter Estimates for Variables in Model 4 (Honors in the Major)**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Estimate</th>
<th>Standard Error</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-11.187300</td>
<td>0.797100</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>SAT Total</td>
<td>0.004401</td>
<td>0.000652</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Matriculation Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>1.467900</td>
<td>0.252400</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>2009</td>
<td>1.578100</td>
<td>0.245100</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>2010</td>
<td>0.862600</td>
<td>0.262100</td>
<td>0.0010</td>
</tr>
<tr>
<td>2011</td>
<td>-1.416100</td>
<td>0.441900</td>
<td>0.0014</td>
</tr>
<tr>
<td>2012</td>
<td>-3.289200</td>
<td>1.025800</td>
<td>0.0013</td>
</tr>
<tr>
<td>AICE hours</td>
<td>-0.007890</td>
<td>0.033890</td>
<td>0.8160</td>
</tr>
<tr>
<td>AP hours</td>
<td>0.044980</td>
<td>0.005969</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>IB hours</td>
<td>0.010390</td>
<td>0.007235</td>
<td>0.1511</td>
</tr>
</tbody>
</table>
Is there a relationship between participation in AICE and retention rate?

Model 6 considered the probability of students’ dropping out before graduating. Table 9 (on page 51) presents the parameter estimates for the variables in this model.

The AICE hours parameter was statistically significant ($p=0.0035$). Its value is negative, indicating a lower probability of dropping out for a student with more AICE credit hours. Figure 1 presents the probability of a typical candidate (as defined above) dropping out for different values of the AICE credit hours variable.

According to the model, a typical student with zero AICE credit hours had a predicted probability of dropping out of 0.205. This decreased to 0.154 for a student with 9 AICE credit hours, to 0.113 for a student with 18 AICE credit hours, and to 0.082 for a student with 27 AICE credit hours.

Figure 2 shows the estimated probability for each determinant of success for different numbers of credit hours across the three acceleration programs (for those models for which the numbers of credit hours earned were statistically significant). Model 1 is not included in this analysis because the regression coefficients in Table 4 do not measure increases in log odds. For Models 4 and 5, the AICE and IB hours parameter estimate was non-significant, suggesting no evidence of a relationship between the number of AICE hours earned and the likelihood of undertaking honors in the major or study abroad.

For students taking part in each of the three programs, the probability of undertaking directed individual studies (including credit-bearing undergraduate research) and of participating in the university honors program increases as the number of credit hours earned increases. The probability of such students’ dropping out of college decreases as the number of credit hours earned across the three programs increases. Retention rates for AP and AICE students
are virtually identical whereas IB students have a greater risk of dropping out, irrespective of the number of credit hours earned. Students who had not participated in an acceleration program in high school were most likely to drop out of FSU. Descriptive statistics do not account for background factors, but descriptive analyses revealed that students who had taken AP courses blended with AICE or IB were the least likely to drop out of FSU. However, of those students who had taken only AP, AICE, or IB, AICE students were the least likely to discontinue their postsecondary studies.

**DISCUSSION**

This study afforded an opportunity to test whether, after accounting for attainment at the end of high school (as measured by total SAT score) and other background variables (such as gender and race), students who participate in AICE, AP, or IB acceleration programs:

- achieve a significantly higher FSU cumulative GPA than those who do not;
- increase their probability of undertaking study abroad; directed individual supervised studies; undergraduate research; and honors in a major; and
- decrease their likelihood of dropping out of college in accordance with increasing numbers of credit hours earned.

**Main Messages**

As with the Phase 1 study (Shaw and Bailey 2011a), findings indicate that participation in an acceleration program re-
results in, on average, a higher university cumulative GPA than does non-participation. Specific findings are as follows:

1. **Is there a relationship between participation in AICE and university performance?**
   - The number of credit hours earned improves university performance for each of the three acceleration programs, with the most gain shown by students who participate in AP and the least gain shown by those who participate in IB.

2. **Is there a relationship between participation in AICE and university engagement?**
   - The probability of undertaking directed individual studies increases as the number of credit hours earned through each of the three acceleration programs increases.
   - The likelihood of enrolling in the university honors program increases as the number of credit hours earned through each of the three acceleration programs increases.
   - The effect of increased numbers of earned credit hours on the probability of a student’s enrollment in directed individual studies is greater, on average, for AICE than for IB.
   - The effect of increased numbers of earned credit hours on the probability of a student’s enrollment in the university honors program is greater, on average, for AICE than for IB.

### Table 9.
**Parameter Estimates for Variables in Model 6 (Retention Rate)**

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>Standard Error</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercep</td>
<td>-1.639000</td>
<td>0.224400</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>SAT Total</td>
<td>0.000507</td>
<td>0.000191</td>
<td>0.0082</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>-0.081900</td>
<td>0.069120</td>
<td>0.2361</td>
</tr>
<tr>
<td>Asian</td>
<td>0.163800</td>
<td>0.092780</td>
<td>0.0775</td>
</tr>
<tr>
<td>Native American</td>
<td>0.128100</td>
<td>0.185800</td>
<td>0.4905</td>
</tr>
<tr>
<td>Hawaiian/Other Pacific Islander</td>
<td>-0.063230</td>
<td>0.483200</td>
<td>0.8959</td>
</tr>
<tr>
<td>Hispanic</td>
<td>0.186100</td>
<td>0.050070</td>
<td>0.0002</td>
</tr>
<tr>
<td>Non-Reported</td>
<td>-0.048950</td>
<td>0.160800</td>
<td>0.7608</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>-0.207500</td>
<td>0.036460</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matriculation Year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>-0.052880</td>
<td>0.055560</td>
<td>0.3413</td>
</tr>
<tr>
<td>2009</td>
<td>-0.306900</td>
<td>0.054750</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>2010</td>
<td>-0.447200</td>
<td>0.057420</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>2011</td>
<td>-0.755500</td>
<td>0.061370</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>2012</td>
<td>-2.175900</td>
<td>0.099090</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>AICE Hours</td>
<td>-0.039150</td>
<td>0.013400</td>
<td>0.0035</td>
</tr>
<tr>
<td>AP Hours</td>
<td>-0.039180</td>
<td>0.002955</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>IB Hours</td>
<td>-0.018880</td>
<td>0.003227</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>

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With the exception of credit hours earned through enrollment in AP courses, the number of credit hours earned does not appear to affect the likelihood of a student enrolling in honors in the major or studying abroad.

Is there a relationship between participation in AICE and retention rate?

The likelihood that a student will drop out of college decreases as the number of credit hours earned through each of the three acceleration programs increases. AP and AICE students who earned the same number of credit hours are equally likely to continue their postsecondary studies whereas IB students who earned the same number of credit hours are more likely to discontinue their studies.

These findings suggest that the Cambridge acceleration program is a credible alternative to other more established acceleration programs in the United States in that it prepares students for a level of success in postsecondary education as measured by cumulative GPA as well as positive outcomes on a range of university performance indicators.

Sample Size Considerations

The three-level study was based on the academic records of more than 30,000 students nested in six matriculation years and from nearly 2,000 schools. Snijders (2005) argues that the sample size at the highest level of a multi-level model is the main limiting characteristic of the design (p. 2). The level-one sample size in this study is 30,144. Snijders (2005) also implies that the average cluster sizes are not particularly important for the power of a test (p. 2). He also suggests that for testing fixed regression coefficients (the focus of the analysis undertaken here), small cluster sizes are not problematic.

It should be noted that the number of students participating in AICE is low relative to the number participating in AP, but the numbers are large enough to allow for modeling with confidence in the robustness of the outcomes.

Choice of University Success Measure

More a challenge than a limitation is the choice of university success measure. For example, a number of other different university outcome measures could be investigated:

- number of courses passed/number of courses in which students excelled;
- GPA in certain courses, e.g., science/mathematics versus humanities courses;
- university enrollment status (as of the second fall after high school graduation);
- re-enrollment in a second year at the same institution (Allen, Robbins, Casillas and Oh, 2008);
- non-cognitive activities, e.g., greater propensity to participate in a non-curricular activity (Bowen, Chingos and McPherson 2009; Camara 2005);
- psychological and social factors, e.g., peer relationships, personal fitness (physical and emotional), self-discipline, the ability to manage study and social time effectively (Harmston 2004, Purcell and Clark 2002, Tinto 1987);
- institutional factors, e.g., demographic features, geographic location, proximity to home, student financial support (Hamrick, Schuh and Shelley 2004); or socioeconomic status, e.g., parental income, family education (Baum and McPherson 2008, Geiser and Santelices 2004, Sadler 2010).

Time to degree completion is also cited as a measure of postsecondary success and can be influenced by cognitive as well as non-cognitive factors. Collecting data on average time to degree completion was considered as a variable in this study but was abandoned given the disincentive at FSU to graduate early. The state of Florida awards the Florida Bright Futures Scholarship to students who do well in high school, and virtually all students who attend FSU receive this award. The scholarship is awarded for 120 credit hours and is not reduced by the number of accelerated credits that a student earns in high school. For example, if a student enrolls at FSU having already earned 30 hours of credit from accelerated programs, his scholarship will still cover 120 credit hours of study at FSU. This creates a disincentive to graduate early.

Ultimately, the choice of performance measure and the extent and scale of the research must account for a number of practical matters, such as access to participants (in this case, provided by FSU’s Office of Admissions and Records staff) and data (particularly the feasibility of data retrieval); the interests of stakeholders; time, personnel, and financial resources, including available research ex-
pertise; and the need to minimize any disruption of programs and participants.

**Controlling for Selection Bias**

A common challenge in studies of this type is controlling for selection bias. Students opting to participate in an acceleration program typically attend better-resourced schools, are taught by more experienced teachers, and live in socioeconomically advantaged communities. The selection of a particular educational program is not necessarily random, and it is not altogether obvious what determines the choice of a specific acceleration mechanism. Shaw and Bailey (2011a) ask, “Is choice of educational program influenced by type of high school, extrinsic and intrinsic motivational aspects, institutional ethos, affective characteristics, parental status, socioeconomic constraints? Why do some students choose not to avail themselves of an acceleration programme” (p. 14)? More research needs to be undertaken in order to enlarge our understanding of why students choose to participate in a high school acceleration program.

**Participation and Success: An Issue of Causality?**

An issue that cannot be overlooked in studies of this kind relates to whether causal links actually exist between participation in an acceleration program and later academic success (Dougherty, Mellor and Jian 2005; Hargrove, Godin and Dodd 2008; Klopfenstein and Thomas 2005; Paek et al. 2005). Students are attracted to acceleration programs for a host of reasons. Quite apart from the appeal of earning college credit without having to pay college tuition to do so (MacVicar 1988), students who undertake an acceleration program are invariably a self-selecting group of highly motivated, able individuals (Breland et al. 2002; Dougherty, Mellor and Jian 2005).

In the models undertaken in this study, the only variable representing the effect of acceleration programs was the number of credit hours earned. This assumes that there is no effect of participation in the acceleration programs per se, regardless of the number of credit hours earned. A number of further models were run to investigate whether there is a separate effect of participation. Each model undertaken above was reproduced, adding in binary variables indicating participation or non-participation in each program. For all but one of the models, there was no significant effect of AICE participation over and above the number of credit hours earned. The one significant (though small) effect was on model 3, which predicted the probability of enrolling in the university honors program.

The issues around causality are multi-form and complex and require further investigation.

**FUTURE WORK**

This study, together with the freshman GPA data modeling work reported in Phase 1 (Shaw and Bailey 2011a), suggests an empirical approach for future research:

- year-one performance measured by end-of-first-year-of-college GPA;
- number of degree completers/time to degree completion;
- investigation of determinants of students’ success throughout the course of their university program.

