Value-Based Education: A Vision for a Higher Education Business Model

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Introduction

Our overarching thesis is that exemplary education and affordable tuition in higher education are compatible, and that both will benefit from a sound business model. Declining levels of higher education funding from government sources are a reality. Student debt is arguably at a tipping point as concerns rise over the ability of borrowers to repay their loans. Public officials and students alike are increasingly framing the challenge for higher education in terms of access, affordability, and accountability. These trends underscore the need for a more effective business model in higher education. The traditional model has primarily been characterized by revenues composed of student tuition, government funding, donor giving, and research grants, with tuition increases making up the difference between sources and uses of funds. If students lacked the financial resources to cover the cost of their education, loans were arranged through the financial aid office of the college. We believe that this business model is broken, and that the correlation will increase between financial self-reliance and affordable tuition.

In providing a practitioner’s guide for change, we draw on our experiences as president of the Community College of Allegheny County (CCAC) and in the private sector (Sutin) and as president of a small, private liberal arts college that has managed to keep tuition in check (Jewell, who is currently president of Grove City College in Pennsylvania and has consulting and leadership experience in industry and higher education). Development of a sustainable business model that maintains affordable tuition without sacrificing educational quality is a complex undertaking, one that requires strategic leadership, effective management, support from internal and external stakeholders, and steadfast dedication to results.

Our comments are divided into five sections. Part one elaborates a case for reform. Part two comments on characteristics for improving the higher education business model. Part three
identifies impediments to institutional change. Part four offers less traditional ways to build a more vibrant and less-tuition dependent business model. Finally, part five illustrates exemplary institutional achievements and comments on replicable lessons learned.

An Evidence-Based Case for Change
Key socioeconomic trends heighten concerns about the affordability of higher education and the viability of its current business model. Aggregate student loans now exceed consumer credit card debt, and are estimated at $1 trillion in 2011—with an average debt of $23,300 per student.¹ Meanwhile, real median household income in 2010 declined to just under $50,000, down 7.1 percent from its peak in 1999.² Although consumers reduced their debt obligations of late, the ratio of debt-service payments to disposable personal income was 10.9 percent in the fourth quarter of 2011, and outstanding consumer debt totaled $11.5 trillion.³ In layman’s terms, this means that medium to lower income families are still burdened by significant accumulative debt during an era of income reduction, and may be less able or willing to finance their undergraduate education by means of student loans.

Tuition increase trends and current unemployment data are equally disturbing. The National Center for Public Policy and Higher Education’s report Measuring Up 2008 states that college tuition and fees rose 439 percent between 1982 and 2007, compared to medical care cost increases of 251 percent over the same timeframe and relative to increases in median family income of 147 percent and a rise in the consumer price index (CPI) of 106 percent during those 25 years.⁴ To compound matters, the Associated Press reports that an estimated 53.6 percent of recent college graduates are unemployed.⁵ Unemployment figures for college graduates further
accentuate questions regarding the benefits of a college education relative to costs incurred by the students.

Tuition increase trends have been a source of mounting criticism. Dr. E. Gordon Gee, president of Ohio State University and former president of Brown, Vanderbilt, and West Virginia Universities, recently expressed a widely-held concern: “The notion that universities can do business the very same way has to stop.” Andrew Gillen voiced a sentiment held by many when he wrote, “Schools charge ever more because they can.” In the interest of greater transparency and comparability, the U.S. Department of Education now hosts a website through its College Affordability and Transparency Center to provide tuition data to the public.

State funding for public higher education has diminished, and is not apt to increase anytime soon. Thirty states project an aggregate budget deficit of $54 billion in fiscal year (FY) 2013. Underfunded state pension liabilities are conservatively estimated at $700 billion, exclusive of other underfunded liabilities such as health care benefits. Unaffordable fringe benefits for retired public employees, the rising costs of Medicaid and other human services, funding for K-12 education, and expensive prison systems further dampen the outlook for increased state funding for higher education. The best case scenario for public higher education may well be maintenance of current funding streams from state government.

Relatively affordable sectors of higher education, such as community colleges, are proving more attractive to students. This trend should be a source of concern for non-elite institutions at the higher end of the tuition curve. According to the American Association of Community Colleges, approximately 13 million students are enrolled in credit and non-credit courses, an enrollment increase of approximately 2.9 percent from 2009 until 2011. This accounts for more than 40 percent of all students enrolled in higher education. Between 1999
and 2009, the Delta Cost Project reported that community colleges have had the most vibrant enrollment growth of any sector of education. Students are attracted by comparatively more affordable tuition, career programs, instruction-oriented faculty, and the prospect of transferring credits to a four-year college. The marketplace, measured by student enrollment, will be the ultimate determinant of which institutions offer the most effective combination of tuition and quality of education.

Business Model Features

Our envisioned business model contains three essential characteristics. First, institutional leadership is strategic, transformational, and widely supported by internal and external stakeholders. Second, the operating environment is efficient, and contains costs. Third, incremental revenue generation is sustainable, allied with the institutional mission, and offers potential for growth. Systemic reform of the business model relies upon integrating these attributes into the core behaviors of the institution.

