A Summary of:

25 Ways to Reduce the Cost of College

Center for College Affordability
and Productivity

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Center for College Affordability and Productivity

The Center for College Affordability and Productivity (CCAP) is an independent, nonprofit research center based in Washington, DC that is dedicated to researching public policy and economic issues relating to postsecondary education. CCAP aims to facilitate a broader dialogue that challenges conventional thinking about costs, efficiency and innovation in postsecondary education in the United States.

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Introduction

Almost everyone agrees that colleges have become costly to attend and are a growing burden on society to finance. Rising tuition costs threaten the ability and desire of students to attend college. Are there things that can be done to significantly reduce the cost of college? The answer is an emphatic "yes." The Center for College Affordability and Productivity (CCAP) identified 25 ways to reduce college costs and has produced an extensive book-length study to explore them. Interested readers can access the entire study at http://www.centerforcollegeaffordability.org/pages/page.asp?page_id=123706. This booklet summarizes the 25 ways to cut costs, pointing the way to achieving significant cost reductions for those sincerely interested in making college more affordable and accessible to members of American society.

Section One:
Use Lower Cost Alternatives

#1:
Encourage More Students to Attend Community College

The average cost of educating a person at a community college is markedly lower than that of four year institutions. Tuition levels for students are seldom much more than one-half of what they are at four-year schools, and governmental subsidies per student tend to be lower as well. A very significant savings in overall college costs could occur simply by increasing the proportion of Americans attending lower cost schools, including for-profit proprietary institutions.

A large portion of students attending both two and four-year schools drop out, often because of academic difficulties. Too many students whose high school grades and test scores indicate they would have difficulty with four-year schools enroll anyhow. These students not only accrue large personal debts but also impose a burden on society in the form of federal financial assistance and unwarranted subsidies to state schools. Four-year schools should be discouraged—perhaps even actively prohibited—from accepting many of these students. Students instead should be encouraged to enroll in two-year colleges; those who succeed academically can then move on to four-year schools.

One difficulty with the scenario above is that it is often difficult for students to transfer to four-year schools without a significant loss of credit—meaning the total college experience extends beyond four years and therefore becomes more costly. State higher education coordinating boards, state boards of education, state governments and, above all, school officials should work to make credit transfer relatively seamless and cost efficient. This means there should be more communication and coordination between the two types of higher educational institutions. Perhaps financial incentives need to be offered to the four-year schools who demonstrate that they are accepting more and more community college transfers—students who are actually ready for their third year of college.

How much can be saved by increasing the proportion of students in two-year community colleges? A lot. Let us compare two otherwise identical states who both educate two- and four- year students,

respectively, at a cost to society of $10,000 and $25,000 each annually. Suppose the first state has 75 percent of its undergraduates in four-year schools and 25 percent in two-year ones, while the second state has equal numbers in each type of institution. Total per student costs for the first state would be $21,250, while for the second state they would be $17,500, or 17.6 percent less.

#2:
Promote Dual Enrollment Programs

Many educators would agree that for many students, the senior year in high school is a waste. Certainly there are numerous bright and ambitious high school students capable of doing college level work while in high school—sometimes in the junior or even sophomore year. Students who earn a good deal of college credit in high school can sometimes reduce their college baccalaureate years to three—saving nearly 25 percent in direct costs and, just as importantly, giving an additional year of productive full-time labor.

Examples of dual enrollment programs include:

- *Advanced Placement (AP)*—High school courses and examinations that provide colleges with good information on prior student knowledge; already growing substantially, its further growth should be encourage.

- *College Level Examination Program (CLEP)*—A college board program that offers credit in over 30 subjects; 2,900 colleges now accept at least some CLEP credit, but the program needs more publicity and support.

- *On-line Education*—A variety of on-line providers offer credit to high school students and even cater to that clientele, but this credit also needs to be made available to college students.

- *Dual Enrollment Programs*—Some states offer high school students the opportunity to get dual high school/college credit for courses taken at colleges while in high school; the establishment and expansion of such programs should be encouraged.

- *International Baccalaureate (IB)*—The International Baccalaureate is viewed as offering a superior and challenging version of the traditional curriculum; many colleges give partial credit for students from IB schools.

The key is to incentivize students, and schools must encourage alternative ways of obtaining college credit. Since colleges are reluctant to reduce the tuition revenues they receive per student, legislative mandates may be required in some cases to force the acceptance credit for programs like AP, although this would obviously raise serious issues about political interference and institutional autonomy.

#3:
Reform Academic Employment Policies and Revisit Tenure

A major cost item for universities is the cost of instructors. Costs for adjunct faculty are relatively low, but senior tenure-track faculty are very expensive; at a few universities, salaries for full professors (including fringe benefits) rise to as high as an average of $200,000 annually. A large portion of faculty receive tenure, the equivalent of a lifetime employment contract. A decision to award tenure often means making a financial commitment with a discounted present value of two million dollars or more. Hardly any other occupation offers such an extraordinary employment arrangement.

Tenure was originally designed to protect academic freedom and to prevent the dismissal of professors who take unpopular positions on issues. No doubt one strength of American universities is the diversity of ideas that are generated and disseminated as a result, at least in part, of the tenure system. Tenure can also be viewed as a valuable fringe benefit, making academic positions more attractive than they otherwise would be. As such, it might in some cases improve the quality of the professoriate.

