

“The Rising Cost of College Tuition and the Effectiveness of Government Financial Aid”

**Testimony of William F. Massy
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Committee on Governmental Affairs
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Thank you for inviting me to testify. Our central question this morning is whether colleges and universities are doing everything possible to maximize value for money in education. My research with Andrea Wilger at the National Center for Postsecondary Improvement (NCPI) indicates that the answer is “no.” Cost increases could be held within tighter limits. The quality of education in the United States remains good by traditional standards, but it could be significantly better.

Institutions don’t know enough about educational cost structures to make the tradeoffs needed to optimize cost effectiveness, and cultural factors make it difficult to act on the data they have. Academic quality assurance and improvement processes appear inadequate when compared to the processes U. S. business developed after learning the hard way during the 1970s and 1980s. Applications of technology to enhance quality in teaching and learning are becoming widespread, but only a few schools are applying technology to reduce costs other than through distance education. Markets could do more to discipline price and quality, but their operation is limited by lack of data. Colleges and universities can learn to contain cost while simultaneously improving the quality of undergraduate education and maintaining research leadership. However, the needed reforms will come easier if markets become more efficient and public accountability is improved.

The real “sticker price” of tuition at colleges and universities will continue to grow, probably at rates averaging as much as one or two points over inflation, unless imperfections in the educational marketplace can be mitigated. (Tuition at public institutions may deviate from this pattern depending on what happens to state appropriations.) Such increases are consistent with typical “internal inflation” rates in higher education. These rates reflect the labor-intensive character of the enterprise, a never-ending need to fund new programs, escalating regulatory burdens, and continuing needs for investment in facilities and technology. They also reflect an “arms race” of expenditures triggered by the pursuit of prestige. A more efficient market would rein in the arms race, discipline prices, and encourage better productivity and “growth by substitution.”

Tuition depends as much on markets as on costs. While institutions may occasionally exercise voluntary restraint, they usually charge as much as the market and the politics of their situations permit. This behavior is not inappropriate. It flows naturally from the principles that govern not-for-profit enterprises. Such enterprises seek to achieve results deemed to be in the public interest. Provided they are efficient, the more money they spend the more they can accomplish.

Tuition probably won't grow to levels where enrollments drop off significantly. Institutions will charge as much as the market will bear, but no more. They are learning to optimize the use of financial aid to compete for students—indeed, “enrollment management” has become highly professionalized. Less-selective institutions (especially in the private sector) already must discount heavily in order to survive, and the selective ones do so out of a sense of obligation and a desire to maintain student diversity. The market is competitive (though not efficient), and net prices are adjusted as needed to fill available seats. By stimulating demand, the “Baby Boom Echo” effect will if anything raise the sustainable tuition level.

What can be done to mitigate these problems? The following proverb may prove helpful. “He (or she) who would move a stone through sand must dig in front as well as push behind.” Like most businesses, colleges and universities act in good faith when they press the limits of the market. But unlike businesses, few schools know enough about educational cost structures, the processes needed to assure and continuously improve quality without adding to cost, and the tradeoffs between costs and outcomes. They can't score breakthroughs without such knowledge, no matter how much pressure the market and public agencies apply. Improving the state of the art in cost analysis and quality work represents the “digging in front” part of the solution. Improving market efficiency through better information and enhancing public accountability represent the needed “push behind.”

Certain European and Pacific Rim countries are ahead of the United States in developing quality assurance and improvement methods, quality incentives, and public accountability. Ms. Wilger and I have studied quality processes on site in Australia, Sweden, Denmark, the UK, Ireland, and the Netherlands, and I served as principal architect of Hong Kong's public higher education quality assurance and management review systems. The experience with quality and accountability overseas has great relevance for the United States. The Senior College Commission of the Western Association of Schools and Colleges (WASC) will soon decide whether to adapt elements of the UK, Hong Kong, and Swedish programs to regional accreditation. (I understand that the North Central Association is considering similar issues from the standpoint of the Malcolm Baldrige National Quality Award and ISO 9000.) This is a good start, but more entities need to get involved.

“Education quality work” (EQW) is the system of activities that improves and assures educational quality. It focuses on *performance feedback* and the *organizational processes* needed to act on the feedback. EQW should not be confused with teaching and learning itself. It is the “feedback and control system” that guides teaching and

learning. EQW must begin at the departmental level, since working academics are the only ones who can assure and improve quality, but it also includes oversight by schools, institutions, and external agencies. Student assessment is a key element of EQW. The shortfalls observed in externally-mandated assessment programs can be reversed by focusing on assessment as something departments should do in order to enhance their own effectiveness. Institutions and external oversight bodies should ensure that departments use student assessments to spur continuous quality improvement, and that meaningful assessment data are made available to the public. The oversight should be improvement rather than compliance oriented but it should maintain an element of accountability—as the Swedish higher education quality assurance agency puts it, “trust but check.”

EQW applies modern quality principles in ways that are consistent with academic values. Unfortunately, tradition and misunderstanding make it difficult for many professors to accept these lessons. They fail to recognize that the approach is not “anti-academic,” but rather that it provides tools for enhancing and humanizing the educational experience. Therefore, EQW will have to be jump started—for example, through regional accreditation reviews and actions by state higher education coordinating boards, perhaps encouraged and facilitated by the federal government.