Perhaps some lessons can be learned from the private sector. Consumers are increasingly value conscious, seeking the best mix of price and quality. The largest retailer in the world, Walmart, sells a wide range of consumer products at very competitive prices through a vast network of sales outlets. Their talent for product procurement, hardnosed pricing in dealing with suppliers, and supply chain management is extraordinary. Amazon has become the internet’s premier distributor of a seemingly limitless number of consumer products by offering competitive prices, timely product delivery, and quality control through posting reviews of products and seller reliability. Apple’s talent for product innovation, marketing appeal to a visually oriented consumer, and high quality of after sales service have led to year over year
revenue increases that are the envy of the technology hardware industry. Each company is
customer-centric, strategic, highly efficient, and keenly aware of pricing in a highly competitive
market. Higher education can benefit from studying the attributes of such high performaning
companies.

The benefit potential from migrating applicable best practices from business to education
is evident in the selection criteria for the Baldrige Performance Excellence Program. The
Baldrige award was launched in 1987 by the U.S. Department of Commerce, under the direction
of Secretary Malcolm Baldrige, to identify and recognize exceptional role models. Education is
now included among six award categories. The selection criteria for this prestigious institutional
award include leadership, strategic planning, customer focus, measurement, analysis and
knowledge management, workforce focus, operations focus, and results. Although the overall
selection criteria for the Baldrige Award relate to the sum of institutional performance, we
believe that many of these variables apply to our envisioned business model. We will comment
on variables deemed most relevant to our business model.

Strategic and Transformational Leadership: A sustainable business model fits the
broader institutional context. Innate values, behaviors, and skill sets of leaders matter. Requisite
personal and professional attributes include team building, planning for the long term, and
holding oneself and others accountable for results from year to year. The most effective leaders
evidence a wide mix of talents, including vision and an ability to inspire confidence among
internal and external stakeholders. They are ethical, curious, agile, self-reliant, creative,
respectful of discourse, willing to make difficult decisions, and tactical in negotiating systemic
change. General technological and financial literacy are important. Transformational leaders
must function in high stress environments and are passionate, independent, and results-driven.
Effective leaders delegate authority consistent with accountability, create open forums for idea
generation across a wide range of interest groups, oversee timely decision-making processes, and
fixate on results. These demands place a premium on the importance of leadership selection,
succession planning, and ongoing professional development. Transformational leaders get
involved. Public relations, collegiality, and fundraising skills alone are inadequate to meet
today’s challenges. The role of the board of trustees in leadership selection and performance
evaluation cannot be overstated.

Systemic change in higher education relies upon a coherent student-centric academic
mission, goal prioritization, and multiyear strategic and financial plans. Annual operating plans
articulate institutional goals supported by action plans, include timetables for results, and allocate
responsibility by providing time sensitive and measurable performance objectives leading to
year-end evaluations. Operating plans for the school year align with annual budgets to assure that
resources are provided in support of institutional priorities. Management reporting, analysis, and
oversight processes are put in place to assure goal attainment. The business model revenue
generation and/or cost containment plans and objectives must be fully integrated into the core
institutional administrative processes if they are to prove effective and sustainable.

Leaders pose probing questions, support evidence-based examination of the findings, and
develop action plans based upon conclusions drawn. Questions that come to mind include: Who
is the customer? How can we better serve our customers? What challenges and trends have
implications for higher education? How can we effectively respond to changing times? What
opportunities can we identify to generate ancillary revenues and contain costs? Which programs
should grow, and which should receive less support or be phased out? Which processes can be
re-engineered to achieve greater efficiency, effectiveness, and expense reduction? What level of
administrative staffing is essential? Which expenses are essential and which are compressible? If productivity standards for faculty are adopted, why not apply appropriate productivity norms to administrators and support functions? Can our students afford for us to be “all things to all people?” Are athletic departments profitable? Are they essential to alumni giving and student enrollment? Are we entering an era where the so-called “no-frills” distance learning-based university will become the new standard? If so, what will be the attributes of such a university? What can one learn from the business model of for-profit sector universities? How will success be defined and measured? What are the consequences for personnel who fail to meet performance expectations or behave in ways that are not supportive of student and institutional interests? The ultimate test of effective leadership is the ability to probe, acquire information, and transform knowledge to action and action to desired outcomes.

*Operational Effectiveness, Efficiency, and Cost Containment:* Finding ways to function in a lower labor content and highly efficient administrative environment represents a singular operational challenge and opportunity. Studies of higher education by the Delta Cost Project provide valuable data into the components of cost, and assert that administrative and back shop service costs have grown, while instructional costs have been reduced as a component of annual operating expenses. Their report cautions, “As an industry, higher education still has not made the transition from cost accounting to cost accountability.”

The rise of certain operating costs such as health care insurance premiums, investments in instructional technology, deferred maintenance on facilities, the growing need for student support services, and campus security cause overall costs to rise in the short term, thereby challenging universities to identify creative ways of containing these and other costs. Leaders can sponsor inclusive problem solving forums akin to “The Toyota Way” in which employees
are integrated into discussions about ways to improve quality and lower costs on an ongoing basis. Leadership supported inclusive discussions offer the potential to identify cost saving and revenue generating ideas. Multiyear cost containment and revenue generating plans can be developed, with results quantified and made part of annual operating budgets and performance evaluative processes. Resource allocation to non-priority functions can be reduced. Chief business or financial officers can be assigned the lead role in expense containment, and encouraged to ask hard questions and set financial challenges for functional and campus administrators to meet during the annual budget process. Organizational structures can be re-designed for efficiency and effectiveness. The ranks of middle management can be pruned, with some administrators assuming additional responsibilities, empowered to make decisions, and compensated at levels commensurate with their additional responsibilities. Approval processes can be reengineered for efficiency. Opportunities to outsource certain functions such as bookstores, property maintenance, security, and energy management are worthy of study.