Yet there are many objections to tenure. First, tenure is a costly way to achieve job security. Many superstar professors are not the slightest bit worried about job security (seeing as they get job offers all the time), and the abolition of tenure would not have much

impact on their willingness to work. Tenure is most often prized by the least productive faculty—the ones who would not receive an offer from another employer if they lost their current jobs. Tenure protects people who become incompetent or ineffective because of changing circumstances. It makes it difficult to reallocate resources over time as academic needs change. The natural inertia of faculty is fortified by tenure since they have little to lose in opposing cost-saving or service enhancing measures.

The cost of tenure, ironically, is reducing its importance over time. The inefficiencies and inflexibilities tenure creates has gradually led universities to replace tenure-track positions with part-time or non-tenured positions. In addition to the use of contingent faculty, some schools may initiate post-tenure review procedures that make it easier to dismiss marginal faculty members. Another alternative is to replace tenure with a system of renewable long-term employment contracts (of say, five years) that increase flexibility while still providing an element of job security. Tenure could also be made more explicitly a fringe benefit with an explicit monetary value. Employees could then select the fringe benefit package that best meets their needs, subject to a maximum amount. Insisting on tenure would come at a price to the employee, such as a reduced quality health care plan, reduced pension benefits, etc.

#4:
Offer Three-Year Bachelor's Degrees

The bachelor's degree in European universities is designated as a three-year program under the Bologna Process. Shorter time to completion of a degree dramatically reduces college costs—perhaps as much as 25 percent. The question is whether the benefits of a fourth year of college training exceed the costs. Do "diminishing returns" set in so that the fourth year of instruction involves only modest extensions of the basic knowledge imparted earlier? The answer to this question no doubt varies between program, schools, and even students. Still, there is little scientific basis for the conventional opinion that four years is the optimal period of collegiate study.

A three-year program can simply be a condensed version of the current four-year program achieved in part through the elimination of vacation periods, particularly in the summer. Alternatively, the bachelor's degree could be redefined by eliminating up to a year of the coursework currently required. One consequence of the move to the three-year degree in Europe is that a large portion of students now want to go on for two additional years and get a master's degree—the old four year bachelor's degree program has, in effect, become a five year bachelor's/masters program. It is therefore not entirely clear that shortening the time to earn a bachelor's degree will in fact lead to lower costs and higher education participation in terms of years.

If colleges serve largely to screen the more able and talented students from those who are less so, then the shortening of the time required to earn a degree would seem to make sense. It may, for example, make a good deal of sense for those majoring in English or anthropology. If, however, the fourth year of study confers valuable post-graduate vocational skills, as in, say, most forms of engineering or in accounting, then it makes less sense. At the minimum, research needs to be done on the costs and benefits of three-year degrees, and more experimentation with shorter degree programs is probably in order.

#5:
Outsource More Services

Colleges and universities are ostensibly in the business of producing and distributing knowledge. Yet huge portions of universities are given over to doing other things: running food and lodging operations, hospitals, recreational centers, building repair and maintenance, high school education (remedial education), entertainment operations (especially intercollegiate sports), information technology services, etc. Many of these operations could be more efficiently provided by specialists in those activities. Many colleges have made some progress in this area, especially in food services, but vastly more can be done.

Colleges should explore contracting out or selling their food and lodging businesses, but also much more, such as IT operations, building maintenance, student health centers, remedial education, and even campus recreational centers. Universities with large hospitals should consider separating the hospital operations from the core university businesses. In some cases, the sale or long-term lease of capital assets is appropriate, particularly dormitories and dining halls. Resources from assets sales can finance capital projects in core academic areas. Done adroitly, colleges can rid themselves of some money-losing auxiliary operations and actually earn revenues from the leasing of campus facilities to private entrepreneurs to operate businesses (e.g., fast food restaurants in student union buildings). Some schools are even outsourcing some instructional services to for-profit companies, partnering with such companies in, for example, offering on-line or remedial education.

Although more controversial radical, the complete separation of highly commercial intercollegiate athletic activities from the university would seem to be appropriate. This is particularly true of schools with big time sports programs that often have budgets approaching and even exceeding $100 million annually.

Section Two:
Use Fewer Resources

#6:
Reduce Administrative Staff

Recent studies by Daniel Bennett of CCAP, by Jay Greene of the University of Arkansas, and by the Delta Cost Project substantiate what many faculty have long claimed: administrative costs are soaring at universities, mainly through the growth of staff, though also by large increases in compensation, particularly at the highest levels. For example, from 1997 to 2007, the proportion of full-time equivalent employees in the categories "executive, administrative, and managers" and "other professionals" rose from 22.6 percent to 26.1 percent, continuing a trend that had begun still earlier. Universities and even many liberal arts colleges suffer from a huge bureaucracy that is not only expensive, but contributes to slow and often non-innovative decision making. It is not uncommon for schools to have more people working in an administrative capacity than serving as faculty members.

In the private sector, businesses facing intense competition often slash administrative staffs—the auto companies are a good recent example. Administrators do not make cars, nor do they teach classes. You can have a university without administrators, but not without students or faculty. The minimization of administrative costs and bureaucracy should be sought in any university reform. A few decades ago, few universities had more than a small centralized public relations staff. The typical mid- to large-sized school today has PR people in units throughout the university. Similarly, the number of people involved in affirmative action, diversity coordination, or serving as multi-cultural specialists has soared. As the nation shows continued and often spectacular progress in eliminating the vestiges of discrimination, is it still necessary to have all of these people? Do campuses really need to hire sustainability coordinators? Do they need associate provosts or vice presidents for international affairs? All of these types of jobs simply did not exist 40 years ago.