It is hoped that this approach will serve as a template for other universities in Florida where significant numbers of former Cambridge students are known to be studying.

An extension of the research will involve eliciting data from a range of stakeholders, including undergraduate and postgraduate students, faculty, and university admissions staff.

Perceptual questionnaires and face-to-face interview techniques will be designed to elicit information about the Cambridge acceleration program in relation to:

- the perceptions of faculty members and their students;
- the attitudes and experiences of postsecondary administrators; and
- the wider impact of the Cambridge program in the United States and its effects on other administrative and academic systems.

**REFERENCES**


Purcell, J., and A. Clark. 2002. Assessing the life and times of first-year students to be college and career ready. Paper presented at the conference of the Southern Association for Institutional Research, Baton Rouge, LA.
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Be a Pine Tar Registrar

By Richard Morrell

Early in my career as a registrar, my mentor, Charles E. Selden, then registrar of the University for Northern Colorado, cautioned me to never succumb to the dreaded ‘registrar’s disease’ that he called ‘a rule is a rule is a rule.’ Having seen me be hard-nosed with a student regarding a rule, he explained that the disease paralyzes the registrar’s effectiveness and can put him in a kind of quarantine such that no one at the university wants to associate with him. The disease is communicable: many who work in proximity to the registrar can catch it and come to demonstrate all the symptoms exhibited by the original carrier.

Registrars make exceptions to rules almost every day they are at work. The truly great men and women in our profession are perhaps best defined by their ability to make wise and timely exceptions to any particular rule. Make too many exceptions and you risk losing the confidence of those who make the rules. Make too few exceptions and you risk being stereotyped as inflexible and tyrannical. Make exceptions without consistency and risk being viewed as Machiavellian.

THE PINE TAR INCIDENT

Summer 2013 marked the 30th anniversary of an event that should be noted by all registrars, regardless of whether they are baseball fans. The incident deals substantially with the issue of rules and their exceptions.

On July 24, 1983, George Brett of the Kansas City Royals hit a home run that was invalidated by Rule 1.10 (b). The rule states that no foreign substance can be applied and extend more than eighteen inches from the bottom of the bat. It was then (and is common now) for batters to apply pine tar to the handle or lower portion of a baseball bat. Pine tar helps the batter grip the bat more tightly than would be possible otherwise. Rule 1.10 (b) was written to protect the very players who use the pine tar. The logic was that if the pine tar extended well above the handle of the bat onto the barrel—the area that normally makes contact with the ball—it would sully the ball. A ball with pine tar on it would be unbalanced and also would result in the pitcher having a better grip on the ball. Given those two advantages, the pitcher would throw better pitches—pitches that would be harder to hit. Note that the rule was developed to help the batter, not the pitcher.

On July 24, George Brett hit a home run that gave Kansas City the lead in a game against the storied New York Yankees. Just as Brett stepped on home plate, the Yankees’ manager protested the home run on the grounds that the bat was illegal because it had pine tar beyond the allowable
eighteen inches. The home plate umpire, George McClelland, laid Brett’s bat across the seventeen-inch-wide home plate and determined that the bat was illegal; he called Brett “out” and negated the home run. McClelland’s call was unequivocally ‘by the book.’

The Kansas City Royals’ representatives appealed McClelland’s ruling. A few days later, the president of the American League announced that he was reversing the ruling and allowing the home run to stand; the rest of the game would be replayed at a later date. His premise was that the ‘spirit’ rather than the ‘letter’ of the rule should be honored. He explained that the rule had been written to protect the batter, not the pitcher, and he reasoned that in this instance, the batter had garnered no advantage by the pine tar’s extending beyond the allowable eighteen inches.

What does this have to do with the work of the registrar? Plenty. Registrars are in a unique position: They are regularly called upon to decide whether and when to make exceptions in a variety of circumstances involving both written and unwritten rules. It is incumbent upon us to see the wisdom in the ruling issued 20 years ago by the president of the American League: He chose to follow the spirit rather than the letter of the rule.

Articulating some particular processes should help us understand the registrar’s role in making exceptions.

GUIDING PRINCIPLES
Understand the Rules

It is vitally important to know the rules of our institutions. Many are written or otherwise codified. Many more are likely to be long-standing practices with no written rules. Regardless, the registrar must know the rule and how it has been developed and applied.

When a student or other community member asks a registrar to make an exception, it is incumbent upon the registrar to become familiar with the rule (if she is not already). She needs to know why it was codified or otherwise placed into practice, regardless of whether it is written or unwritten.
Early in my career, I was charged with the task of making exceptions to graduation requirements. The minimum requirement for a degree was stated in our university catalog as 124 credit hours. A student requested that I waive the requirement because he had been misadvised; in my opinion, it was a clear case of university—not student—error. Fortunately, I asked my superior for advice before issuing a decision. He informed me that to his knowledge, the university had never allowed an undergraduate to graduate with fewer than 124 credit hours. To allow this particular student to do so would not serve the student or the institution well.

At that institution, making exceptions to graduation requirements was an accepted practice, although no written policy governed it. Further, there was an understanding (again, not written anywhere) that no one could graduate having completed fewer than 124 hours. Fortunately, I was able to grasp the essence of the unwritten rule and to understand the spirit underlying it. I denied the request. The clear mandate of the registrar is to know his institution’s written and unwritten rules.

Understand the Intent
It is not good enough to simply understand the rules as they are written. Intent underlies every rule. Registrars must understand the intent of rules if they are to make wise decisions regarding the granting of exceptions.

At another time, a student asked to delay his graduation term by a semester and to be exempted from the requirement that he be continuously enrolled until the graduation date. He explained that his wife was graduating the next semester and that he wanted to be able to invite both his and his wife’s families to the same graduation ceremony because many would be traveling a great distance and could not make the trip twice.

The intent behind the continuous enrollment rule was to encourage and help students to remain on track for timely progress toward their degree. In this student’s situation, the intent of the rule was simply not applicable. I granted the exception, and both the student and the institution benefited.

Understand When an Exception Can Be Made
Often, a rule cannot be appealed—and there may be good reason for it. For example, students typically are permitted to choose only during the first part of the semester whether to take a course pass/fail or for a grade. Making an exception to that rule during finals week clearly should not be allowed.

Understand Who is Permitted to Make the Exception
In the pine tar incident, the umpire made the call at home plate. Coaches and players argued the call, but the call stood—as was the tradition. That is, the call stood until the president of the American League reversed it. In the 2013 World Series, an umpire’s call was reversed on the field. That was not the unwritten rule then, but it is now. The point is this: know who can issue exceptions and who can override them, and understand that previous assumptions may not stand indefinitely.

Often, institutional entities share responsibilities. In such situations, there are rules (unwritten, more often than not) concerning who is and who is not allowed to make exceptions. For example, I currently work at an institution where exceptions to tuition and fees rules are handled by the registrar’s office for undergraduates and by the graduate school for graduate students. Interestingly, no written rules govern this process. It is simply a longstanding practice: it has been done that way for as long as anyone can remember. The better you understand the unwritten rules, the more effective you will be for your institution. Another sage piece of advice is to codify as many of the unwritten rules as you possibly can.

Make the Decision by Following the Spirit of the Rule
I would add just one detail: Make the decision with wisdom and confidence, but most important, make it in a timely manner. Do not fall prey to that other dread disease, analysis paralysis. We’ll consider that another day.

Be a ‘pine tar’ registrar!

About the Author

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Registrars have a special, evolving relationship with the curriculum. We often are the ones who enforce curriculum rules and certify students for graduation. Curriculum is the core of higher education. It is how we organize our universities so that faculty can teach and students can learn. We organize our universities around curriculum and divide ourselves into colleges, schools, and departments that often have certain traits in common. From a practical standpoint, completing a prescribed curriculum is how we determine whether a student has earned a designated degree. In addition, institutions, state agencies, and accrediting bodies use our curriculum to assess our effectiveness. Quite simply, curriculum is not just what we teach: It is a way to provide order to our work.

The roots of curricular change at an institution of higher education are various. Of course (and rightfully so), the faculty have responsibility for the curriculum and must act on changes. Yet changes in technology and process can inspire holistic review of a university’s curriculum both from a macro level (i.e., core requirements) and a micro level (i.e., major and minor requirements). Registrar’s offices can play a variety of roles in curriculum. At many institutions, the registrar’s office certifies students for degree clearance and so interacts with curriculum “where the rubber meets the road.” Further, we work with faculty to develop an approved curriculum into something that students (including prospective students) can understand in terms of degree requirements. Staff from registrar’s offices thus have a role in curriculum development and frequently sit as ex officio members of curriculum committees (or at least provide feedback to such committees). Last, through regular meetings with faculty and administration, we work with all stakeholders on curriculum issues from a strategic and technological standpoint.

Over the course of just a few years, West Virginia University (WVU) revamped its technology, process, and policies related to curriculum. With the creation of an Office of the University Registrar (OUR) in 2009, there was a unique opportunity—and mandate—for change. The OUR quickly launched several projects that had an impact on curriculum. Even in that short period of time, the nature and magnitude of the OUR and faculty collaboration evolved.

Our approach to working with faculty to develop and implement curricular-based initiatives transformed into one that was mutually beneficial. Our most recent collaboration, the focus of this article, was informed by earlier collaborations when we were less strategic. We had implemented in the recent past both a degree audit and a catalog management system. Although both projects were successful, each had challenges that influenced our revised
process. In the earlier implementations, our process was much more self-contained in that we managed on the basis of ad hoc feedback from relevant constituencies.

Even though we had received important feedback along the way, both earlier projects had been hampered by our not having formalized opportunities to interact with the people who would use the systems on a regular basis. As a result, we made some strategic changes when we embarked on our most recent project. An active steering committee greatly improved the process and helped guide the project. We also made better use of pilot groups than we had in the implementation of the degree audit system.

The purpose of this article is to highlight the OUR-faculty collaboration that improved WVU’s course development, approval, and implementation process. This joint effort resulted in a new way to approach projects at WVU and has created new opportunities for collaboration. It has allowed the registrar’s office to be a stronger voice on campus as faculty members considering course and curricular issues now perceive it as a valuable resource. The OUR has gained a needed partner and resource in faculty as it works with them toward curricular improvements. Examination of our past project history and our new approach has inspired a successful model for collaboration that we trust will continue to support strong initiatives in the future.

**PREVIOUS PROJECT HISTORY**

In 2011–12, the OUR implemented an electronic catalog management system (CMS). The university purchased and implemented a CMS supported by a known vendor for three catalogs during the 2011–12 academic year. During the implementation phase, OUR staff worked with partners in academic colleges and departments. This system significantly altered how we revised and updated our catalogs as well as how we presented the documents to the public. The system enabled us to utilize an electronic workflow rather than exchanging word-processing files in order to update the catalogs. Simply put, we focused less on the process and more on the content. Faculty quickly noted the value of the new system’s ability to provide data that could be used to better understand course utilization and patterns over time.

This broader orientation to the curriculum inventory inspired questions about how to obtain similar results in other areas of the process. For example, later in the 2011–12 academic year, Faculty senate leadership sought the assistance of the OUR in streamlining the course approval process. Historically, the process at WVU had been paper based and required approvals at multiple levels. As a result, it took a significant amount of time, requiring, on average, more than six months for a course to be approved. Not only would the new initiative enhance course offerings and strengthen the curriculum as a whole, but it also would increase the efficiency with which courses were reviewed and approved. (The university had attempted previously—though unsuccessfully—to create an in-house system.) The OUR had experience with the CMS vendor and identified a potential solution.