In an ideal world, a thoughtful multi-year strategic plan will precede the creation of a multi-year financial plan. This is not always possible, in which case tactical operating plans become the center of attention. Recent history at CCAC offers one such example. Between August and November of 2003, a state funding reduction of 10 percent was announced. This was followed by a notice that the premiums charged for employee health care insurance would increase by 39 percent in 2004. New contracts with both labor unions had already been signed and called for salary increases in excess of the prevailing CPI. The CFO projected that the college would face a $13-15 million dollar operating deficit three years into the future in the absence of adopting a comprehensive intervention plan. This information was first brought to the attention of the board of trustees. The same data was shared in open town hall meetings with
faculty and staff. As a result, everyone understood the financial challenges facing the college and the need for a comprehensive financial intervention plan.

Through an open engagement process, employees and leaders from both the faculty labor and service workers unions generated a number of ideas worthy of implementation. The faculty labor union opened the channels for the college to participate in a regional health insurance consortium that eventually saved the school hundreds of thousands of dollars per year. The service workers union executive council proposed a fee structure for students requesting copies of their transcripts, which accounted for hundreds of thousands of dollars in incremental revenues per annum. CCAC applied a product costing model to its community education functions. Courses that did not meet minimum enrollment levels were closed. This effort yielded cost savings of approximately $1 million per annum. The college also decided to proactively manage course enrollment by communicating guidelines for academic deans and department chairs to follow when deciding upon opening new sections of existing courses. The result was that course enrollment per section increased by 10 percent, which reduced instructional costs by $1 million per annum as low enrollment sections that did not meet these guidelines were closed. Administrative positions were eliminated. By implementing a comprehensive financial plan, the college community became more financially aware and self-reliant. Operational losses were averted. By adhering to a comprehensive three-year financial plan, average annual tuition increases at CCAC were held to 1.9 percent between 2005 and 2008. Later on, CCAC adopted a five year strategic plan, and was better positioned to align it with annual operating plans, budgets, annual performance objectives, and evaluation processes. A financial crisis had set the stage for employees to accept the institutional need to plan and act with strategic and financial goals in mind.
At Grove City College, the administration continued on its mission to hold total dollar costs down to continue to deliver on its promise of affordability. Fundraising was increased dramatically to support capital building projects and to increase extant scholarship endowment. Dedication of planning and other resources to idea generation and plan execution will lessen reliance upon external funding and tuition revenues to balance sources and application of funds. Later on we will cite success stories in higher education, ones that evidence achievement through collaborative planning, idea generation, and taking ownership for creating financial solutions.

**Incremental Revenue Generation Through Entrepreneurial Behavior:** Higher education is a service industry engaged in knowledge creation and delivery. It has largely relied upon fundraising and increasing prices of goods and services sold to its consumers to compensate for a flawed business model. Some universities and community colleges have proven proficient at growing revenues from ancillary enterprises. This is unlikely to be achieved in the absence of dissent, as some in the academy disdain “commercialization” and argue that creating revenue generating enterprises within an academic environment compromises one’s academic mission.

We offer two examples worthy of consideration, both of which are supportive of the institutional academic mission. There are others. Booker T. Washington’s autobiography, *Up From Slavery*, relates the founder’s story of Tuskegee Institute (now University) and its genesis from a singular schoolhouse to a campus with nearly seventy structures. Tuskegee’s first generation of students, faculty, and staff designed and built their campus—and sold bricks to local buyers.¹³ Mr. Washington was an entrepreneur who embraced business practices and career programs. He was an educational enabler for students who could not otherwise afford tuition. Work-study programs for students were the norm rather than the exception.
Another exemplar of educational entrepreneur is the late Dr. Thomas Detre. He founded the University of Pittsburgh Medical Center (UPMC) in support of the academic mission of health and medical education at the university. Dr. Detre was both CEO of UPMC and senior vice chancellor for health sciences of the University of Pittsburgh. Under Detre’s leadership, UPMC acquired hospitals and medical practices, and is now an $8 billion annual revenue enterprise. Although UPMC eventually became a separate legal entity, their model calls for collaborative research and access to clinical sites for faculty and medical students that helped enable the medical school to attain national prominence. Detre embodied the spirit of a medical entrepreneur.

Tom Detre and Booker T. Washington were highly successful academic entrepreneurs. Their examples also raise questions about what lessons we can learn from them. Can institutions become entrepreneurial without entrepreneurs? Can entrepreneurs function in an environment characterized by risk-averse cultures and approval processes that impede innovation? Their achievements were distinctive, not in the least because financial achievements were student-centric.

Most colleges have a basis upon which to build revenue generating enterprises. Many colleges have faculty, administrators, and business leaders on their boards of trustees who are well-versed in business practices. What remains is to embrace innovation, identify activities that lend themselves to revenue creation, develop a plan, draw upon talents within the institution, and designate a leader with a proven track record for building successful businesses.

The recent initiatives of such prominent universities as Harvard and MIT into the space known as “massively open online courses” merit attention as potential revenue generators. Their collective noncredit approach is delivered without fees to an estimated 1.5 million people, with
individual course enrollments numbering into the thousands. While the development of a final business model is a work in progress, these ventures are likely to eventually figure out ways to “monetize” high enrollment courses. At the very least, advertising revenues have noticeably shifted from hard copy and broadcast media to online sites that provide internet-based sites serving millions of users. Therein may lie the attraction to such ventures as edX and Coursera.