A related problem is the explosion in salaries, particularly for senior administrators. Even five years ago, $500,000 was considered an

extremely high salary for a university president, whereas today a growing number make $1 million or more. Chief financial officers of universities that made $175,000 five years ago often make $300,000 or more today. Universities argue they need to pay these amounts to keep up with their peers and to be competitive with the private sector. But universities offer benefits including higher job security not available in the private sector and for decades were able to attract very competent administrators for salaries that, relative to other workers, were far lower than they are today.

The expanded version of this work offers some suggestions on combating administrative bloat. No doubt the root problem is that there are few incentives to reduce administrative costs, and little or no accountability of top administrators to external forces, in part because of huge amounts of third party subsidy payments.

#7:

Cut Unnecessary Programs

In university environments, it is painful and politically explosive to try to eliminate programs. Professors expecting lifetime employment security fiercely fight these measures, often with the support of sympathetic and powerful faculty members and administrators. Sometimes alumni get into the act. Yet, a dynamic society needs change. Majors that once flourished now have few students. Programs that were fashionable a generation ago are now viewed as outmoded. Resources need to be freed up for new areas of academic inquiry based on technological advances, changing income and tastes, etc.

Cuts can be made selectively or across-the-board. Ultimately, however, if serious reform is to occur, some programs should be eliminated. Writers like Robert Dickeson have elaborated upon the process that is appropriate in program evaluation. Certain questions must be asked: Is the program critical? Is there sufficient student demand and faculty interest? Is the program financially viable? Does it have a superior national academic reputation? Only rarely, and probably never, can a university truthfully answer "yes" to all these questions for every single one of its programs.

Major budget cuts arising from the 2008 financial crisis and subsequent recession offer institutions the opportunity to overcome otherwise intractable political opposition to eliminating unnecessary programs since not doing so is prohibitively costly to the rest of the institution. Washington State University, for example, eliminated its Department of Community and Rural Sociology, the German major, and the Department of Theater and Dance. Other universities should use the current period of financial stringency to make similar cuts.

#8:

End the "Athletics Arms Race"

There is remarkably little evidence that the massive subsidies to intercollegiate athletics (ICA) have had significant positive spillover effects for universities in the form of greater financial support, improved recruitment of students, higher national rankings, etc. There is abundant evidence, however, that only a handful of ICA programs break even, and that subsidies for these programs have grown rapidly—as much as 15 percent in some years—fueled by soaring costs for coaches, more elaborate facilities, etc. Using generally accepted accounting principles (that, for example, include all capital costs), it is doubtful that any programs are truly profitable. Many programs actually lose significant sums of $10 million or more annually. Since the schools where these subsidies are greatest often have relatively lower-income students, it can be argued that there is a regressive "athletics tax" that burdens students and taxpayers alike. Indeed, even the profitable, or nearly profitable, programs should probably pay a tax (i.e., make payments) to the rest of the university to cover indirect resource costs associated with their operations, such as the time the president spends dealing with athletic matters.

Like arms races in the world of geopolitics, athletic arms races probably require a joint agreement in order to end—in this case a mutually agreeable means of cutting expenses. Whether this is done through the existing arrangements (especially the National Collegiate

Athletics Association) or through other means (e.g., a presidential summit conference involving most leading schools), unified action is necessary.

By far the largest expense item is salaries. Football coaches command multi-million dollar salaries because successful teams add millions of dollars to university coffers. Salaries, however, are inflated because players are "paid" trivial amounts relative to their contribution to earnings, so coaches largely capture the income that normally would go to the student athletes. Limiting football coach salaries to that of the university president would dramatically reduce salaries (or, perversely, increase them for the presidents!) Scholarships for students might legitimately be viewed as wages for student employment, but even here team sizes are excessively large—why, for example, does a sport that fields teams with 11 players need a playing squad of more than 60 players (allowing for multiple persons in each positions in both offensive and defensive units)? The median school in Division 1 of the NCAA spent $2.5 million annually on team travel in 2006. Why can't distance limits be placed on travel to all but a few special games? Is the practice of having teams stay in hotels before home games necessary? Why can't playing seasons be shortened, both for academic and financial reasons?

#9:
Overhaul the FAFSA Form

Students wanting to obtain federal student financial assistance must complete the Free Application for Student Aid (FAFSA) form, which is also used for making decisions on financial aid by others, notably the colleges themselves. In the 2009-10 academic year, the number of questions on the FAFSA form exceeded 100. Susan Dynarski and others have argued the marginal gain in knowledge about applicants from having an elaborate form was far more than offset by the adverse impact that the complexity of the form had on students' willingness to apply, particularly in the case of low-income families. Some estimate well over 1.5 million aid-eligible low income people fail to apply for assistance, probably in large

measure because of the complexity of the application process. Some small progress has been made in simplification, but the form is still complex and intimidating, particularly for people with limited educational backgrounds. However, with the cooperation of other federal agencies (notably the Internal Revenue Service) and minor changes in law, it would be possible to abolish the FAFSA completely and still obtain the truly vital information needed to assess whether loans should be awarded to an individual. Another alternative would be a postcard-sized form asking for information regarding basic income, family size, and the age of children.

The problem with the FAFSA form is merely the most tangible indication of a broken, dysfunctional and byzantine system of federal financial aid. A strong case can be made for the federal government to abandon its role of providing loans and moving to alternative forms of financing. However, as long as the existing system is in place, the simplification of well over a dozen loan and grant programs into one or two would seem to be a top priority. At the very minimum, barriers to participation such as the FAFSA form should be broken down. See also our discussion of student financial aid reform, #22 below.