**THE COLLABORATIVE APPROACH**

We did not believe that a traditional project management model would prove effective. This was largely because of the different constituencies involved in the curriculum development process as well as the lessons learned from previous efforts to develop an electronic system. As we reflected on our experience implementing the electronic degree audit and CMS, we identified opportunities to incorporate users of the course approval process into the development and implementation procedures. We hoped that doing so would increase ownership and involvement by those most directly affected.

After demonstrating the Course Inventory Management (CIM) software to the faculty senate leadership, we purchased the software. The OUR and faculty hoped it would better align the course approval and curriculum process with the academic catalogs and the degree audit system. It also might automate existing approval processes and increase efficiency.

A collaborative model was used to implement the CIM system. Demonstrations were held for faculty leadership, administration, and other representatives who were integral to the curriculum review process. A steering committee representing all stakeholders in the process—including each college/school, governance groups, and administration—was developed. The steering committee was charged with outlining the best practice for implementing the system, identifying key individuals who should be involved in the process, and communicating system strengths and weaknesses once it was tailored to university procedures. This collaborative model engendered a mutual sense of
ownership, which proved to be key in the implementation phases.

For our work to be effective, our conversations had to be intentional and highly collaborative. Implementing a technological solution to course and curriculum proposals and changes requires extensive conversations that are not typical of everyday work. Asking good questions proved an early and essential part of these conversations. As we began examining current practices, it quickly became apparent that while our representatives understood the approval process, they were not as involved in the process as were the faculty. This helped our staff to identify objective questions about the process. Our staff also were knowledgeable about how other institutions managed the process and thus were able to help evaluate the effectiveness of the process at WVU; to identify areas where existing procedures were inadequate; and to work with faculty members to offer new solutions and establish a new process. Faculty members who were highly engaged in the existing system were able to explain which elements were essential and needed to be maintained.

As mentioned above, the steering committee was crucial to the implementation and success of the effort. Several members—such as faculty senate leadership and associate provosts—were appointed on the basis of their functional responsibilities. We also asked the dean of each college and school to appoint a representative. In order to ensure a diverse group, we planned to review the membership once the names were put forth and to make any adjustments that seemed necessary. In fact, we didn’t need to make any adjustments. The diverse voices of the associate deans, faculty, program directors, and administrative staff who served on the committee provided very different perspectives at each meeting.

The steering committee met two or three times per semester during the implementation—often enough to be valuable but not so often as to burden the membership. Each meeting featured an update on progress since the last meeting, discussion, and decision making. A registrar’s office staff member facilitated each discussion, but we also allowed the discussion to help guide us. Steering committee members quickly became our ambassadors in the respective colleges and schools. For example, in order to launch the new system, we needed to determine which individuals in each department and college would have a role in the approval process. Steering committee representatives were empowered to aid in the collection of information used to determine the workflow. They also helped us identify pilot groups when we moved to that phase of the implementation.

IMPLEMENTATION

The CIM system was implemented in two phases: Phase I (2012–13) involved the establishment of procedures for course adds/changes/deactivations; Phase II (2013–14) addressed procedures related to significant curriculum changes. The success of the workflow process was a key aspect of the system. Appropriate signature designees change frequently within and between academic years, making this one of the most problematic and fluid needs related to the efficiency goal. Members of the steering committee and individual units provided lists of names of individuals who would need to sign off on a course and encouraged their units to complete this task if it was delayed.

In January 2013, three colleges tested the system by offering a series of courses that required approval. (Steering committee members had helped select these colleges on the basis of their knowledge of pending course and program changes.) The first course was approved in March 2013. Faculty and staff who were involved in the approval process identified areas for improvement; these were discussed as a group and were resolved with assistance from the vendor. Finally, the system and modified procedures were implemented campus-wide in May 2013.

In fall 2013, development work of Phase II began. Establishing the system for approving curriculum changes had its own unique challenges, but our collaborative approach again proved effective. Having become accustomed to the our and faculty collaboration, our approach became more fluid. For example, naming a formal steering committee did not prove necessary; instead, the our continued to facilitate creation of the system and work with the vendor. Faculty and other administrators were called upon as needed to answer questions about current practices, to confirm processes, and to evaluate the system as it developed. This was possible because of the strong foundation of collaboration that had been built during the development of CIM and because the relationship between the our and faculty continue to strengthen as we maintain the CIM system.
MUTUAL BENEFITS

Processes and procedures related to our courses and curriculum have been strengthened. All parties have had to review what the curriculum actually is—not just what we thought it was. Given this more nuanced knowledge of the curriculum, we were able to document policy, processes, and procedures that previously had been incomplete or elusive. Changes to curriculum now are documented clearly, thus providing faculty, students, and administrators alike with access to the curricular knowledge they need to conduct university business. Furthermore, we have documented these practices in a way that ensures their stability in the future. Shared resources, potential course conflicts, and greater efficiency within the approval process have already been noted in the early implementation phase.

Some benefits extend well beyond the system’s functional aspects. For the first time, the course approval process is transparent and available for all faculty to review. Faculty members can emulate successful models as they begin their course proposals, allowing not only for a more effective process but also for creation of a stronger curriculum. The new system also provides faculty with a means to communicate about courses across unit lines and approval levels. This helps sustain the collaborative approach to curriculum. Faculty and administrators alike are now able to easily navigate the process, with the result that they can devote their energy to developing the curriculum rather than to determining what steps to take.

The biggest change was in philosophy: Now, the Office of the University Registrar is a resource and a partner with faculty on issues related to curriculum. Roles and responsibilities of faculty and administrators are better understood. Faculty members still hold primary ownership of and responsibility for the curriculum, but they now appreciate the perspective and support that individuals in the our can provide. We frequently work with departments before curriculum changes are introduced, and the dialogue has helped all parties. By being a part of the discussions earlier in the process, we are able to help the governance groups ensure that what they want to accomplish can be managed successfully from a system perspective.

This new philosophy also has potential for high-level collaborations with faculty in the future. For example, these systems provide course and curriculum data that were not previously available; our and faculty can use this information to inform their collaboration on other projects and scholarly work. They can partner as equals to consider new curriculum advances. Collaborations can begin from a point of shared understanding and appreciation of what each partner can lend to the project at hand.

KEY FACTORS OF SUCCESS

OUR-faculty collaborations at West Virginia University have been cultivated for a comparatively brief period but have proven mutually beneficial. Initial experiences have served to develop approaches that have strengthened the our-faculty relationship and identified the our as an equal partner in curriculum development and maintenance. Our ability to reflect on previous attempts at collaboration and process change was essential as it helped us understand past successes and failures and identify possibilities for addressing future challenges.

Involving the right group of people is key. Establishing a broad yet targeted steering committee and series of pilot groups was essential to the development and planning phases. Convening a diverse group of campus representatives ensured that the entire community was actively involved in the project and also helped increase the commitment to successfully completing the project. More important, we increased ownership of and stakeholder responsibility for the project. This will be integral to the sustainability of curriculum-related initiatives.

The elements of a true collaboration had to be created and nurtured. We had to possess a shared vision and commitment to improvement. We had to understand and appreciate different roles and perspectives related to curriculum change. Information, concerns, and optimism had to be shared openly, and we had to ensure that all stakeholders were heard. We had to be critical and then work together to find solutions to challenges.

We also had to acknowledge that even our best efforts as a steering committee could not create a system that could anticipate every possible challenge. The pilot groups provided objective opportunities for various schools to test the initiative at the department, school, and higher levels. Select pilot groups represented large and more complex colleges. We worked together to improve the system. Once this phase was completed, the steering committee, the our, and faculty at large had evidence that the initiative would be effective in other areas of the university;
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He didn't know either.
others joined us as they witnessed the success and responsiveness of the new system.

CONCLUSION
Many may consider our experience unique—particularly at a university that had not had an established OUR prior to the collaborations. Unusual circumstances had contributed to the establishment of the OUR and were crucial for faculty shared governance perspectives across the campus. Together, these contextual factors contributed to the relationship building that occurred between the OUR and faculty. Other factors that could be developed at any institution were also evident. All institutions have needs that can be addressed and improvements that would benefit more than one group. Once a shared vision and commitment to improvement are established, collaboration is possible.

The evolved relationship between the OUR and faculty at WVU has replaced the previous faculty-centered and OUR-centered approaches for developing new initiatives. Identifying the mutual benefits of a single collaboration is an important but often overlooked step. It requires multiple perspectives and communication that may be difficult to generate. Involving all parties—particularly users—early in the process and discussing how each group will benefit is crucial.

Whether this approach can be sustained remains to be seen. Fiscal, programmatic, and other resource limitations may challenge the maintenance of initiatives. OUR and faculty responsibilities for an initiative should be identified and discussed in the development phase as part of the effort to plan appropriately for the future. For example, the group may decide that the OUR manages and coordinates future steering committee meetings and other communication about program changes. Faculty representatives may be charged with identifying other OUR-faculty collaboration opportunities as well as ways in which the OUR can be included in discussions of new initiatives or changes. Regardless, both parties should have shared and individual responsibilities for maintaining a philosophy of collaboration and dual ownership. Now that we are aware of both the dangers of working in isolation and the benefits of collaboration, we must be diligent in preventing a return to our silos.

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LESLEY COTTRELL, PH.D. is an Associate Professor in the Department of Pediatrics, School of Medicine at West Virginia University. She served as the University Faculty Senate Chair in 2010-2011 and continues to be an active representative.
"It’s snowing still," said Eeyore gloomily.  
"So it is."  
"And freezing."  
"Is it?"  
"Yes," said Eeyore.  "However," he said, brightening up a little, "we haven’t had an earthquake lately." (Milne 1928)

WELCOME TO CHAOS…

…and your new normal. It is overwhelming, overextended, fast-paced, foggy, and frantic. And make no mistake: It is the new normal. You must accept this and rise to the occasion. Otherwise, you will give up or constantly seek greener grass through new employment. Chaos has come to organizations in all sectors—private, government, and academic. Yet even Eeyore could see through the fog and have a good day at times. If he could, then you can. There is always something to do that is purposeful, and that is something to be grateful for.

Welcome to the new world—"the Internet of things"—or "everything is moving fast with no time to be sure that we are done." This is the 21st century—CRM, NSA, "wired," Caprican, post–financial, meltdown economy. It has brought more of the vague, the unknown, and the uncertain, and with it a pace unknown in recent decades—and one that carries with it considerable risk. Welcome to chaos. Life has gotten messy.

The risk—moving at a pace that exceeds your organization’s abilities—is inherent in all decisions and practice. You may try to avoid risk, but oh, you must grab ahold of this beast right now or else continue to suffer in the unknown, unproductive world of work that is never finished and continually mounting. Let us remind you again (though we are fairly certain you have heard this many times): It is not whether risk exists but whether it is managed that matters. The problem is no longer whether you can avoid chaos; it is whether you can learn how to thrive in it.

Managing chaos is hard and risky, but not managing chaos is much worse. If you choose to embrace the current paradigm, it can be filled with opportunity, excitement, and numerous rewards. But it is not for the faint of heart. You must be confident, strong, methodic, and deliberate. You must be willing to constantly change your work and plans as new information is presented. You must dive in and attack. If you fail to, your staff will be underwater by the lunch hour. But if you succeed (and we believe you can), then it is a golden opportunity for you to shine and for the weak to fall away. The opportunity for field promotion during the battle with chaos is enormous.
What are the odds that you will actually change and embrace the chaos? They are low. Human beings are quite risk averse. But doesn’t it sound like more fun to crash a Corvette than to drive a Yugo through life? Can you even call the safe path a life—or one you want to live?

Teddy Roosevelt (1899) said, “Far better is it to dare mighty things, to win glorious triumphs, even though checkered by failure...than to rank with those poor spirits who neither enjoy nor suffer much, because they live in a gray twilight that knows not victory nor defeat.” Roosevelt lived a phenomenal life, and you can too. Managers, it is time to live. It is time to really manage. It is time to assume risk, to lead, and to earn your pay.