Impediments to Change

Many factors restrict the ability of higher education to respond effectively to emergent financial challenges. At first glance, incremental costs associated with government regulations, technological advancement, campus security, expanded student support services, new construction, facilities maintenance, and the need to hire and retain bright people suggest that increasing tuition may be inevitable. We do not believe, however, that this is the case. Corporations face similar drivers of incremental cost, yet recognize that their bottom-line results rely upon product innovation and improved operating efficiency because raising prices on their customers may not be an option. Grove City College’s total dollar increases have been held in check largely due to sustaining a highly efficient operating environment. CCAC has made significant progress in doing the same. But a reformed business model may prove unsustainable if internal constituents do not accept the need for change or lack the will to do so.

No business model can overcome a setting in which institutional mission and priorities are unclear, planning and plan execution processes are flawed, or when leadership is indifferent. Comments by two CEOs in The Iron Triangle, an important 2008 look at tuition pricing and accountability, offer classic illustrations of denial. In reference to the rising cost of tuition, one CEO said, “I have yet to be convinced that the cost of higher education is as strikingly awful as
the media is portraying it to be,” while another dismissively observed, “Yes, yes, the cost is going up, as is everything else.”\textsuperscript{16} Although the study was completed several years ago, the trends indicative of serious financial hardships were already well-established. Step one in discovery of a solution is acknowledging that a problem exists.

The composition, talent, and behaviors of boards of trustees merit close attention. Boards have ultimate fiduciary responsibility for an institution’s educational quality and financial condition. They no doubt worry about external macroeconomic forces that challenge higher education. Board support for institutional change is indispensable to leadership, especially if opponents of institutional reform attempt to discredit leadership. It is the CEO’s responsibility to deliver results and keep a board informed. The board, however, must decide upon appropriate courses of action and provide support for leaders as change agents.

External stakeholders, including public officials, are increasingly critical of higher education institutions they deem unaccountable, insensitive to student needs, change averse, and lacking transparency. Further concerns have been raised about the compatibility of business models with time consuming approval processes, shared governance, the tenure system, and labor unions. This criticism represents wholesale frustration with institutional values and behaviors, or what is often referred to as institutional culture. We leave it to others to more fully examine the veracity of these assertions. If such criticisms are warranted, then devising courses of action to remediate dysfunctions merits attention.

Finally, questions arise from a seeming fixation upon new construction. Perhaps akin to our nation’s arms race of a prior generation, some institutions have built costly non-instructional facilities to attract new students to country club-like environments. The rapid growth of for-profit education, primarily through distance learning, and the rental of limited amounts of on-location
instructional space during the past thirty years suggests that large segments of the student market now care more about convenient access and career training.

Non-Traditional Opportunities

There is a substantial body of knowledge about the attributes of high performance institutions and transformational leadership that higher education can draw upon as new business models are created. This section affords attention to select unconventional opportunities that support a more functional business model.

*Improve Public Education Policy and Funding Practices:* State governments can facilitate improved educational effectiveness in a number of ways. Certain inefficiencies of public education cannot be resolved at the institutional level alone. For example, public higher education institutions in general, and community colleges in particular, are rendered more costly due to the relatively high numbers of high school graduates who do not test as being “college ready” and require remedial education in math, writing, and/or reading. Data gathered by the American Association of Community Colleges shows that an estimated 60 percent of all students enrolled at community colleges are enrolled in remedial courses. At CCAC, our CFO estimated that 10 percent of our annual operating budget of approximately $100 million was spent on remedial education.

Public educational policy and funding practice should encourage collaborative intervention programs for so-called “at risk” students between higher education and secondary schools with the intent of improving upon graduation the number of college-ready students. There is ample evidence to support this case. CCAC partnered with four school districts to sustain a middle college, one of sixteen community colleges nationwide to do so. Every year,
about 200 high school students identified as probable drop-outs attended CCAC’s middle college for their course instruction. The curriculum did not change. The pedagogy was largely based upon instructional software and faculty served more as tutors than lecturers. Average high school graduation rates were 90 percent, with 60 percent enrollment in college. LaGuardia Community College of New York was the first to host such an enterprise. This model is highly portable. There are many intervention strategies evidencing collaboration between school districts and community colleges. State government funding for such enterprises will go a long way toward reducing the percentage of students who enter higher education needing remediation.

Governmental policies and funding practices can also encourage collaboration on behalf of high-performing high school students, while eliminating redundancies among publicly funded institutions. Two examples come to mind. Collaborative efforts between community colleges, public four-year colleges, and public school districts can result in integrated honors curriculums of honors, advanced placement, and existing college courses so that more proficient students can receive up to 60 college credits upon graduating high school. Joint high school and college appointments of credentialed high school and college faculty merit attention. In addition, state governments are positioned to mandate automatic transfer of credits on behalf of students who transfer from one public institution to another within the state. In short, if public education and funding policies are more strategic, then cost savings are achievable for government and institutional budgets alike.