#10:
Eliminate Excessive Academic Research

Universities have two major academic functions: the dissemination of knowledge (i.e. teaching), and the creation of it through research. There is a strong bias in the academy to emphasize research at the expense of teaching. Faculty promotions are heavily research-based. Widely circulated research results create a national reputation, whereas the reputation for good teaching tends to be localized. Universities improve their ranking in the *U.S. News & World Report or Times Higher Education World Rankings* by emphasizing research. Salary increases for faculty have averaged more in the highly research-intensive universities than in other institutions.

Yet research is subject to diminishing returns. In the humanities and social sciences, for example, most enduring topics have been

heavily researched, and there is little new to say—over 26,000 articles have been written on Shakespeare since 1980, for example. Many of these articles are published in obscure academic journals with very small readership. Professorial teaching loads have declined to permit greater research, thereby increasing the per student cost of instruction. No one has done a serious cost-benefit analysis on conducting so much research. This is not to argue for the elimination of research, an end to federal research support or the like; , but rather, it is to note that the rate of return at the margin for additional research is no doubt typically very low.

At mid-quality universities, professors may teach six courses per year, with some occasional reductions for research leaves of absence or for teaching particularly large classes. Suppose a department has 90 courses to teach annually, and average professorial salaries including fringe benefits are $100,000 a year. If the average teaching load is five classes a year, it takes 18 professors to cover the teaching, costing $1.8 million. With an eight course load, it takes fewer than 12 professors, costing over one-third less. Is the incremental research occasioned by the lower teaching loads so valuable as to justify huge increases in instructional costs? In most cases, objective analysis would almost certainly conclude that increased teaching loads for professors make sense on cost-benefit grounds.

#11:

Streamline Redundant Programs at the State Level

One of the strengths of American higher education is the diverse number of institutions, all following a slightly different path to their mission. This diversity gives students more choices and increases competition, but it also sometimes leads to expensive duplication of effort and resulting inefficiencies. Universities are run by empire-building humans who engage in mission creep, adding degrees and majors, often without fully considering the duplication of effort involved.

The level of duplication varies by state. Tennessee reported in 2009 that it had 24 doctoral programs with fewer than three graduates apiece in the period 2004 to 2009. Similarly, a large minority

of academic programs at state universities in Pennsylvania seemed to award 10 or fewer degrees annually. Do we need all of these low demand programs? Are they being maintained because of inertia, or to meet the teaching wishes of certain faculty rather than the vocational or academic needs of students?

The problem of program duplication is particularly acute at the advanced level of instruction. Ph.D. programs are extremely expensive to run: essentially very high-salaried professors intensively teach very small numbers of students. Couple this with the notion that a Ph.D. program needs to be physically located near every potential student and the prospect becomes economically unfeasible. Nationally, where there are, say, 125 Ph.D. programs in a discipline, the elimination of 50 of these programs would still allow national competition and diversity while potentially saving a good deal of resources by weeding out programs of marginal quality and limited demand.

The use of electronic means of communication can be used to allow faculty from multiple institutions to participate in joint degree programs. Merging two or three marginal programs into one of greater substance can save resources in the long run as a single integrated program is established. Sometimes joint programs can involve two schools in close proximity, and may even involve a mix of public and private schools. Duke and the University of North Carolina at Chapel Hill, for example, have a joint program in German Studies.

#12:

Promote Collaborative Purchasing

Private companies like Wal-Mart use their enormous purchasing power to negotiate low prices from suppliers. Colleges that band together to buy goods and services can often obtain lower prices on goods and services used than if they buy separately. Agreements can be made between institutions on a bilateral or multi-lateral basis, through statewide agreements, or even by regional agreements involving schools in many states. The distinction between “state”

and "private" institutions need not be important here, with small private liberal arts colleges joining larger state universities to try to get the benefits of large-scale purchasing. A consortium of schools can be created as a separate entity to do group purchasing, for example. Collaborative purchasing is no panacea, and there is some reduction in institutional flexibility if all purchasing is done in this manner. But for a large portion of purchases, group buying of goods is a worthwhile strategy to pursue.

Section Three: Efficiently Use Resources

#13:

Improve Facility Utilization

Compare the use of building space at a typical private business and a university. The private business usually uses most space at least 50 hours a week, 52 weeks a year, and often more than that—well over 2,000 hours annually. By contrast, large amounts of campus building space is occupied perhaps 25 hours a week, perhaps 32 weeks a year—800 hours a year. (This problem is less prevalent at for-profit universities operating with strong financial incentives to maximize facility utilization.) In the long run, using facilities more intensely will reduce the need for new buildings, reducing capital and maintenance costs noticeably.

Units within universities think that they "own" the space they occupy, and often are reluctant to share it with others who can better utilize it. The solution to this and related "turf" problems is to assert institutional (as opposed to departmental or college) ownership over all facilities, and then use the market mechanism to allocate space more efficiently. For example, the university might give departments specific budget allocations to cover rent of facilities, and then charge rents in a manner that would increase off-peak usage. Perhaps classrooms would be free for use on Fridays, evenings, weekends, and in the summer, relatively cheap at 8 a.m. or after 4 p.m., but relatively costly at other times. Departmental funds provided for rents should be established at less than what would be required to maintain the pre-rental usage of facilities.