We have spent much time in previous articles describing tools (white papers, charters, plans, etc.) to help you organize and manage. Now we offer more qualitative guidance.

THE ILLUSION OF CATCHING UP, REVISITED

Before we describe the first steps toward managing a better you and a better office, we want to briefly revisit the ‘illusion of catching up,’ which we discussed several articles ago. It is a fallacy to think that one day you will get caught up with your work and that your life will get back to normal. Chaos is the new normal. There is no one project, one stressful semester, or one new hire that, once completed, will suddenly return you to a less stressful, slower-paced time. Recall the following all-too-common statements:

- “That project will have to wait until I catch up.”
- “Once I finish a few things, we will finally get organized.”
- “Once we get over the top on this one, we will examine your proposal.”
- “This time of year [applied to any time of year] is always busy.”
- “Let’s have lunch...right after I get a few things off my plate.”
- “When I catch up at work, we’ll take that vacation I promised you.”
- “Once work slows down, I will start coming home earlier and we will [fill in the blank].”

Over time, the thought process that underlies these statements crushes morale and destroys workplace productivity—especially as it begins to take its toll at home. Be honest: Rarely do you ever feel you are caught up. And if you do, how long does it typically last? For most managers, working at 110 percent is the daily reality. Many strive to combat this reality by working more hours. (After all, being the last one out of the parking lot and saying that you worked all weekend have become badges of honor.)

But consider this: Working all weekend means not only that employees are working ineffectively but also that they are being managed ineffectively. The longer the pattern continues, the more the stress builds, the more morale declines, the greater the risk of project blunders, and the greater the likelihood that good employees will feel that they are failing one another and becoming unproductive. This is burnout: It is real, and it results in poor work and poor physical health.

It is time to let go of the illusion of catching up. Give it up, managers. Admit, accept, and move on. It is time to embrace the race, choose to run, choose to start, define “done,” and deliver.

In this article, we discuss a number of concepts that provide a starting point for beginning to organize the chaos. The concepts include managing yourself; managing your people; managing your boss; and managing politics and deliverables.

MANAGING YOURSELF

Choose to Lead

Today we all must be leaders—of our subordinates, our peers, and our family and friends. In the workplace, you must remove a variety of burdens from your staff. One of the most important aspects of leadership is to protect yourself and your people from needless organizational time wasters and overload so that everyone remains effective. Think of yourself as an offensive lineman protecting the quarterback: You need to protect your people from interruption and politics. Their time must be managed and prioritized so they can concentrate on their work, finish their work, and feel a sense of accomplishment. There is nothing worse for a team than day-in, day-out stress. This leads to inefficiencies, lost time, lost resources, and delayed schedules. In short, staff under constant stress worry; they do not work.

Managers are like traffic cops or dispatchers who watch for the problems and landmines of the day. Leaders then take action to see that none of their people steps on those
landmines. The economy is too competitive to not pay attention to all things managerial. Each day, you must come in to the office, be strategic full time, and work. We urge you to also jump in, take responsibility, and lead.

Choose to be Healthy

To quote the vile Count Rugen from the movie *The Princess Bride*, “If you haven't got your health, you haven’t got anything.” In order to execute on the sections that follow, you must ensure that you are giving yourself the best chance to succeed. Each and every day you come to the office, you must be 'on.' You must bring your ‘A’ game. You must be clear headed, well rested, and in pretty good shape. Being physically and mentally fit will enable you to perform at your highest level. It will keep stress from overtaking you. It will reduce the chances of a life-altering health event or a nagging injury or condition. It will enable you to remember more, to be more creative, and to stave off burnout. It also will send a good message to your team, your boss, your colleagues, and your customers. It may not be fair that people judge those who are in good shape and good spirits more kindly than they do those who are not, but life isn’t fair. Don’t compromise yourself with poor health. If you won’t take care of yourself for the sake of your own body, then do it for your team and your pocketbook.

Pay Attention to All Things, Big and Small

We cannot emphasize this enough: You must pay attention to all things big and small. The environment has become too competitive to overlook anything anymore. You must look at your customers, at your leaders, and at your organization and constantly be evaluating how you fit in, how your team fits in, what is being said, what is not being said, and what is important. You must be able to ‘go broad and go deep,’ meaning that you must understand a wide array of subjects but also have intimate knowledge of at least some of them. And because what is important changes from month to month, you must be ready to adapt yourself and your team quickly. This means professional development (discussed in greater detail below) and reviewing and adjusting strategy, structure, and methods as necessary. We estimate that new college graduates will have to become ‘brand new again’ every ten to fifteen years or so. What is a career but a few years of learning, a few more of high productivity and contribution, and then a few years of hanging in and hanging on (assuming you avoid some major organizational shake-up)? Avoid that last stage and instead find yourself renewed in your productive stage. So choose to actively pay attention to as much as you possibly can. Take continual stock of and reinvent yourself as opportunity to do so arises; otherwise, you may find yourself miserable—or even miserable and unemployed. Learn to look for and read the signs, both obvious and implied. Pay attention, or prepare to be replaced by someone who does.

Quit your Whining

Doubtless you have seen the sign “No whining!” No one likes a whiner, yet how often do we deserve the label? It is as if we are wired that way. As Agent Smith suggests in *The Matrix*, humans require misery. Life is not fair. Bad things happen. Talking about unfair things pushes away the blame. But as a manager, whining is unacceptable. You do not have time for it: it is not constructive, it helps no one, and it sets a bad example for your team. Yes, sometimes you need to vent. But if at all possible, vent to your spouse, to friends, or to your dog. If you must vent at work, close the door and do it with someone you trust. Stop whining. Work, execute, and deliver in order to stay profitable and employed. Period.

The fact is, you are where you are. If you aren’t happy with the circumstances, then change something. Move; become a boss; change the world. Otherwise, accept what you have, embrace it, and make the best of it. If you do not enjoy today, no one will let you be in charge of tomorrow. Understand and accept that you live in chaos—and that chaos, understood, can be rewarding.

Organize

We urge you to utilize the organizational techniques articulated in our previous articles. You cannot afford to be the least bit disorganized. You must understand your team’s work. All work must be lined out and prioritized. You must know how many projects you have in motion, how many you are terminating, how long each is expected to take, who is working on what, and at what stage every project is currently at. You must know how much time is required for maintenance, how much for management, and how much for meetings. Start simply—with white papers—then move to work plans and toward understanding how your resources are consumed. Always think
in terms of resource balance and deliverables. Resources include your and your people’s hours, your money (budget), and your energy. Do not expend energy on things that are of no use.

**Manage Time Like a Consultant**

Come to work ready to deliver that ‘A’ game. Think as if every hour of your day must be productive, billable, and useful. Plan every hour deliberately. Otherwise, you cheat your customer—your organization, your team, and yourself. Do not misinterpret this as burying your head at your desk every moment of every day. Chats near the water cooler and casual visits can be useful for politics and moving work forward—or simply for the sake of a little break (recall that we do need to take time for restoration). Just be sure that they have purpose; if they don’t, move on after a friendly exchange or gesture. Neither consultants nor you can afford to allocate hours to non-billable or ‘not useful’ tasks.

**Manage Professional Development**

Learn something every day. Make it a point to read for at least an hour or two every day. How can you find that kind of time? Be purposeful. You may not be able to read quite that much every day, but at least attempt it on many days. Once you are organized in other areas, you can make time to read. It is too easy to let go of personal and professional development goals. But you must make them a priority. Plan your career as well as your strategic development. Know how you want to progress. Know how you want to grow your team, your knowledge and intellect, your career, and even knowledge for knowledge’s sake. Just as athletes continually train their minds and bodies in order to stay competitive, managers must train in order to hone their skills and stay employed.

**Manage Confidence**

You need confidence. Yet confidence can be oh-so-difficult to maintain. Although you may feel insecure at times, do not reveal your fears and doubts to your people, your bosses, or your competitors. Instead, manage your fears. Some may be legitimate, but often they are your own creations. In any event, do not be ruled by them. There is no reason to feel a lack of confidence if you have trained and prepared. Remember and understand that what you do is work. And work is not life, your spouse or children, your tennis or golf game. Work is not who we are (although many seem to believe otherwise). It is what you do for pay; it is work. The point is not to take everything quite so personally.

You can help spread this confidence by empowering your people to take charge, allowing them to take the lead, and allowing them to help you. Your people need to be able to make decisions without fearing that their doing so will result in your becoming unfriendly and/or unstable. Too many of us have had a boss like that. By empowering your staff, you will give yourself the gift of time to train (professional development) and to be more productive.

**MANAGE YOUR PEOPLE, UP AND DOWN**

**Actively Manage**

Management is difficult—more difficult than in the past. It requires managing not only your people but also your bosses and, perhaps most difficult, yourself.

It is challenging to remain self-disciplined and self-strategic while not feeling stressed much of the time; at best, it puts you in a state of constant adjustment. It also can be very lonely. In fact, it has gotten a whole lot lonelier because in order to be effective, middle managers must make many more decisions in isolation than ever before. There is no time to spare: You must evaluate alternatives quickly, gather cost-benefit data and information, make decisions, and move forward, and, as necessary, change course—quickly.

In managing subordinates, you need to make fast decisions while at the same time encouraging and protecting. Your employees need to stay focused and confident in the assurance that their work is purposeful and meaningful. A group hug may not always be appropriate to ensure that everyone is on board. Shared governance is common practice in higher education, but there are many times and circumstances when it may not be appropriate or competitive, especially as external constituents and politics and the latest ‘big idea’ require a quick response. Even after big decisions are made, dozens of smaller decisions may be necessary to move an effort forward. (That said, be sure to avoid the over-planning that can doom a project before it begins.)

**Managing Up**

Long ago you may have been taught that a manager was misdirecting effort if she spent more than 20 percent of
her time managing her subordinates. The other 80 percent needs to be spent managing stakeholders, customers, clients, and the boss.

Helping the boss see her way to the right decision has always been an important part of being a good employee. A boss cannot and does not know all things. Teach, help, and provide enough information to facilitate good decision making but not so much as to create confusion. Find the balance: Bring solutions to the meeting. Try not to be yet another problem for your supervisor.

If you cannot communicate your issue in five or fewer minutes (ideally, you will do so in two minutes or less), then you do not understand your problem well enough. You have not studied the issue sufficiently to communicate quickly, explain concisely, and identify solutions. Sometimes you may need to ask for advice. But keep that simple, as well. Provide a document and say, “I want your opinion.” Talk for a maximum of one minute and then ask, “How would you handle that?” Be brief, and request specific commentary about a specific subject so you can leave with a decision (or at least with some useful advice).

Frequent, brief, work-only, decision- and deliverable-oriented visits can help you get noticed. Help your boss make the right decisions day in and day out. Help him to be successful. As a result, you will be appreciated, you will learn, and perhaps you will even become the boss someday.

Protect

In the midst of chaos, you must ensure that your employees feel protected so they will be free to excel, produce, and feel empowered and purposeful. How can you do this? Begin by managing yourself in such a way as to not burden your people with your own issues. Your employees have plenty to do without having to worry about managing you and your problems or inefficiencies.

Next, protect your people from outside attacks or assaults on their workload. (This is so important a concept that we include it under both leadership and management.) Make it clear to the outside world that your team is organized and working hard—that you have prioritized, scheduled, and planned. The world must know that you have good white papers and work plans and that your team delivers work efficiently. Those outside of your group must understand that you have your team under control and that the work flows through you. As manager, you are the gatekeeper. You are the sentinel. No work is undertaken without it first being assessed by you, and no assignment is issued without your knowledge.