*Lower Pricing to Students:* From a student’s perspective, all-in costs include tuition, fees, textbooks, transportation, room and board, and, in certain cases, childcare. Higher education has choices worth studying. For example, if educational and related facilities were found to be underused on weekends, evenings, and during summer holidays, then universities could incent
students to accelerate their graduation through offering a delivery model with tuition discounts for those who elect “fast track” options based upon a defined year-round learning plan. A financial model can be designed to calculate the revenue enhancement to the university through optimizing its instructional capacity. Financial benefits can be shared with students in the form of tuition discounts. A migration from tuition discounting based on financial need to one that rewards student behaviors such as continuous enrollment is equitable and manageable. Faculty should be encouraged to select textbooks that can be rented digitally or in hard copy. Carpooling options can be explored for commuter students. Extended hour childcare co-operatives run by and for parents/students can be launched. Certain college fees can be offered al la carte in a manner akin to user fees.

**Shift to Variable Cost Models:** The for-profit sector of higher education has been highly profitable, in part because for-profit institutions deploy a largely variable cost model in which they expand and contract capacity depending on student enrollment. They rely largely upon adjunct faculty and deploy distance education as their primary means of conveyance. From experience in industry, we witnessed the wholesale shift in the private sector to variable from fixed costs during the past thirty years, which allows companies to increase or contract expenses in proportion to consumer demand. In contrast, most of non-profit higher education remains heavily reliant upon a less agile, fixed-cost, campus-centric model.

Traditional colleges and universities can shift towards more of a variable cost model by studying fixed costs and undertaking feasibility studies on high potential opportunities. Since most expenses normally relate to base compensation and fringe benefits, this approach inevitably suggests that careful consideration be given to outsourcing certain functions from enterprises with specialized expertise and track records open to public inspection. This may include facilities
management, bookstores, technology and management information, certain types of student and human services, energy and other forms of procurement, workforce development, professional training, and communications. Consideration should be afforded to facility rentals and expanding distance learning capabilities as opposed to new construction or building acquisition.

**Exemplar Business Models**

There are many examples of exceptional achievements by two- and four-year institutions that sustain quality education in tandem with containing costs and/or finding inventive ways to increase revenue from nontraditional sources. The examples below are testimonies to leaders who have strengthened their institutional business models through self-reliant initiatives.

**Grove City College**

Grove City College is a Christian liberal arts institution in western Pennsylvania located approximately sixty miles due north of Pittsburgh. It maintains a number of characteristics and business operating principles that date to its founding in 1876 and are representative of most schools founded in that era, but that many have long left behind. In that respect, the College is truly idiosyncratic but highly successful in higher education today.

The College’s Board of Trustees and administration work hard to advance its principles of faith and freedom and to promote fidelity to its business operating principles. A brief review of six of these principles will demonstrate positions much different from those of most higher education institutions today, but which are not inconsistent with those on which many schools operated before World War II:
1. **Operate the institution based primarily on the aggregate cost of room, board, and tuition.** In fact, 94 percent of the College’s operating revenue comes from this source. By placing an almost total emphasis on enrolling the requisite number of students to ensure sufficient revenue, the College bears full responsibility for understanding and serving its market while maintaining as much control as possible over its base revenue stream. The College is one of the few that does not accept direct or indirect federal aid or direct state aid. These sources of revenue, while beneficial, have two risks. One is the control and/or strings attached to such funding, and the other is the unpredictability of the funding, as evident in recent hard and lean times for these income sources.

   The College also does not accept, through its students, Pell Grant monies on the grant side, nor Stafford or other federal sourced monies on the loan side. The College does, however, dedicate 85 percent of its endowment earnings appreciation and interest to its own need- and merit-based scholarship awards. Additional private sourced money is available through its enrichment grants to students of color with need. Of its student body of 2,461 students, 257 had an estimated family contribution of $3,800 or less (similar to Pell Grant calculations). Overall, 57 percent of the school’s students receive need- or merit-based aid.

2. **Use only a limited portion of endowment earnings to cover the operating budget.** The College’s Board has not approved soliciting funds for an operating endowment. Its focus in fundraising for endowments has been overwhelmingly on financial aid endowment. Accordingly, the College’s operating endowment comprises only 10 percent of its entire endowment and has never covered more than 1.5 percent to 2 percent of operating costs. Currently, it is covering 1 percent.
At most schools, the endowment is used to provide supplemental operating funds, money for capital upgrades or replacements, or as a “rainy day” fund—and often, much more than 1 or 2 percent of an operating budget has been covered by endowment funds. As seen below, an over-reliance on endowment money for annual operating expenses proved difficult to disastrous at many schools during the recent investment market collapse.

The College’s approach, therefore, had positive implications during the recent significant economic decline in the investment markets, as the College was able to award raises and had no hiring or salary freezes or layoffs. It did, however, transition from a defined benefit pension plan to an enhanced defined contribution plan due to federal law changes and other circumstances. In contrast, numerous schools in America, including some of the biggest names, had been relying on large endowments and the earnings from those endowments to support a sometimes surprising percentage of their budgets. When the investment market collapsed over an 18-month period, those schools were caught short in terms of earnings and cash flow. Accordingly, layoffs, salary freezes, and holds on new construction became the norm. Thus, an obvious principle of fidelity to fiscal solvency is non-reliance on endowment earnings for more than a reasonable proportion of budgeted support.