The concept of renting space can apply to more than classrooms and laboratories. It should be used with respect to office space as well. The market incentive can even be carried down one more level. Each faculty member could be given a personal budget for telephone, computer usage and internet access, mail, travel, and, most relevant here, office space. Rents on offices would vary with their desirability. Those insisting on large private offices with a beautiful view would have fewer funds available for travel or other support services.

#14:
Increase Teaching Loads

The corollary to the tenth point on eliminating some academic research is to increase teaching loads. At research universities in the United States between 1988 and 2004, it is estimated that teaching loads fell 42 percent. Even in private liberal arts colleges that pride themselves on their attention to instruction, those loads fell 32 percent. William Massy and Robert Zemsky have talked about an "academic rachet" effect, and the impact of this on instructional costs is huge, as demonstrated above.

The root cause of the fall in teaching loads relates to incentives and rewards. Faculty are rewarded for publishing articles, the results of which can be precisely measured (pages of articles published, numbers of citations in scholarly journals, etc.) and is observable nationally or even globally. Good teaching is less easily measured, and is observable locally. National reputations are built through research, not teaching. The federal government gives billions in grant money for research, not teaching. Grant recipients receive large summer stipends and often generous overload compensation. Two equally competent professors might receive $75,000 in salary, but the great teacher will get $5,000 for teaching one summer school course, raising annual compensation to $80,000, while the research grant recipient will get a summer stipend of perhaps $17,000 plus $15,000 in academic year overload compensation, for a total of $107,000. Is it any wonder that faculty push for lower teaching loads to increase their research prowess, in their mind increasing their chance for winning research grants?

There are two ways to increase loads: one by fiat or mandate, and the other by use of incentives. State governments could mandate all professors at state universities teach nine hours a week, for example. That approach has severe limitations, including failing to give institutions flexibility to vary loads with the strengths of faculty members—Nobel Prize winners would flee a state with such a law, and with good reason. Mandates can be made slightly

less onerous by being placed at the institutional level—the average load of the full time faculty must equal X hours a week, with top researchers teaching less and excellent teachers teaching more. But universities and colleges strongly resist even this approach, which they view as an unwarranted intrusion on their institutional autonomy.

The alternative approach is to use a carrot rather than a stick approach. Explicitly reward teaching financially, both by increasing rewards for quantitatively and qualitatively teaching more, but also, perhaps, by lowering the rewards for research somewhat. Since there is a bias, due to information costs, in favor of hiring professors with good research credentials, at the local level perhaps universities should offset this by increasing the weight of teaching performance in the assessment of salary and promotion. Instead of weighting teaching and research equally (say 40 percent, with 20 percent for service and administrative contributions), increase the weight placed on teaching to 50 percent and reduce that on research to 30 percent. Recognize great teaching with large and well publicized teaching awards. But complement the financial incentives with mandated higher teaching responsibilities for the faculty. Very few schools are willing to do this, but increased financial stringency may lead to a move in that direction, one that hopefully will grow into a broader movement. Another step in the right direction would be to promote greater transparency in the provision of university information regarding teaching, student performance, and student post-graduate success in a manner that would diminish the influence of college rankings that especially reward research results.

#15:
Encourage Timely Completion of Degrees

A large majority of full-time students do not graduate from four-year degree programs on time. Similarly, a huge problem exists with two-year schools. The drop-out rate in general is a national scandal at all levels of academia, including doctoral-level programs. Huge

amounts of resources are devoted to giving incomplete educations to students, who often incur large debts and, because they lack a degree, are unable to get a well paying job that will compensate them for their college expenses.

In part, of course, students drop out because they were inadequately prepared for college and, in some cases, should have never enrolled in the first place. But often perverse incentives keep students lingering around colleges for long periods, whether or not they obtain a degree. The fifth or sixth year student pays the same tuition money usually as the third or fourth year student, and very often earns the institution the same amount of state subsidy. Rather than pushing students to graduate in a timely manner, skewed incentives lead schools to encourage students to take five or six years to get a bachelor's degree.

This problem is much smaller at private not-for-profit schools. In those institutions, the aforementioned perverse incentives are less present. High tuition costs provide a strong incentive for students to avoid the fifth or sixth year of study. Academic standards on average are higher. States and individual institutions wanting to lower dropout rates and time to completion will change their incentives. Indiana, for example, gives a cash bonus to universities whose students graduate in the standard four years. An alternative approach is to deny subsidy payments for any student with more than, say, 110 percent of the credit hours needed for graduation.

Again, a voucher system of government subsidization offers good ways to provide incentives for timely completion. Deny subsidies (vouchers) to students with more than 100 (or perhaps 110) percent of the hours required for graduation. Give a bonus payment to students graduating early—a payment smaller than the subsidy associated with the period of early graduation, but big enough to incentivize students to seek early graduation. Again, insist upon ease of course transfer between institutions, and encourage early enrollment, Advanced Placement, credit via the CLEP exam (perhaps paying the fee for students to take the test), for-profit accredited internet-based courses, etc.