Be careful not to protect people from working hard—only protect them against overwhelming amounts of work. Your team must work hard and deliver a steady stream of high-quality projects. It must not be expected to deliver 33 top-priority outcomes by the end of the semester.

Consider one more strategy as a tool for protection: throw some work under the bus. At times you will be unable to hold back the crowd. Sometimes, for various reasons, you won’t be able to stop as much at the gate as you would like to, or you won’t be able to schedule, assign, and negotiate quickly enough. You cannot pile on work beyond the breaking point without jeopardizing both the quality of your work and related schedules. It is too easy to become a bastion of mediocrity. It is better to accomplish less well than to do everything poorly. When the quantity of work becomes overwhelming, consider strategic failure. Decide purposefully that some things will not be completed according to someone else’s plan. Throw the work under the bus of that vice president who can get the president’s attention; that attention might lead in turn to prioritization and perhaps even another person to help do the work. Or throw the work under the bus of the person with no power and whom no one likes. Whatever you decide, be strategic: having a poor or no outcome in one area should result in increased productivity in another area. This requires courage. Allow your team to let certain projects wait until another day. You may have to pay a price for utilizing this strategy. You may suffer a consequence for de-prioritizing the wrong project. This is a cost of being the manager. Adverse consequences are not your team’s fault. You must take responsibility, deal with the consequences, and negotiate the fallout. If you don’t like it, then you may need to rethink your management track.

Coaching: Managing Isn’t What it Used to Be

Given the shift from an industrial society to one filled with knowledge workers (particularly so-sensitive millennials), considerable coaching is required. The coaching-managing philosophy is no longer optional but rather an everyday prerequisite for success. Previously, managing meant lining out your people, stating objectives or outcomes, and then letting your people do the work. Now, people require
continuous monitoring, contact, motivation, engagement, and a level of expressed gratitude not required previously. You need to encourage, communicate often, manage by walking around the office (and eating with your people), and let your people know that you know what they are capable of and that you expect nothing less. You must know each of your people well, care about them as individuals, and make them understand and believe that you are there to help them succeed. In today’s workplace, teams need to be coached to victory.

Balance

Unless you have been working in a cave, you have read and heard much about work/life balance. Most managers and employees rate it as important. Some of us even make a concerted effort to make a few changes in order to attain balance, but more often than not we soon find we are back to feeling overwhelmed and working longer hours. What can you do to improve your work/life balance? First, be a bit flexible; second, have clearly defined work plans. The burden is on you as manager to assign the appropriate amount of work to your people. The burden is on you to ensure that work plans are robust, with milestones and delivery dates established with balance in mind. Don’t beat up your people. You will have to work them 45 to 50 hours a week, week in and week out. That is the new norm. But give them the time to work with some flexibility. Not all will rise to the occasion, but the best folks will. Take care of them.

Some of your staff will not go home willingly. But go home they must. If necessary, get angry. Force them to go home. Force them to take days off. Working all weekend and never taking vacation is not a positive trait. Usually it is a sign that something is wrong. Either you are not managing correctly, or the employee has some other issue. Rather than demonstrating a willingness to work hard, working constantly demonstrates that the individual has no life apart from work, is inefficient, or is not delegating appropriately. Work is good, but rest fosters creativity and innovation. Humans are workers by nature, but like salt in...
the bloodstream, too much will kill a person...or at least make him miserable to be around.

Know that attaining balance all the time is nearly impossible—but do aim for balance 65 to 75 percent of the time. Work is often crazy, but don’t let “crazy” be the norm every day.

Rewards

Rewards are good, but they are only as good as they are scarce and sincere. Work isn’t third grade soccer camp where everyone gets a trophy for showing up. In trying to reward all for everything, you reward no one. Rewards need to be important; they need to be sincere; they need to be real. They are wonderful when used appropriately and horrible when they are not.

Reward only when work is great. Otherwise, keep the plaques in the drawer and wait for the day when you indeed do have a winner. Long ago we had a student ask why no one in class got an A. Our response was that no one deserved an A. Teaching evaluations for that class were not too favorable, but that is life. Managing—like teaching—can require some dissatisfaction in order to do what is right. Think through your rewards carefully, and be sure that any recognition you offer has a purpose.

That said, when someone is deserving, do not miss the opportunity to immediately and loudly acknowledge her contribution. Single out the person who is an example for all to follow. The reward need not be big or expensive. Whether you grant a day off, lunch with the boss, or tickets to a ball game, an expression of gratitude goes a long way. Save it for when it is deserved, and then make it visible and special.

Some argue that higher education has far too many rewards. Give significant thought to what is appropriate in your individual workplace, and be sure that rewards are appropriate and meaningful. Note that a 3 percent across the board pay increase is a cost of living allowance (or at best profit-sharing), not a merit raise. Do not call a pay increase a raise if it rewards all employees, good and bad, at the same level. This is destructive. That said, higher education allows far too little in the way of merit pay. But just because it is difficult to allocate does not mean that we shouldn’t try to help our organizations keep great people. If you cannot increase your staff members’ pay, then think of perks and recognition you can offer. You must differentiate good from mediocre work and then reward the good as appropriately as you can.

MANAGING DELIVERABLES

Be a Solution Provider

You should have heard by now that you should bring only solutions—and not problems—to the boss. Be the person who delivers solutions. Show up with evidence that you have taken the time to think the problem through and that you are seeking approval of possible solutions, not throwing up your hands because you don’t have any idea of what to do. Communicate costs and benefits, pros and cons, and seek a decision that will move you forward. At worst, ask for guidance or advice; do not ask to be told what to do. And be careful about asking your boss if she wants A or B because she may say yes to both—particularly if A and B solve different problems. The objective is to advance progress, not to obtain more work. So deliver a solution. Deliver thought, a plan, and a close.

Deliver Loudly and Visibly

Be sure to position your delivery so all can see it. Deliver a show complete with an opening, a beta test, and a final solution; serve cookies and punch, food and liquor. Do whatever it takes for people to notice that you and your team delivered on time and on budget. This is politics and showmanship at its finest. It can be done with humility, but remember: it is show time; it is delivery time. Take advantage of the fact that you and your team have done well. The team will get promoted, and everyone will get a little more at the end of the year—be it pay, a promotion, or an increased budget to do more excellent work the next year.

Celebrate Delivery

There will be times when your delivery can be neither loud nor visible. Even in such cases, you still need to celebrate with your team. Thank your staff for doing great work. Whether delivered over donuts and coffee or at a black-tie event, your thanks lets your people know that they have purpose and are appreciated. Have a party at the office; take them out to lunch; or give them gift cards. What you do doesn’t really matter. Just do and celebrate.

Remember: Delivery in all its forms should be visible, loud, and celebrated. Get what you can while you can. An-
nnounce your wins. Perhaps the Office of Registration and Records just celebrated its 35th consecutive upgrade without a hitch, or the 10,000th online transcript was printed, or the professional development software was implemented in record time. Is this playing politics? Yes. But it is also educational. If you do not tell the world what your team is doing, who will? Certainly not the other departments that are after your budget. Be strategic; be smart; deliver.

**HOLDING TIGHT TO SATURDAY AND SUNDAY**

We know that we are not inventing new concepts but rather synthesizing and summarizing ideas for managing your work force. Good management and good leadership concepts have been around for quite some time, but we all need a constant refresher. Further, these concepts need to be modified according to each generation’s attitudes and characteristics. The societal shift from industry to service and knowledge necessitates significant adjustment of management concepts and practice. We must constantly remind ourselves that there is always more to read and learn.

We hope that our practical, deliberate delivery of the management concepts discussed here—concepts that have stood the test of time—will help you attain real change at your institution, in your group or unit, and in you.

**WE ARE IN CHAOS**

We are in an all-out competitive, war-like environment where everyone every moment is trying to out-do and out-compete everyone else. Education is now global; content is global—and packets of data are flying around at the speed of light. As you sleep, someone somewhere is trying to steal your students and your way of life in order to better his own.

Because we have such unrestricted access to information—and, thus, to projects and initiatives—the supply of work to add to our chaos seems never-ending. Well, actually it is never-ending. We are an overworked, under-rested, accelerated “5-Hour Energy Drink” society. There is no going back.

We need to learn to succeed, find balance, find faith today and in the future, hold on to hope, be human, and enjoy our children, spouses, and friends. We need to be in the business of execution and delivery in the most efficient manner possible. Close projects, provide service, and make money (okay, academics, budget surpluses). Most of the time we do not need fancy concepts or long-winded quantitative models and behavioral concepts. Rather, we need to get people to do good work in a safe and uninterrupted workplace. Each of us works best when we feel as good about our place as we can and have some purpose and balance in our lives.

Commit to some light project management and some detailed people management. Take back your Saturdays and Sundays.

**REFERENCES**


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Eastern Dreams: Alternative Pathways for Chinese Students Pursuing Baccalaureate Degrees in the United States

By Linda Serra Hagedorn and Jiayi Hu

The number of international students pursuing postsecondary degrees in the United States has increased consistently over the past several years (Institute of International Education 2012, 2013). In fact, the most recent report—for academic year 2012–13—indicates that compared to the previous academic year, the number of international students at U.S. colleges and universities increased by 7.2 percent, to more than 800,000. Students from China lead this global trend, accounting for 28.7 percent of all international postsecondary students in the United States. Moreover, the number of Chinese students studying in the United States continues to increase, as demonstrated by the sharp increase (21.4%) compared to the previous academic year (IIE 2012, 2013). All indications are that the number of Chinese students applying to U.S. colleges and universities will continue to increase, perhaps resulting in a need for enrollment professionals to examine current policies for relevance and fairness and to understand how students from China are preparing to enroll.

The surge in numbers may be traced to China’s historical and cultural emphasis on education, which has been augmented by the country’s one child policy and an increasingly large middle class. Together, these factors have produced a generation of parents with not only the highest expectations for their sole offspring but also the resources to invest in an education they believe will help their children distinguish themselves from their peers. Many Chinese parents believe that a western education at an elite university will guarantee their children a bright future. Overseas degrees are highly valued in the Chinese job market, with U.S. degrees the most favored (Inside Higher Ed 2014). The increase in the number of Chinese applicants to U.S. universities—particularly elite and Ivy League universities—has resulted in intense competition among Chinese students.

Yet the drastic increases in the number of Chinese college students at U.S. colleges and universities is not universally welcome. For example, there is evidence that some Americans believe that Chinese students displace U.S. students. The Chronicle of Higher Education reports that the increasing number of Chinese students has resulted in complaints that campuses have become “too Asian” (Ruse 2010). Some Americans also believe that many Chinese students cheat on tests and academic work (Winn 2012). These issues together have made the admission of Asian students—Chinese students, especially—increasingly controversial (Jiang 2011). Chinese high school students who dream of success must be even more competitive and must strive even more to distinguish themselves from their peers. (See Figure 1, a framework for understanding
the nature of and the conflicts among “eastern dreams,” Chinese students’ need to distinguish themselves, and the perceptions of Asian students at western universities."

In an effort to distinguish themselves from their peers and turn their dreams of a U.S. education into reality, Chinese students pursue additional coursework, intensive English language training, and alternative educational pathways. This article describes the various pathways available to Chinese students who seek to prepare for a baccalaureate education in the United States. For each pathway, we provide a description, a synopsis of its current status, and an overview of related challenges.

**ALTERNATIVE PATHWAYS**

Chinese students with eastern dreams must begin the process of distinguishing themselves from their peers long before they begin filling out college applications. In many cases, this process turns into a frenzy of additional training, classes, alternative college credits, and working with education agents. Although students may participate in a full array of strategies designed to “win” the college admissions race, the actual criteria or ways that these activities are evaluated have never been researched or documented. Given the consequent lack of knowledge of what really works and a pervasive belief that “more is better,” eastern dreamers often pursue courses and activities that require significant commitments of time and money.