3. **Avoid debt.** Debt is, of course, a two-edged sword. Often necessary, especially for building and physical plant growth, debt should be what we call “subscribed” (i.e., institutions should ensure an existing way to cover it and/or the creation of a new, reasonable revenue stream to manage it toward liquidation, rather than basing its assumption on poor reasoning or speculative premises). For years, Grove City College carried no debt. Today, the College has a “revolver” that covers the upfront cost of the technology hardware platform that each freshman receives (tablet PC, printer/copier/scanner), and which cost is subsequently paid (as
a component of tuition) by each student over the course of his or her enrollment at the College. The only other borrowing has been for a new residence hall several years ago—which is being repaid from the tuition and room charges from the increased student enrollment—and for the construction of a new Science, Engineering, and Math (SEM) building, for which funds are being raised under a new, current capital campaign. In the case of the SEM building, the borrowing is in anticipation of pledges and gifts to be realized so as to continue planned building construction and to take advantage of reduced construction costs and historically low-interest borrowing rates. The College strives to hold debt down so as not to pass much, if any, of the obligation to students.

4. **Keep it clear and simple.** The College is perhaps the most transparent, as to its student charges, as any school in the nation. It does not discount off its list price. Students can pay less only if they qualify for need- or merit-based aid, which is funded (as stated above) by earnings on the 85 percent of the College’s endowment dedicated solely for this purpose. By comparison, most schools today discount off their list price.

What does that mean? In many cases, schools raise their list price above the true cost of operation (i.e., the fixed operating costs to include direct and variable labor plus general and administrative overhead), and then give students a “discount” or “deal” to entice them. The deal may be expressed in the form of scholarship merit grants or need-based aid.

Another salient fact is that the majority of need- and merit-based aid is not endowed, meaning that most of the money must come from a school’s current operating budget. Some of the elite, wealthy schools have the capital to sustain large need and merit awards, but the vast majority of schools in our nation do not have such a strong capital base. So where do they get the money? Many schools raise their price above the true cost of operating so that
those students who do not qualify for aid and must pay full price are actually helping to cover the
discount aid to others. Moreover, many schools forego programs and defer needed
maintenance in order to keep their discounts going so as to continue to attract students.

We submit, however, that continued discounts in the 40 percent range (not uncommon) are unsustainable in the long run for two reasons: first, the total cost for some schools (including tuition, room, board, fees, and books) exceeds $60,000 per year. Even the most affluent parents are finding that cost difficult. Second, the vast majority of schools in America defer other vital needs such as repair and/or replacement of essential infrastructure and buildings, or venturing into new disciplines, or maintaining an appropriate IT infrastructure to support a school’s operating and pedagogical needs.

The Grove City College model is, in comparison, both interesting and enlightening. Consumers Digest 2011 ranked the College number one on its list for top value in private liberal arts schools in America. The ranking is based on attributes that validate or define the institution’s academic program factored against cost of tuition, fees, room, and board. According to the magazine, more than 2,000 schools were considered. In the top five behind Grove City were (in order) Williams, Pomona, Amherst, and Claremont McKenna. Moreover, of the eighty-eight private colleges and universities in the Commonwealth of Pennsylvania, Grove City College ranks 87th in tuition and 88th in combined tuition, room, and board; and, in fact, is less expensive than the University of Pittsburgh or Penn State University, even for in-state students. The total cost for tuition, room, and board at Grove City for the 2011-2012 year was $21,008 (the cost includes charges for two semesters, and is the same for in-state and out-of-state students). (Interestingly, Grove City College did not make the U.S. News and World Report list for value because it does not discount.)
How does the College “stack up” against the fourteen state-owned institutions in Pennsylvania, one of which is just seven miles from the College? All of the state-owned schools charge the same basic tuition (as approved by the Board of the Pennsylvania State System of Higher Education). Room and board charges vary, and so do fees. The school near Grove City College charges fees in seven areas, in addition to tuition. An in-state student taking a full load of credits (12-18) is paying over $2,200 in fees alone. Total charges for an in-state student (including tuition, fees, room, and board) are estimated to be $17,631—and that number may continue to increase as state subsidies have shrunk dramatically over the years and with an austerity-minded governor who must balance the Commonwealth’s budget. The delta between Grove City College and the state-owned schools could shrink more as Pennsylvania does a de facto privatization on the schools it owns and operates outright.

5. **Fund depreciation.** The College has had a long-standing policy of funding all or most of its depreciation. It carries its annual depreciation number as an expense on its operating statement and tries to recapture all or much of it as a component of its tuition and room charges. Accordingly, the school sets aside in a restoration and renewal fund significant capital to do campus repairs and upgrades, and to support the necessary upgrades to the campus’s IT platform. There is little, if any, deferred maintenance, and the College has an IT platform that is one of the best in the nation.

6. **Control labor costs.** The College strives to be as efficient as possible in its labor areas (including staff and faculty). On the academic side, while encouraging research for those faculty so inclined, the College remains, ostensibly, a teaching institution. Most professors teach four courses per semester (the national average is 2.5) so that students receive extended
exposure to faculty experts across a series of courses, thus fulfilling the College’s mission pedagogically. On the financial side, the professional productivity is high, which results in less direct labor costs being passed on in the school’s charges. On the staff side, positions are kept to a number that makes sense, and all overtime is personally reviewed and approved by the president.

All of the above steps are a part of Grove City College’s historical roots, but they require both discipline and the vigilance of the full campus community and the board every year. Much of the above is also captured in a rigorous strategic planning process that has broad campus-wide representation and input. There is no substitution for the backing and backbone of a strategic plan. Such plans are essential for mission validation and all the steps necessary to execute such a vision. They, of course, are not static, and not all may be able to be accomplished, but they are an essential guide along the foot path.