Section Four:
Exploit Technology to Reduce Costs

#16:
Move More Classes Online

Calls to increase on-line education often lead to two objections: First, the costs of on-line education are really not lower than traditional education. Second, an increased reliance upon on-line education will lower the overall quality of American higher education. The evidence, however, casts some doubt on the strength of these objections. It is true that, offered to small numbers of students, on-line courses are not necessarily cheap. Yet the for-profit schools have clearly demonstrated that there are enormous economies of scale, and major companies have turned from loss to profit (e.g, Bridgepoint Education, Higher Education Holdings) as scale expands. Some companies (e.g., StraighterLine) are able to offer online courses for $99 a month plus $39 per course enrolled. A full semester of courses can be obtained for well under $1,500. Regarding quality, recent analysis done for the U.S. Department of Education suggests that on-line education is not inferior at all to traditional learning—indeed, the contrary is the case. Combining on-line instruction with a small amount of live in-person support is particularly effective. To be sure, not all instruction can be offered effectively on-line, but large numbers of high enrollment introductory courses in most major disciplines are ready for effective transition towards broad on-line course offerings.

Regarding costs, most analysis of the issue fails to account for the considerable capital costs associated with traditional instruction, costs that virtually disappear with on-line courses. They fail to take into account the savings that can occur from reduced commuting and room and board costs when students can take courses from their home, a particular advantage for those in lightly populated rural areas.

Among those fighting on-line instruction are faculty at many schools (sometimes successfully sabotaging new on-line programs), accrediting and governmental regulatory groups (by imposing costly licensing requirements), and some faculty unions. Fortunately, enrollments are rising rapidly in spite of all this, given the

cost advantages, convenience, and high quality of many online offerings. In addition to formal degrees offered by such schools as the University of Phoenix, Kaplan University, Ashford University, the University of Maryland University College, or Western Governors University, there are efforts to extend learning via the internet by making course materials available for free on-line (the MIT Open Courseware project is particularly commendable).

#17:

Reduce Textbook Costs

The price of college textbooks has soared over the years. Once an instructor selects a textbook, the publisher has a monopoly position as the only provider of the text, and in recent years they have taken advantage of this to raise prices to the triple digits for many texts. Fortunately, modern technology has helped break down this monopoly.

On-line booksellers increasingly sell used copies of books to students at lower prices than local bookstores. More professors are opting for electronic books, and the development of devices such as the Kindle and the iPad are likely to further the revolution in electronic publishing that also has hit the traditional textbook market. Finally, bookstores and publishers are reviving an old idea—textbook rentals—as a means to lower enormous textbook costs.

As technology changes, universities may wish to reconsider the operation of campus bookstores, something that usually is best left to private entrepreneurs. State laws to control textbook prices and other regulatory approaches to the problem may do more harm than good, although colleges should encourage faculty to select texts in a way that allows students alternative means of purchase, which inevitably leads to lower costs.

#18:

Digitize Academic Libraries

The largest building on most great research university campuses is the main library, for no other reason than the warehousing of

millions of books takes up enormous amounts of space. Aside from books, libraries spend vast amounts subscribing to thousands of academic journals (usually at a subscription price of several hundred dollars annually). Many books are read or even looked at only rarely, and it is hard to justify their purchase on any cost-benefit basis. The capital costs of library buildings are likewise immense.

The revolution in information technology should radically revise the concept of the university library. The electronic purchase of books should substitute for traditional acquisition of hard copies. Consortia of universities can band together to reduce costs. Organizations like OhioLink are state-wide networks of libraries that in effect create a single library to serve vast numbers of students.

By far, however, the greatest promise comes from digitization of books and periodicals. The rise in the cost of academic journal subscriptions has been the leading cost driver for university libraries. As a result, the end of paper academic journals may be near as libraries seek cheaper electronic alternatives. For years, institutions like JSTOR have permitted scholars to access vast amounts of materials in scholarly journals from their office. The most interesting elaboration of this concept is the Google Library Book Project, a vast effort to digitize almost all major printed works, including the collections of such premier libraries as the New York Public Library, Harvard University, the University of Michigan, and Stanford.

To be sure, there are many issues involved. There is, of course, the issue of intellectual property rights. A physical library may well still be a good place for students to gather to study, to work on computers, and occasionally to use printed works. Most university and college libraries have undergone vast physical changes to accommodate the changes in technology. In the long run, however, does every campus need to have a physical repository of printed volumes? Cannot virtually all of the research and teaching functions be done electronically? This does not mean a complete elimination of libraries, perhaps, but changes their nature and downsizes their physical presence.

#19:
Outsource Email Services

In the course of a generation, email has become the dominant mode of communication, both on campus and between academic personnel and the outside world. Analysis of email costs have suggested that full costs only run $25 per month per user, which for a university with 15,000 students and 2,500 employees is $750,000 for the employees alone, and as much as several million dollars a year for all users, including students. Specialists in information technology services, companies like Google and Microsoft, can usually significantly undercut the costs of in-house systems of email delivery, potentially saving large sums of money. The savings come in the form of lower storage and staffing costs, and reduced costs for servers, archiving and filtering messages.

The email issue is an application of a broader principle. Colleges and universities are in the business of creating and disseminating information, but not in the business of developing and managing the technology that allows for low cost communication of data and images over long distances. There are extremely successful companies who have learned how to do these things relatively cheaply and reliably. That is why universities should typically not only outsource email services, but also other electronically based services utilizing information technology, such as preparation of payrolls.

#20:
Utilize Course Management Tools: New Approaches to Instruction

The typical professor still teaches pretty much the way Socrates did 2,400 years ago, talking to a group of students in a lecture-discussion session. To be sure, the use of blackboards, PowerPoint, and perhaps some internet-based visuals has jazzed things up a bit. But as Carol Twigg and others have suggested, we have merely added some new technology onto old approaches to teaching. Yet as Michael Clifford has said, today's students are inhabitants of a new information age,

while many of the instructors are merely "immigrants" to new technologies, just learning to assimilate what students already know. Much of this, of course, is a generation gap issue that may close in time (although the technology continuously changes as well).