**PATHWAY 1: EDUCATION AGENTS**

**What is an education agent?**

The cloaked nature of how elite colleges choose whom to admit has inspired the rise of education agents who, for a price, promise assistance with and success in the college application process. An education agent is a person, company, or organization that provides services for a fee to students seeking to earn a degree abroad. (The fee may be paid by the students, U.S. institutions, or both.) Agents may enroll students in special classes, assist with the college application process, and/or help students obtain visas. Zhang and Hagedorn (2011) describe the burgeoning of agents as phenomenal.

**The Current Status of Education Agents**

According to Zinch China (Bergman, 2012), 80 percent of Chinese undergraduate students employ an agent to assist in the filing of their college applications. While some agents operate scrupulously and provide helpful services to families with no prior experience of study overseas, others prey on the ignorance of students and their families and charge high prices, often for unnecessary services. Moreover, some agents write their clients’ personal statements, forge letters of recommendation, and may even produce fraudulent admission and/or English test scores (Hagedorn and Zhang 2012).
Challenges Related to Education Agents

Zinch China (Bergman 2012) estimates that as many as 90 percent of recommendation letters in support of Chinese students’ U.S. college and university applications are fraudulent; 70 percent of such students’ college application essays are not written by the students; and half of all high school transcripts of Chinese applicants to U.S. institutions are falsified (Kwok 2012). Students who gain admission to elite programs on the basis of fraudulent means (e.g., cheating) may fail out and/or find themselves subject to other negative outcomes subsequent to their enrollment (Bergman 2012; Ma 2012).

Some U.S. institutions work with specific agents to recruit international students. In some instances, the college or university may pay the agent a commission or finding fee. At present, no licensing or listing identifies agents who can be trusted or those who are suspected of engaging in fraudulent or otherwise questionable behaviors.

PATHWAY 2: SPECIAL COLLEGE PREPARATION PROGRAMS (CPPS)

What are special college preparation programs?

College preparation programs are relatively long-term (typically two- or three-year) programs that feature English proficiency, college preparatory, and study skills courses as well as application services. Most CPPs are conducted at Chinese high schools for students who plan to study abroad in English-speaking countries. Some programs award transferable college credit. (Such programs are typically high cost and high stakes.)

Global Access Certificate. The Global Access Certificate (GAC), a product of ACT Education Solutions, Limited (a subsidiary of ACT Inc.), is a typical example of a college-credit-based preparation program. The GAC program is reported to provide students with the academic knowledge, learning skills, English language skills, and confidence to enter and successfully complete a bachelor’s degree program at a foreign university. The GAC program operates within Chinese high schools by offering courses during regular school hours. The courses are comparable to dual enrollment programs in the United States whereby students may earn college credit that can be transferred to a foreign university. Students who earn the GAC by completing three levels of courses may transfer as many as 31 credits to any of at least 2,400 U.S. colleges and universities. (The transfer credits are verified by the American Council on Education’s College Credit Recommendation Service.)

The GAC program has been offered in China since 2000. In 2008, approximately 30 GAC-approved teaching centers were in operation (New GAC Centers Opening in China, ACT Education Solutions 2008). The China Center for International Education Exchange (2013) reported that in 2013, 24 GAC centers were operating in China— with plans for more.

International Baccalaureate (IB) program. The International Baccalaureate program assists students who are contemplating studying abroad. Students take a series of college-level courses during their last two years of high school. The IB program comprises three core sections and six subject groups. A central part of the program is an extended essay that requires independent research related to one of the IB subjects. In addition to the core courses, IB students must choose one subject from each of five groups: (1) language and literature, (2) additional language(s), (3) the social sciences, (4) the experimental sciences, and (5) mathematics and computer sciences. In addition, the student may choose either an arts subject from a sixth group (the arts) or a second subject from one of the other groups (1 through 5).

What is the current status of special college preparation programs?

The number of students enrolled in special college preparation programs in China is increasing rapidly. Consider Shenzhen, one of the developed cities in China, with almost 4,000 students decide to study abroad by avoiding National College Entrance Exam in China per year, ten public high schools have begun to offer international college preparation programs during the year 2011 and 2012 (Souhu Education Online 2012). Take the capital city Beijing as an example, the report published by China Education Online (2014) indicates that until 2013, seventeen high-performance high schools in Beijing have established 22 international college preparation programs. From 2009 to 2013, sixteen new international college preparation programs have been established, with a doubled increase rate.

The first IB-authorized school in China was established in 1991 (IBO 2013c, 2013d). The IB Primary Years Programme (PYP), for students aged three to twelve years, fo-
focuses on the development of the child as an inquirer, both in the classroom and in the world. The IB Middle Years Program, in operation since 1994, is designed for students aged eleven to sixteen. The IB Diploma Program starting from 1968, was designed, for students aged 16 to 19, to deliver an academically challenging and balanced program of education with final examinations that prepare students for success at the postsecondary level and beyond. The latest statistics indicate that 75 IB world schools in China offer one or more of the three IB programs; 29 schools offer the primary years program; 23 schools offer the middle years program; and 63 schools offer the diploma program (Hagedorn and Hu [in press]).

What are the challenges related to special college preparation programs?

Despite the rapid growth of interest in CPPs, no regulations govern the marketing or establishment of such programs in Chinese high schools. In addition to the two major CPPs described above, numerous individual programs operate in private Chinese high schools and other venues. No official listing or governing policy exists for businesses that purport to serve students and their families in attaining their dreams of international study. Most parents enroll their children in special high school programs without the benefit of full knowledge of other programs that offer similar services. Some programs may mislead parents by advertising—aggressively or even falsely—that they successfully enroll large percentages of students at top U.S. institutions.

Once a Chinese student enrolls in a special program whose curriculum differs significantly from that of a traditional Chinese high school, he must opt out of taking the gaokao, the national college exams. CPPs prepare students to take the tests required for consideration for admission to U.S. institutions (e.g., the Test of English as a Foreign Language, or TOEFL, and the ACT). The gaokao require an entirely different preparation process. Thus, Chinese students who enroll in CPPs forego their eligibility for enrollment at Chinese universities. Once the decision is made...
to prepare for international college admission, the door to postsecondary education in the home country is closed.

PATHWAY 3: INTERNATIONAL COLLABORATIVE DEGREE PROGRAMS

What are international collaborative degree programs?

In general, international collaborative degree programs serve Chinese college students who have taken a more traditional path in high school, have taken the gaokao, and have been admitted to a Chinese university. The international collaborative degree program is the result of a partnership between institutions that allows students to earn a U.S. baccalaureate degree as well as a Chinese degree. There are various types of collaborative degrees, including:

- **Joint Degree**: Two institutions (one American and the other Chinese) collaborate on the award of one degree. The diploma typically records both institutions' names.
- **Dual Degree**: Two institutions award separate though articulated degrees.
- **Single Degree**: Students take courses in one country and transfer earned credits to an institution in another country; the degree is earned from the institution to which the credits are transfered.

Popular configurations of collaborative programs are the “1+3” and the “2+2.” Students enrolled in a 2+2 program pursue half of the program requirements (two years’ worth) at their host country campus and the other half at the foreign institution with which their host campus has a collaborative degree agreement. This provides students with time both to improve their English language skills and to gain college experience prior to going abroad.

What is the current status of international collaborative programs?

Universities often hesitate to develop collaborative programs because they require a close and carefully monitored relationship based on agreements specific to degree components. Collaborative programs may include agreements regarding tuition charges, transfer credit policies, and when and how to “double count” credits earned across both degrees.

Students and their families find collaborative degree programs attractive because of the versatility and utility of earning two university endorsements simultaneously. Having to spend less time in the United States also may result in some cost savings.

What are the challenges related to international collaborative programs?

Because participation in a collaborative program typically results in students’ spending less time in the United States than if they were enrolling outright in a U.S. baccalaureate degree program, students are likely to have a more limited international experience. Students enrolled in a collaborative program also may encounter some difficulties in relating advanced courses in one country to the introductory courses they took in another country. Beyond differences in curriculum, teaching style, and assignments, social and cultural differences may hinder students’ success.

Another challenge for students participating in collaborative programs relates to their lack of institutional choice. Chinese students admitted to a program cannot earn a degree from any other U.S. university than that stipulated in the cooperative agreement.

PATHWAY 4: “SWIRLING TRENDS”

What is the “swirling trend” as it relates to international students from China?

The term “swirl” was first used in 1990 by Maricopa County Community College officials to describe the non-linear paths forged by college students admitted to multiple colleges. A student may alternate enrollment between two- and four-year colleges or may attend both types of colleges concurrently, taking courses and earning credit at both institutions (Palmer 2001). Like their peers in the United States, increasing numbers of international students are taking courses at more than one institution (Hu and Hagedorn [in press]). For example, it is not uncommon for international university students to also take courses at community colleges. Students then transfer the credits from the two-year to the four-year institution.

What is the current status of swirling?

Swirling between two- and four-year institutions became increasingly common between 2006 and 2012 (Hagedorn
The reasons that underlie swirling include efforts to offset the high tuition at four-year institutions and to decrease time to degree, seeking access to popular professors at two-year institutions, bypassing difficult courses at four-year institutions, and optimizing one’s course schedule (Hu and Hagedorn [in press]). According to a case study at one midwestern U.S. research university, Chinese international students were most likely to enroll in language and literature courses at community colleges.

What are the challenges related to swirling?

Unlike students who enroll in collaborative programs, students who ‘swirl’ negotiate multiple institutions’ requirements on their own. No cohesive guiding policy or regulations direct them to the correct courses for their degree programs. Students may find that certain course credits either do not transfer at all or may not count toward their graduation requirements. Students who enroll in online coursework may find they are less successful than they might have been in a traditional course. Students also may choose to enroll in certain courses at an alternative institution (such as a community college) because they anticipate that the course will be less rigorous than at their primary institution. For the four-year institution, the trend of international students ‘swirling’ is likely to result in a loss of tuition revenue.

PATHWAY 5: INTERNATIONAL SUMMER SCHOOL

What is international summer school?

This pathway is unique in that it targets students who have already completed at least one year of postsecondary coursework at a U.S. college or university. International summer schools are independent educational entities that enroll students during the summer while they are in their home country (e.g., China). They offer students the opportunity (1) to decrease either the time to degree or their course load during the regular academic year and (2) to continue their studies throughout the summer. International summer school programs advertise that credits earned will transfer to the U.S. colleges or universities at which students are regularly enrolled and will apply toward their degrees.

What is the current status of international summer school?

The SIE International Summer School is the most prominent program of this type, having partnered with some of China’s best universities—including East China Normal University (Shanghai), University of International Business and Economics (Beijing), Beijing Normal University, Nanjing University, and Sun Yat-Sen University (Guangzhou) (SIE International Summer School 2012). Since its founding in 2009, it has enrolled more than 1,200 students and has reported helping them save millions of dollars of college tuition while offering a U.S. university-level education (SIE International Summer School—Undergraduates 2013). According to an SIE International Summer School administrator, the program was begun by a Wabash College graduate who saw the need for Chinese students to return home during the summer and to earn college credit while there. SIE’s mission is to be the pioneer and leader in establishing international summer school programs in China and to provide the opportunity to earn U.S. university–level transfer credits.

By 2013, most competitor organizations had gone out of business. At the time of this writing, SIE is the only international summer school operating in China.

What are the challenges related to international summer school programs?

Enrolling in an international summer school may seem an opportune way for students to utilize their time and save money, but the effectiveness of ISS courses has not been tested. Moreover, there is no guarantee that a particular U.S. college or university will accept such credits for transfer. In fact, because the credit transfer system has not been standardized, some U.S. institutions—for example, Michigan State University and Indiana University at Bloomington—refuse to accept credits from programs like the Chinese International Summer School (McMurhrie and Farrar 2013).