Finally, given the operating principles at Grove City College, what is the value and value added, and how is it measured? The College uses two Ph.D.s (each serving half-time in this area with a half-time teaching load) to monitor and measure academic performance and outcomes. A summative assessment process is used to assess how the final product performs as to workplace success, success on graduate and professional school applications, standardized test outcomes, etc. A formative approach is also taken to assess how students are doing in grasping course material as they progress towards advanced courses and capstone experiences. These assessments help to improve the engaging and emerging experience. Grove City College uses its own assessment tools (which lack normative national benchmarks) plus national testing instruments (e.g. Major Field Achievement Tests, Fundamentals of Engineering exam). This
full-time process demonstrates learning attainment and helps the College tweak areas that need adjustment. Its metrics and outcomes are essential to the school’s educational program. Such an investment in professionals is an essential element in understanding the quality delivered and attained. On recent Major Field Achievement Tests, the College’s percentile ranks among participating institutions were as follows: Biology, 88; Chemistry, 80; English, 97; History, 96; Mathematics, 90; Physics, 95; Political Science, 99; and Sociology, 90. (Note: Institutional participation in the Major Field Achievement Tests is voluntary, and the number of schools and students participating varies from field to field.) Grove City College’s education majors have consistently scored above the national median in the various tests that comprise the National Teacher Exam, with an overall passing rate of 98.6 percent in 2010-2011. On the EIT General Exam, Grove City College’s engineering students have had a 100 percent pass rate over the last three years, compared with the national percentage passing rate of 81-82 percent. (The College’s engineering program, including Mechanical Engineering and Electrical and Computer Engineering, is ABET accredited.)

In American higher education, most schools survey their most recent graduates six months after graduation. Some schools are delaying to nine months or a year in the hopes of improving outcomes, especially in jobs attained. The College’s most recent survey, done six months after the class of 2011 graduated (81 percent of them in four years), revealed outstanding numbers: 95 percent of the class of 2011 responded to the survey, and 94 percent had a job of their choice or were enrolled in a graduate or professional school of their choice (24 percent of the 95 percent who responded).
As stated at the beginning of this section and as demonstrated, cost and quality are not mutually exclusive, and there are many schools which could benefit, over time, by phasing back to the Grove City College paradigm.

Community College Initiatives

Community colleges may be the most agile segment of higher education. Their mission has expanded from a traditional junior college transfer function to include workforce development and community and remedial education. Many are increasingly inventive in coping with the decline of public funding during an era of increasing student enrollment. We are pleased to share some evidence of their capacity to respond through developing non-traditional revenue streams and containing costs.

*Southern Alberta Institute of Technology Polytechnic* (SAIT), in Alberta, Canada, offers a fascinating revenue generation story. It documents the development of an entrepreneurial culture to meet a gap between funding provided by the province of Alberta and the tuition they are permitted to charge students by provincial government. Gordon Nixon, vice president academic, fully describes the institutional evolution in these words, “SAIT has provided for-profit training for more than thirty years; it is deeply ingrained in its culture and business model.” In 2010, SAIT’s annual operating budget was approximately US $275 million, of which US $42 million was funded by its for-profit workforce training business (using a school year average conversion rate of CND$1.00 = US$1.00). Their current goal is to double this revenue stream within the next five years. Between 2005 and 2010, SAIT devoted itself especially to business planning, strategically focusing attention on developing closer ties with industry in general and the energy industry in particular—for whom they train workers around the world. Nixon describes SAIT as
“academic capitalists.” They also adopted insights from Jim Collins’ *Good to Great* as a guide to business development.

Conversations with Nixon, supplemented by his chapter in Sutin’s *Increasing Effectiveness of the Community College Financial Model*, offer several lessons that can be adopted by others. SAIT is devoted to focusing a few good ideas where they already have captive expertise, where industry training needs are high, and where the vision for the revenue generating business is aligned with the institutional academic vision. They hire entrepreneurs to run the enterprise who understand the need to differentiate their services. The entrepreneurs are accountable for financial performance, and are empowered to plan, set goals, and manage their enterprise as a for-profit business. They adopted performance and accountability metrics and paid bonuses to those who met or exceed their goals. Perhaps as important, SAIT elected to discontinue low-margin customized job training programs.

*Maricopa Community College District* serves the greater Phoenix metropolitan area, and is one of our nation’s largest community college systems with student enrollment of more than 275,000. In a written interview with the authors, Debra Thompson, Maricopa’s vice chancellor for business services, described the ways in which this community college has responded to a severe reduction in state funding. Between 2009 and 2012, the state reduced funding to Maricopa by an accumulative 90 percent; as of 2012-2013, state aid totaled $8.3 million, with the result that state funding now represents only 1.2 percent of Maricopa’s general fund resources of $683.5 million. Enrollment increased by 20.6 percent between fiscal years 2008-2009 and 2010-2011.

Maricopa adopted a comprehensive multiyear financial plan to help close the gap between public funding and financial and other resources required to accommodate student
enrollment. In the short term, district and operational budgets were reduced by $35 million. Property tax assessments were increased. New budget allocations for the operations of new facilities were reduced by one-third. Planned salary increases were reduced. In one recent year, half the sum of increases in health care insurance was passed along to employees. Perhaps more important is that Maricopa leadership understands the need to be strategic in support for priority programs and services on an ongoing basis, and the need to diversify its revenue sources—with special attention to credit and non-credit workforce training programs.