There are a vast number of new technologies available to revamp the learning experience, many of them involving interactive contact between the subject matter and the student, as opposed to mere absorption of content from a single instructor. The listing below is more illustrative than comprehensive, but a few examples will make the point. New learning or course management systems can help instructors manage their class and communicate with students; Blackboard is the market leader in this field, although there are important open source competitors. Electronic clicker devices are used in growing numbers of classes, allowing instructors to obtain instant feedback from students. The instructor can ask the student a multiple choice question in class on a concept, and if a large percent of students click the wrong answer, the professor can modify his planned presentation to deal with the learning deficiency.

Interactive (so-called Web 2.0) approaches include wiki pages, blogs, video and note sharing. Students can interact with each other and instructors. Student blogging has proved effective in some courses, both to improve writing skills and to discern student knowledge and comprehension of key concepts. Even YouTube and related video approaches are being used. If, as some think, "the best way to learn is to teach," student-made presentations in the style of YouTube may offer, in some cases, opportunities to enhance learning.

In embracing technology, schools need to carefully evaluate new approaches. Are students learning more? Are costs rising or falling? Would it not be better to move to a relatively interactive on-line form of instruction than try to augment traditional instruction with new technology? The technology should be adopted only if it improves service quality (more learning, better educated students), lowers costs, or does both. To this point, the evidence of significant cost reduction from new technology is lacking.

Section Five:
Improve Competition

#21:

Ease the Credit Transfer Process for Public Institutions

Americans are a nation of movers, and inter-institutional academic migration is commonplace. In many cases it makes great sense: students save money by transferring to a cheaper school; students transfer to schools better suited to their changing interests; or students transfer to a less rigorous school if they are in danger of flunking out. In other cases, students simply complete a two-year program and transfer to a four-year school.

As mentioned earlier, colleges have historically put up obstacles to transfer, most importantly by denying a good deal of the academic credit earned at the previous institution. Most of the attention has been place upon transfers from two-year community colleges to four-year baccalaureate schools. Nearly as important numerically are the transfers *within* the respective categories of two and four-year schools. Pressures are increasing to ease credit transfer, in some cases prodded by legislative mandates requiring state institutions to accept credits from other institutions in the same state.

Bilateral "articulation agreements" between two schools, typically a community college and a four-year institution, have occurred a good deal over the years. Additionally, credit transfers can be made by multilateral agreements of all schools in a state, or a large portion of them. For example, North Carolina in 1995 mandated by legislation what is now called the Comprehensive Articulation Agreement to ease transfer of students from any state community college to a campus of the University of North Carolina. Some states have moved to trying to develop a common core curriculum that is widely accepted at many institutions, easing credit transfer issues for those courses. Still another approach is to adopt a common course numbering system, for example, the beginning course in microeconomics will be called "Economics 101" at all state institutions.

In addition to increasing competition between schools, the easing of the transfer process probably also reduces on balance the drop-out rates while increasing the rate of completion. Yet the issue is not entirely problem-free. There are qualitative issues, and it is

common for community college transfers to drop out of four-year colleges at a greater rate than students already enrolled. Programmatic diversity potentially could be reduced if, in the name of ease of transfer, college curricula become standardized at a high level around the state, robbing institutions of their autonomy and perhaps their unique identity. Nonetheless, the benefits of low-cost transfer are sufficiently great that the move towards easing credit transfer needs to be continued.

#22:
Reform Student Aid

In its 2006 report, the Spellings Commission on the Future of Higher Education concluded, "The entire financial aid system—including federal, state, institutional and private programs—is confusing, complex, inefficient, duplicative and frequently does not direct aid to students who truly need it."

The Spellings Commission had it right. There is a bewildering array of financial assistance programs—loan programs, grants, tax free savings plans, tuition tax credits, etc.—each with their attendant problems. Even a reasonably informed student or parent has difficulty knowing more than a small portion of the nuances of the system, and swamped guidance counselors often do not have the time to advise families about all the options. Additionally, there is a huge timing issue. Students typically submit college applications before having any real indication of the amount of expected financial aid. They are applying without really knowing the cost of the program that they would like to participate in.

Additionally, some of the programs encourage cost increases by the college themselves. Tuition tax credits, for example, provide tax savings only if students attend college, increasing the demand for college and thus college prices, defeating some of the benefit of the tax credit. Student loan subsidies in effect vary with the tuition of the school attended, so the government rewards both the schools who increase fees as well as the students who attend them. Each year, tuition fees nationally rise by, say, six percent, so student

loan grants for the following year rise by that amount or more. It is probably true to say that the vast increase in student loans is as much a cause as a consequence of the tuition price explosion in modern times.

Much of today's financial assistance is a form of price discrimination—charging customers differing amounts for the same service. Net tuition prices vary substantially from the published "sticker price." While price discrimination actually serves some useful economic purposes, it also causes problems, particularly when students do not know their likely "scholarship" aid at time of application, forcing them to rely heavily on sticker prices. The differential between the sticker and the actual price, as well as the large variation in that differential between individuals, causes student uncertainty and may lead to inappropriate student choices.

Reform of student aid would involve vast reduction in the multiplicity of federal programs, the simplification of the FAFSA form (discussed above), a reintroduction of private competitive servicing of student loans, and moving to vouchering student assistance instead of institutional subsidies (see below). States need to consider when all-merit based award systems that include very high income students are appropriate, given limited resources.