RECENT REFORMS OF CHINESE COLLEGE ADMISSION

For China, the rapidly growing numbers of its students pursuing international study is troubling. Concerns about “brain drain” and about fewer students taking the gaokao have prompted new policies. Policy makers in China understand that many students choose to study abroad so
they can bypass the fierce competition of the gaokao. According to Zhang and Hagedorn (2011), the gaokao is a "typical example of large-scale selective exams with fierce competitions and extremely high stakes. It has been the most important and the most influential exam in China" (p. 10). A student’s scores on the gaokao are the solitary determinant not only of what university the student is eligible to enter but also whether he can enter any Chinese university. The pressure is tremendous—particularly as a student may take the gaokao only once.

At the October 2013 Third Plenary Session of the 18th Communist Party of China, the Central Committee recommended reforms to the gaokao in order to eliminate many of its most devastating disadvantages (including its sole assessment standard, sole selection method, and sole college entrance channel). The Ministry of Education subsequently developed a set of reform measures: First, the college admission standard will be modified to focus not only on students’ gaokao scores but also on their academic performance and high school social activities. A formative assessment that quantifies a student's current academic capabilities as well as his potential will replace the summative assessment, and the measurement focus will shift from test scores to the whole learning process. The new assessment standards assign levels from A to F rather than specific scores. In the past, students could miss by a mere point the opportunity to enroll at the university of their choice. It is expected that the levels (A to F) will assess student capabilities more fairly. These changes will make college admission more objective, accurate, and effective in the assessment of student capabilities.

Second, the gaokao will be offered multiple times a year. Some subjects, such as English, will be tested multiple times a year, allowing students to prepare according to their own schedules. In the past, students had to prepare for all subjects at the same time and took all of the exams during an appointed period of time. In contrast, the gaokao reform will allow students to take subject-specific exams upon completion of intensive study of just that subject. Thus, students will have the flexibility to schedule their study of specific subjects over a longer time span and so will be able to devote their attention to one or two subjects at a time.

Third, colleges will have more freedom to recruit students in accordance with their own objectives. They will be able to organize exams that test the learning capabilities they particularly value.

Fourth, although the Chinese central government will continue to manage the college admission process, it has expressed a desire to lessen its oversight of certain areas and to allow education authorities to exercise greater responsibility.

College admission in China seems to be becoming more flexible, expanding opportunities for students to enter Chinese universities. Such changes may relieve some of the pressure that in recent years has significantly increased the number of Chinese students studying abroad.

CONCLUSION AND IMPLICATIONS

U.S. higher education remains the envy of the world. It is no surprise that Chinese students and their families dream of undertaking postsecondary study in the west. The dream typically features an Ivy League university, but in fact, all forms of U.S. postsecondary instruction are considered prime. The number of preparatory high school programs suggests that the surge of students from China will not abate anytime soon. (A related trend is the rise of programs and intensive English instruction for elementary and even preschool students in China.) These numbers cannot be ignored. U.S. colleges and universities must respond thoughtfully with policy that will balance opportunities for access among its citizens and its admirers. Moreover, they must also develop policy related to alternative means to earning a college degree domestically and internationally. Agents, special programs, and swirling are not uniquely Chinese issues but are contemporary global trends. Such innovations are developing more rapidly than policies for managing them.

Confucius, in his doctrine of the golden mean, stated that “too much is as bad as too little” (Dorter 2002). Today’s Chinese student dreams of a U.S. college education and is bombarded with many alternatives and pressure to achieve more. U.S. institutions must seek to develop policy that will delicately balance international students’ desire to study in America, the goals of globalization, and the need to maintain appropriate access. In short, U.S. institutions need to seek their own golden mean.

REFERENCES

PAYING FOR THE PARTY: HOW COLLEGE MAINTAINS INEQUALITY


Reviewed by Matthew Fifolt

In Paying for the Party, authors Armstrong and Hamilton depict “the growing mismatch between what public institutions provide and what students in higher education need” (xiii) by describing a social environment and academic infrastructure that “systematically disadvantage” all but the most affluent students (3). Through descriptive accounts of student experiences, Armstrong and Hamilton demonstrate how college transitions and class trajectories seem to diverge according to social upbringing, family resources, and embedded privilege. The authors note that in the college setting, even the smallest class differences are magnified, and these differences can either foster or inhibit success.

The research that informs Paying for the Party is a longitudinal, ethnographic case study at a flagship public university in the midwest United States. Armstrong and Hamilton and their team of graduate and undergraduate researchers spent a year observing and interacting with the female residents of one floor of a reputed “party dorm” at “Midwest University” (MU) in order to develop a deep understanding of the lives of these students. After their initial year of onsite engagement, Armstrong and Hamilton conducted a series of five annual interviews with the students to follow their academic and career trajectories through the university system and one year post-graduation.

To frame the discussion and illustrate students’ progress through the university, the authors created a table and theoretical model based on their findings. The items and interactions that comprise the table and model include: (a) class projects (individual agendas); (b) college pathways (social and academic structures of the institution); (c) organizational imperatives (institutional needs); (d) class background; (e) orientation to college; (f) college experiences; and (g) class trajectories beyond college. The authors assert that, despite the illusion of choice, “at most schools there is an elaborate process of sorting that moves people onto distinct pathways” (22). Armstrong and Hamilton identify three distinct pathways that students tend to follow: the party pathway, the mobility pathway, and the professional pathway.

In describing class differences, the authors observe that “more affluent students approach college primed to ‘meet people’ and see the expansion of social networks as a central part of college” (p. 36). Conversely, they report that many
working class students, especially individuals from small or rural towns, find college to be an isolating experience, and leaving home results in “potentially severing deep and meaningful ties to their communities” (p. 45). The authors observe that these differences in orientation are amplified in the college setting. Further, the disparity in financial and other class-based resources seems to have a cumulative, multiplier effect—positive and negative—over time.

To illustrate institutional dynamics and power, Armstrong and Hamilton provide compelling evidence that the Greek system at MU yields significant influence in campus life. Although only 17 percent of the undergraduate student body are members of the Greek system, the prominence of fraternities and sororities has come to define MU as an institution that places greater value on the social than on the academic aspects of college life.

For many of the women in this study, an inextricable feature of the Greek system—and, therefore, access to the party pathway—was sorority rush, a highly competitive process of sorting and screening. Armstrong and Hamilton note that sororities recruit women based on innocuous attributes such as “personality” and “fit”; however, these terms and other actions clearly signal to prospective new members their standing among their peers.

Further, sorority rush, while designed to avoid outward discrimination, tends to exclude individuals who deviate from the “norm”—namely “nonwhite students, those not born in the United States, older students, those with children, lesbians, others with unconventional gender styles, or individuals with disabilities” (p. 78). Finally, the authors suggest that significant membership fees and other expenses reinforce the status quo by excluding students who are economically disadvantaged or who lack the support system necessary to maintain a certain lifestyle.

According to Armstrong and Hamilton, “[t]he sorority recruitment process...sorted almost perfectly along class lines” (p. 97) for the women who lived on this specific floor of the party dorm. Further, the authors observed that the more involved some individuals (mostly socially ambitious women) became with the process of sorority rush, the less visible others (usually more isolated students) appeared on the floor. The authors describe a system in which “dominants” seem to absorb energy from “subordinates” and the social dynamics of the floor dictate who is worthy of attention and who is not. Consistent with the literature on student attrition, social isolation led several of the women to experience problems with depression, drug and alcohol abuse, and academic disengagement, which often resulted in the students either transferring or leaving the university prior to graduation (Astin 1984, 1999; Bean and Eaton 2000; Tinto 1987, 1993).

SOCIALITES
Study participants from upper- to upper-middle class backgrounds understood the language and customs of sorority rush and therefore transitioned seamlessly into the Greek system. Bolstered by significant financial resources, these “socialites” enjoyed the benefits of the full college experience and graduated on time with passable grades. Using networking and personal connections, socialites secured the most prestigious internships and entry-level positions, many of which were heavily subsidized by family wealth.

WANNABES
A second category of students, “wannabes,” also followed the party pathway at MU. However, unlike their well-heeled peers, the wannabes had no financial safety net upon graduation and quickly realized that the lifestyle they had enjoyed in college was unsustainable. While socialites’ futures seemed unaffected by GPA and major, wannabes experienced rejection and setbacks due to the downgraded majors and modified career goals they established in order to maintain the party lifestyle. The authors reiterate that “the party pathway was a viable route to success for only a small, highly affluent segment of the MU population” (p. 147).

STRIVERS
The authors identify a third category of women as “strivers”: individuals from working- and lower-middle class backgrounds who relied heavily on part-time jobs and loans to make ends meet. Of this group, only one was selected by the university to participate in an academic enrichment program designed for students from disadvantaged backgrounds. The program provided grants and other financial assistance in order to allow students to minimize their work hours and concentrate on their academics. Armstrong and Hamilton note that this program served only a limited number of students, raising important questions about how institutional resources were allocated in support of student success.
In addition to the need to work, strivers confronted a number of other challenges, including poor academic preparation, few social connections away from home, lack of exposure to or experience with diverse individuals (e.g., those of different religious backgrounds or sexual orientation), and the need to gain immediate stability through early identification of financially secure mates. Within this group of students, the authors identify two distinct types of strivers: stayers and leavers.

**Stayers.** The authors determined that the stayers—those who remained at MU to finish their degrees—were, ironically, the least successful strivers because it often took them more than the typical four years to complete their chosen degrees, and the academic majors they selected often were impractical given their actual interests. Moreover, stayers accumulated significant debt in their attempts to complete an academic degree.

**Leavers.** Leavers, on the other hand, fared far better than stayers—especially among those who transferred to less prestigious, regional campuses. In this new environment, leavers were surrounded by individuals more like themselves and with whom they could more closely relate in terms of responsibilities and priorities. Transferring out of MU facilitated leavers’ selecting more pragmatic degrees and incurring fewer expenses.

**Achievers**

The authors define the final category of students as “achievers.” These students were generally less affluent than socialites but more affluent than strivers and were fiercely competitive for a limited number of top spots in the professional pathway. Achievers were primed for success; they were involved in relevant extracurricular activities, maintained strong GPAs, and had clearly aligned career goals and academic pursuits. Achievers worked to minimize distractions from their goal of degree completion—even within the party school environment.

**Underachievers.** Conversely, underachievers failed to realize their professional pursuits upon graduation despite their earned academic credentials and ambition. According to Armstrong and Hamilton, “the most common problem for underachievers was a never-resolved mismatch between their aspirations and their preferences and abilities” (p. 188). While success for this group of students was not necessarily dependent upon class, the authors note that the more successful achievers in the study tended to have relationships with their parents that were marked by trust and open communication. Achievers’ realization of self-sufficiency upon graduation was heavily influenced by parental resources. Underachievers’ trajectories, however, were more frequently interrupted by divorce, remarriage, illness, and other significant life events.

**Implications**

College and university administrators could benefit from reflecting on the research findings reported in *Paying for the Party:* they provide compelling insight into the ways in which organizational infrastructures can dramatically influence how students experience college. These findings may be especially important for administrators considering how best to meet the needs of students who “aspire to improve their circumstances” (p. 5) but leave the university setting with significant debt and without an academic degree. Debunking the myth that college is a class equalizer, Armstrong and Hamilton note that “the overall social organization of undergraduate life at MU mapped onto preexisting differences among the students and reproduced them” (p. 229). In this way, university infrastructures tended to reinforce class differences, if unintentionally and unknowingly.