Survival instincts and sound judgment were evident in Houston Community College’s (HCC) response to a dynamic similar to that faced by Maricopa, namely reduced state funding during a time of robust enrollment growth. The college’s story was relayed to the authors in correspondence with Dr. Mary Spangler, system chancellor, and Art Tyler, the system chief financial officer. From 2007 to 2012, student enrollment at HCC increased from 56,000 to 75,000, while funding from the state was reduced by 15 percent. At the same time, the state shifted the responsibility for coverage of benefits such as funding pension plans and health care to their community colleges while the costs to sustain such programs were rising. The net impact was a further $30 million per annum reduction to HCC.

The chancellor responded with three initiatives. First, he institutionalized a system-wide task force to vet all budget requests prior to submission to the chancellor and the board for approval. It is comprised of representatives from central office, six member colleges and functional experts. Second, in 2008, he put in place an employee suggestions program for idea generation related to revenue increases, cost savings, and system improvement. More than 500 suggestions have been submitted for consideration. Dr. Spangler and Mr. Tyler report that implementation of suggestions generated by this program have resulted in cost savings of more
than $15 million and more than $60 million in new revenue during the past three years. Finally, HCC used its location in Houston and local ties to Middle East energy suppliers to create consultative relationships leading to the creation of Community College of Qatar and ongoing consultative relationships with Community College of Riyadh. HCC has licensed its curriculum to Community College of Riyadh, and provides credentialed faculty and additional administrative support—resulting in the generation of multimillion dollars of incremental revenues. The above actions brought about system-wide engagement, a greater sense of financial self-reliance and an infusion of global connectivity that enriches the educational opportunities available through HCC.

*Cuyahoga Community College* in Cleveland launched a multi-pronged response to reduced state funding.21 Faced with funding and enrollment challenges akin to Maricopa, SAIT, and HCC, Cuyahoga also adopted a multi-year comprehensive plan. In a recent conversation, Cuyahoga’s Craig Foltin, executive vice president for administration and finance, described the results of several key initiatives to contain costs. First, Cuyahoga centralized procurement and adopted an evidence-based strategic approach whereby it reduced the quantity of suppliers, focusing on products and services with annual costs in the range of $300,000 or higher per annum. Office supplies, office temps, and computer supplies and equipment were among the areas selected for action. Cuyahoga acquired SciQuest software that offers management reporting on supplier relationships, and positions the college to automate procurement and track shipments. Improved efficiencies and lower product and service costs are expected to save Cuyahoga about $400,000 per annum over the next five years.

An area that received special attention was containment of energy costs. Cuyahoga elected to partner with Sourcing Office for purposes of creating a consortium for procurement of
energy. Eighteen local government, higher education, and nonprofit entities now participate in this program. Cuyahoga saved more than $500,000 in fiscal year 2012, compared to its estimate of costs had it remained independent.

Cuyahoga explored other opportunities for outsourcing, and authorized the state auditor of Ohio to conduct a performance audit of its bookstore operations. The conclusions drawn from the audit led Cuyahoga to outsource the operations to Barnes and Noble. The result has been immediately beneficial for students, who can now, for example, purchase or rent e-textbooks at up to 60 percent savings, with hard copies also made available through rental. Meanwhile, Cuyahoga’s net profit from bookstore operations increased to $1.6 million in FY 2012 compared to $500,000 in FY 2011.

Information, service, and processing technology received attention from senior leadership. Cuyahoga’s study of IT and its legacy system revealed a pressing need to improve upon quality of service, numbers of students served, management information, communications, and operating efficiencies. More than 300 actionable initiatives were identified. The objectives are to improve quality of service for students and lower operating costs for the institution.

Concluding Observations
Our envisioned business model supports the institutional academic mission and is rooted in transformational leadership and an entrepreneurial and efficient operating environment. It applies the best applicable practices from industry to student-centric higher education. Sustainable systemic changes require inspired and thoughtful leadership, enthusiastic support from a board of trustees, a clearly defined strategic direction and mission, tactical excellence, and engagement with faculty, students, administrators, and staff. Metrics to assess successful outcomes should go
beyond containment of tuition increases, and devote as much attention to qualitative input as to quantitative results. In this way, we can build upon initiatives that work, and either remediate or discontinue others.

We can learn lessons from the past. The Tuskegee story validates the self-reliance experience, whereby local achievement supported Booker T. Washington’s successful fundraising efforts. The UPMC-University of Pittsburgh Medical School and SAIT stories reflect the financial gains through self-reliant entrepreneurship. UPMC, Grove City College, and SAIT have a common legacy of focus on their academic mission and integration of sound business models. Maricopa, Houston Community College, and Cuyahoga exemplify institutions benefiting from highly capable leadership prepared to sustain quality of education while improving their business models by controlling costs in response to challenging socio-economic and financial conditions.

Most of the lessons learned from successful business models are portable, which accentuates the importance of institutional benchmarking, codifying institutional best practices, information sharing, and practical application. External stakeholders have framed the challenges facing higher education in terms of access, affordability, and accountability. It is up to higher education to respond. The times are changing and so too must we.
3 Federal Reserve Bank of New York, Quarterly Report on Household Debt and Credit, February 2012.
10 Andrew Guillen, A Tuition Bubble (Washington, DC: Center for College Affordability and Productivity, April, 2008), 8.
19 Ibid.
21 Craig Foltin, e-mail message to author Stewart E. Sutin, March 29, 2012.