#23:
Reform Accreditation to Reduce Barriers to Entry

Accreditation is an information device. Schools that are "accredited" meet at least minimal standards of quality. Unaccredited schools likely have weak academic standards, and some might even be diploma mills that simply give away degrees in return for a cash payment. It is widely accepted that the certification of minimal standards is a generally good idea, but there are legitimate concerns that the existing system of accreditation is far from optimal.

There are two major types of accreditation organizations—regional accreditors that evaluate entire institutions, and subject specific accreditors. Strong arguments can be made that the current organizational structure of accrediting agencies is flawed (as in having seven

regional accreditors instead of one national one, for example). Historically, these agencies have focused on inputs, not outcomes. Because federal financial assistance is tied to accreditation, the accrediting agencies are gatekeepers as to who can offer higher educational services. The cost of achieving accreditation is often high, a big barrier to entry to new, smaller schools. The organizations also may suffer from major inherent conflicts of interest, with their governing boards often made up largely of representatives of organizations that they accredit. This may explain why new approaches to educational service delivery have trouble winning accreditation (the firm StraighterLine comes to mind). Accreditation also provides very limited information—schools are either acceptable or unacceptable, with no graduations in between. Their operations are highly secretive and non-transparent, with details of accrediting reports not available to the general public.

A good accreditation system would provide vastly more information to the public. It would require the accrediting organizations be governed by those without any vested interest in the results. It would be outcome-based, not input-oriented. We do not "accredit" auto makers, house-builders, or appliance makers, because there is adequate information on the quality of their products provided by independent third parties. The system works well for them. Maybe conventional accreditation needs to be replaced with a vast information system giving consumers, taxpayers, and donors information that would allow for more intelligent decisions.

#24:

Subsidize Students, not Schools

Markets do a marvelously effective job of allocating most goods or services because the consequences of decisions to buy and sell goods largely impact those doing the buying and selling—customers benefit from getting goods they like at low prices, and producers benefit from getting more for their product than it cost to make it. Higher education suffers because the consumer—students—often pay only a small portion of the cost while avoiding

the consequences of bad decisions. Government subsidies to institutions reduce the role of consumers in resolving classic economic questions: What should be produced, in what quantities, in what manner, and for whom?

A step in the direction of introducing more efficient market power into higher education would be to end institutional subsidies and increase subsidies to students in the form of vouchers or scholarships. This has been discussed above, but the advantages bear repeating:

- Market forces likely would force greater cost consciousness amongst public institutions losing subsidies and relying on student enrollment for revenues.
- Schools will become more student-centered, depending on student support and spending more on pleasing students and less on lobbyists.
- Subsidies can be targeted to meet other objectives, such as promoting attendance by lower-income students, improving student academic performance, and graduating in a timely manner.
- Vouchers will refocus general support on teaching and instruction.
- Costs can be contained by limiting voucher increases to the rate of inflation.
- Students are not rewarded extra grants for attending expensive schools (as with student loan subsidies).

Vouchers have had strong political opposition at the K-12 level, led by labor unions. Unions are far less heavily involved in higher education, and the use of vouchers to achieve egalitarian objectives might bring support for them from individuals historically wary of the concept. Programs such as the GI Bill, Pell Grants, Georgia's HOPE scholarships, and the Colorado College Opportunity Fund are similar to vouchers in many respects, providing a precedent for expansion of this approach to higher education funding.

#25:
Promote Competition Based on Value, Not Reputation

In most areas of human economic endeavor, competition manifests itself in lower prices. If company A has competition from companies B, C, and D in selling a good or service, the competition will lead A to lower prices to fend off loss of sales to B, C, and D. In higher education, however, it seems as if competition leads to higher prices, as schools seemingly "compete" to spend greater sums of money. There seems to be an academic "arms race" resulting in vast increases in spending on, for example, luxurious student recreational facilities, expensive superstar professors, or football coaches.

Schools largely compete on reputation, quintessentially measured by the *U.S. News & World Report* college rankings. Spending more money can lead to higher rankings. To get more money, schools raise tuition rates and engage in incessant searches for grants and gifts. Since third parties fund a large portion of the bills, students are relatively insensitive to price. Very little college advertising speaks of being "the low cost alternative" or the "best bang for the buck," unlike with, say, automobile advertising.

A fundamental problem is the lack of information—quality and value are related to results, and colleges are secretive and sometimes even ignorant about their success in educating students or preparing them for a vocational future. A second problem is that third-party funding and the non-profit nature of most institutions dull the incentives for colleges to try to minimize the price of their services. The FAFSA form enables colleges to price discriminate, choosing sticker prices higher than they would be in the absence of such information.

The most critical element in any solution is the obtaining of value-added measures of what students gain from college, both in terms of knowledge and in terms of other attributes, such as critical learning skills. This requires nudging colleges to provide more information in a useful fashion. It requires that true cost to the student be made available accurately and early. It might depend on changing compensation systems for key employees to emphasize the value-cost relationship, rewarding officials who manage to keep costs down.

Conclusion

Clearly, America's colleges and universities have many different options that could be implemented to halt, and even reverse, exploding costs. This booklet serves as only a summary of 25 ways costs could be cut to make college more affordable to students and the public alike. The entire book-length version of this study, where each of these 25 points are considered in much greater detail, is available for free download at: http://www.centerforcollegeaffordability.org/pages/page.asp?page_id=123706.