As state funding has decreased, mid-tier, public institutions have relied increasingly on the tuition paid by affluent, out-of-state students whose social skills are stronger than their academic backgrounds. Therefore, despite their suggestions for mitigating the problems associated with each of the pathways, Armstrong and Hamilton recognize that reforms likely would be opposed by influential constituents and thus would prove difficult to implement.

Institutions are investing tremendous financial resources in social aspects of college rather than academic instruction. This is occurring to the detriment of in-state students and their families, who are receiving a consequently lower-quality education and reaping only limited career options. Armstrong and Hamilton express the hope that institutional priorities will change. However, their research suggests that public higher education institutions will grow increasingly vulnerable as the stratification of social classes becomes more pronounced.

The authors develop a general theoretical model assuming that students’ college experiences and post-graduation
success may be shaped substantially by the fit between individual characteristics (e.g., financial wealth, orientation to college) and organizational characteristics (e.g., institutional structures, pathways). The authors provide ample evidence to support this assertion. However, whether these data merit the development of a theoretical model remains to be seen.

In my opinion, while the authors make a notable contribution to the related literature and knowledge base regarding the lived experiences of university women, they may have over-reached by calling their conclusions a theoretical model. The development of a theoretical model is premature and misaligned with the qualitative tradition of inquiry employed by the researchers (i.e., ethnography). The authors may have come to a more appropriate conclusion by providing a provisional theoretical model and recommending that the model be refined through the qualitative tradition of grounded theory. This approach would allow future researchers to test the relevance of the model through “constant comparison of data with emerging themes and theoretical sampling of different groups to maximize the similarities and the differences of information” (Creswell 2003, p. 14).

To their credit, however, Armstrong and Hamilton acknowledge that the model is limited to one set of data within one institutional context. They invite others to “extend and revise” (p. 7) the model by applying it to different students at multiple institutional types. These recommendations would have been more effectively situated nearer the end rather than the beginning of the book. By using the model as their lead, the authors suggest that their proposed theory is the singular lens through which readers should interpret the data and their interconnectedness. These differences in qualitative approach to theory generation may seem relatively minor to some readers, but I contend that the authors’ use of ill-fitting methodologies and overstatement of the theory development may undermine their presentation of evidence and the credibility of their findings. Such practices cast a shadow on what is, otherwise, a compelling and important investigation.

REFERENCES

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THE COLLEGE FEAR FACTOR: HOW STUDENTS AND PROFESSORS MISUNDERSTAND ONE ANOTHER
Reviewed by Matthew Fifolt
In her recent investigation of postsecondary education, Cox focuses her attention on the least selective and least prestigious colleges in the country: community colleges. Community colleges enroll approximately half of today’s college students and are the fastest-growing segment of higher education; yet their contributions frequently are overshadowed by those of four-year institutions. Community colleges have been largely understudied and poorly understood.

For many students, attending a community college is a cost-efficient option for accessing higher education. However, there remains a “persistent gap between the faculty understanding of college-level coursework and the kind of work that students are prepared to do” (p. 9). The author notes that “being unprepared to meet certain expectations is not the same as being unable to meet them” (p. 11) but acknowledges that traditional structures and norms of higher education can impede access and opportunity.

Drawing upon instructor feedback and interview data from approximately 120 students who participated in four previous research studies, Cox utilizes an inside-out model of exploration to examine: (a) student goals, expectations, and orientation to college; (b) interactions between professors and students inside the classroom; and (c) academic literacy across classrooms. By examining student assumptions, Cox suggests that students and faculty members could better understand one another and thereby close the expectations gap that currently separates them.
FEAR AND ANXIETY

Across demographic characteristics (i.e., age, ethnicity, academic background, educational goals, path to college), students in this investigation expressed a tremendous amount of fear and anxiety about their educational trajectories and their ability to succeed in college. Frequently, student fears stemmed from past experiences of failure in school, which students viewed as “objective evidence of their academic inadequacy” (p. 25). Their self-doubts were heightened because students recognized that community college was the least discriminating level of higher education. Cox notes, “For fearful students, every interaction in the classroom and with their professors outside of class holds the potential to confirm their feelings of inadequacy” (p. 41).

Cox states that, ironically, the fear of failure was so paralyzing for some students that it became the source of their own undoing. In order to avoid the possibility of failure, students engaged in “passive strategies of disengagement” (p. 40) and self-defeating behaviors (e.g., not participating in class, avoiding certain exams, dropping classes before grades were posted).

Cox indicates that students were inclined to attribute feelings of confusion and making mistakes to their own academic deficiencies rather than to the sometimes difficult process of learning new skills or information. Yet Piaget and others describe the process of resolving discrepancies between old and new knowledge as the way in which learning occurs (Kelehear and Heid 2002). For students who were able to overcome their fears, academic performance often exceeded their own initial expectations and thereby provided evidence that they could, in fact, succeed in the classroom.

FINANCIAL MOTIVATION

With few exceptions, students identified their primary motivation for attending college as economic. Students sought greater occupational prospects and increased financial stability and therefore viewed college attendance as an investment in their future earning potential. According to Cox, students were constantly engaged in a process of weighing short-term loss (opportunity costs) with the potential for long-term gain (greater stability, higher wages). These financial considerations often dictated whether and when students could attend college as well as “how long to attend, what kind of degree to obtain, and how to earn a degree most efficiently” (p. 49).

Students who employed this cost-benefit analysis approach to college frequently scaled back their academic goals in favor of educational credentials that potentially could provide more immediate financial benefits. Further, students assessed the value of courses on the courses’ ability to contribute toward their immediate needs; students perceived courses not directly related to their career goals as a waste of both time and money.

STUDENT UNDERSTANDING OF LEARNING

Over the course of a semester, student attitudes toward their classes most frequently shifted from positive to negative. Cox writes, “I found myself surprised by the extent of disappointment that students express and the frequency with which students moved from initial optimism to disillusionment” (p. 78). The ultimate pragmatists, students exerted more effort if they perceived a course to be worthwhile or of practical value to their career aspirations. On the other hand, if students deemed the course objectives to be irrelevant, they would do the minimum required to pass. Cox observes that this “just get it over with” attitude “manifests itself in minimal effort, disengagement, and, most likely minimal learning” (p. 77).

According to Cox, “students’ understanding of what is worth learning—as well as how one goes about learning...is often incompatible with faculty members’ expectations of college students” (p. 84). She notes that community college students’ ideas about what they should be learning are “not necessarily congruent with their professors’ assumptions” (p. 86). These mismatched expectations frequently led to feelings of frustration and miscommunication and ultimately undermined the learning environment.

STUDENT AND FACULTY INTERACTIONS

Researchers have demonstrated the limitations of the teaching-as-telling (i.e., lecture) style of instruction (Prosser and Trigwell 1999, Ramsden 1992), yet it continues to be the predominant method of instruction at the postsecondary level. Consequently, the lecture style of teaching persistently shapes the expectations of postsecondary students and faculty regarding the classroom experience.

In accordance with historical notions of the professor as the authority, students in this investigation expected
instructors to “profess” their knowledge through traditional classroom-style lectures; they viewed alternative methods (e.g., discussion, peer review) as “unworthy of college-level instruction” (p. 113). In other words, students equated the absence of a lecture with the absence of instruction.

Students described “good instruction” as professors’ presenting their subject-matter expertise (which students would be expected to parrot), maintaining an orderly classroom, and controlling student participation. In turn, the students’ role was “to accept and passively consume” (p. 97). According to Cox, problems in the classroom cannot be attributed to “inadequate teaching techniques, unprepared students, or weak course content” (p. 113). Rather, student anger and frustration with active learning and engagement activities are rooted in their deeply held beliefs about what college-level instruction should entail.

**BRIDGING THE GAP**

According to Cox, faculty members who are able to divorce themselves from the lecture-style format and achieve learning outcomes exhibited specific characteristics, including an ability to demonstrate subject-matter mastery and explain concepts in sufficient detail for students to understand; a focus on interpersonal relationships; and expectations that students will perform rigorous academic work. One student described such an instructor as being “highly educated but much less threatening than a typical professor” (p. 120).

Perceived by students as content experts, such instructors also were “engaged in strategies aimed at alleviating students’ anxieties and provided students with constant encouragement” (p. 127). For example, instructors encouraged students to “participate in low-stakes writing exercises during class sessions” so they could provide positive feedback and gauge students’ writing skills prior to grading their first assigned essay (p. 128). Students responded well to such informal writing assignments because they counted toward the overall grade in the course (as participation) but were not assigned a specific grade.

These observations are consistent with Lang’s (2013) recommendations that students should be given multiple opportunities to demonstrate learning and to develop competencies through low-stakes assessments and in-class activities. Cox notes that short writing assignments provide opportunities for instructors and students to build rapport with one another and to address issues in such a way that students do not feel “belittled, overwhelmed, and demoralized” by instructor feedback (p. 126). She concludes that for students—particularly those with the greatest fears—success “depended on and consisted of gaining confidence” in their ability to succeed in college (p. 133).

**BEYOND THE CLASSROOM**

Cox suggests that community colleges could do more to introduce students to the expectations and culture of higher education. She notes that academic culture is based on “particular habits of thinking, acting, speaking, and writing that are often incomprehensible and alienating to people outside academia” (p. 140). Additionally, many students encounter difficulties in moving away from the strategies that helped them in high school (e.g., memorization, rote learning) and toward those that professors expect college students to utilize, such as applying concepts to new situations (i.e., critical thinking).

Cox further notes that, in general, institutions focus more attention on “regulating students’ entrances and exits” (p. 155) than on investigating root causes of students’ struggles in the classroom. Institutional strategies for improvement include “(a) changing the entry-level assessment tool, (b) adjusting the cutoff scores for placement in remedial courses, and (c) developing exit tests for writing courses” (p. 155). Cox suggests, however, that these adjustments are only exercises in maintaining standards and thereby filter out students who do not meet the standards. She advocates for reframing the situation to assess the extent to which courses address actual student needs; reviewing classroom practices that promote student success; and conducting a comprehensive audit to better understand the reasons for student withdrawal and failure.

Finally, Cox notes that “tweaking the curriculum has allowed colleges both to attend to college instruction in a symbolic way and to negotiate compromises among interested stakeholders, all without addressing what really happens inside college classrooms” (p. 168). In essence, to truly address student learning, educators must adopt a more sophisticated vision of teaching and learning. This new vision would supplant the classical notion of the professional model in which classroom environments are
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SUMMARY

*The College Fear Factor* may be especially relevant for faculty members and community college administrators who are interested in developing a deeper understanding of community college student behaviors and decision-making processes. Cox provides a nuanced perspective regarding student perceptions of faculty, noting a distinction between “excellent professors” and “professors who relate.” Accordingly, “excellent professors” focus on subject-matter expertise whereas “professors who relate” demonstrate subject-matter expertise but focus on interpersonal relations. Cox proposes that “professors who relate” are better able to “come down to students’ level” and at the same time command respect and maintain high levels of academic rigor (p.118), all of which match student expectations.

Cox provides rich, descriptive details about student challenges and successes in the community college setting. She utilizes sound qualitative research techniques, including extensive interviewing and prolonged engagement in the field (Butler-Kisber 2010). While not overgeneralizing her findings, Cox provides well-informed insights and observations that could easily be translated to other community college settings and beyond.

Cox offers clear and compelling evidence of the obstacles that students in her sample faced, but she offers few potential remedies for institutions working to improve teaching and learning in the classroom or for those striving to more effectively align professors’ and students’ expectations for learning. Toward the end of the final chapter, however, Cox does discuss an emerging body of research on teaching that she refers to as the scholarship of teaching and learning. A more descriptive account of this research as well as a call to action may have made this thoughtful and provocative work even more effective.

REFERENCES


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