Space does not permit me to say more about quality work and its relationship to accountability. However, Ms. Wilger and I will be describing EQW, the experience overseas, and the stirrings of interest in the United States at noon on Friday (February 11) in a seminar sponsored by NCPI and the Department of Education’s Office of Education Research and Improvement (OERI). Our project’s 400 faculty interviews and 16 case studies convince us that U.S. institutions would get poor marks if evaluated using EQW standards, but that the potential for improvement exists. For example, Northwest Missouri State University has applied EQW principles with great success. We hope many other institutions will choose to do likewise.

The U.S. and UK seem to be ahead of other countries in work on cost structures, but the state of the art is not as far advanced as that on quality and accountability. The inability to separate unbudgeted research from instruction represents a formidable obstacle. Because these costs are lumped together in all government and institutional reports, the “cost of education” includes a substantial research component—a component that has been growing over time as teaching loads decline. For example, an economics professor who spends a third of her academic-year time working on NSF basic research grants but who can no longer offset her salary will show up in the cost reports as 100 percent instruction. Higher education justifies this practice partly on grounds of practicality and partly by arguing that research and education are joint products that cannot be costed separately. Our research indicates that these arguments are overstated when applied to undergraduate education. Continued reliance on them impedes serious inquiry into cost structures.

Spurred on by their funding agencies, some UK institutions collect diary data on the amount of time faculty spend on instruction-related tasks as opposed to research and

other institutional activities. Such studies can identify work that only remotely benefits undergraduate education. While there surely is a core of truly joint effort, our interviews suggest that it too small to justify inclusion of all department expense in the cost of education.

In the U.S., Northwest Missouri State is starting to use “activity based costing” (ABC) to tease apart the costs of instruction and relate the components to quality processes and educational value added. (ABC was developed by business to get at the actual cost of performing identifiable tasks. It should not be confused with the allocation methods used in cost accounting systems like OMB Circular A-21.) The so-called “Flashlight Program” (The TLT Group, an affiliate of The American Association for Higher Education) and the Pew Grant Program in Course Redesign have developed what amount to ABC templates for use in costing new approaches to teaching with technology. Many colleges and universities in the U.S. and abroad have used ABC and similar costing principles, business process reengineering, and total quality management to improve their administrative functions. Similar thinking is required to stimulate change and evaluate tradeoffs on the academic side of the enterprise.

Markets can discipline the price and quality of education, and by so doing force cost containment, but not with the information available today. Lacking good quality measures, the market rewards *prestige* as defined by faculty research and overall resource consumption more than educational value added in relation to net price. Prestige has become a widely accepted surrogate—albeit a poor one—for educational quality. Professors, institutions, and the market have bought into the proposition that extensive faculty research is a necessary *and sufficient* condition for high-quality education. But while research may benefit educational quality, it is not sufficient. In fact, too much emphasis on research can degrade quality by reducing the time available for education quality work. The focus on prestige also has produced a “winner take all” market and an arms race in resource consumption. Fearing they will be left behind, schools spend heavily—e.g., for attracting and keeping research stars and for amenities. While some spending is justified, today’s markets push it beyond the point of diminishing returns.

Prestige correlates with selectivity. Attending a selective institution confers the advantages of certification and association with exemplary fellow students. However, today’s market focuses too much on selectivity and too little on the *value added* of the educational experience. Great students who get a low-value-added education are great when they graduate. Less advantaged students who get a high-value-added education will be much improved at graduation, though probably not brought to the level of great students from low value-added schools. Unfortunately, the market frames competition in terms of the absolute quality of the graduates, not the value added by the education. An efficient market would encourage institutions to compete on value added in relation to cost. Reporting on education quality work and associated assessment data would make the market more efficient.

Technology can become an important implement of cost containment as well as quality enhancement, but this will not happen without changing the academic culture. The conventional wisdom that technology almost always boosts the cost of on-campus education is short sighted, but not enough institutions are trying to challenge it. Rensselaer Polytechnic Institute's "studio" courses provide the quintessential example of how technology can simultaneously improve educational quality and reduce cost. Such changes require the full-scale redesign of teaching and learning processes, not just adding technological enhancements to existing course structures. Process redesign is easier when cost analysis and education quality work are well established. Effective quality work, with its emphasis on teaching and learning processes and student assessment, may well prove necessary for real innovation. Optimization of faculty time and other inputs to the educational process also will be required.

In closing, I would like to offer some suggestions for action by the U.S. regional accreditation agencies, state higher education oversight bodies, and the federal government. Taken together, such actions would address both cost containment and quality improvement. They would "dig in front and also push behind" to improve value for money in higher education.

1. *The regional accreditation agencies* and their national association could make education quality work a key feature of accreditation.
 - The reviews should incorporate explicit standards for EQW, but they should not specify the methods of implementation. They should cover institutional and decanal activities, and also sample departmental quality work to determine what really happens at the operating level. They might also test for knowledge about cost structures and highlight effective cost-benefit tradeoff decisions.
 - The review reports should be made public. Using them effectively requires wide dissemination to faculty and other stakeholders, which is tantamount to publication. The review methodology does not depend on respondents' self-reporting of weaknesses, so dissemination will not undermine validity. Public disclosure would represent an important improvement on current practice.
2. *State higher education coordinating boards* could hold public institutions accountable for education quality work and effective cost-benefit analysis.
 - Experience abroad shows that effective accountability requires reviews that are linked to funding. Reviews of quality and management systems can provide the needed oversight without

heavy bureaucratic burdens, micromanagement, or infringement on institutional autonomy. States with performance funding could make such reviews a key element of the system.

- State-level reviews might be coordinated with the aforementioned regional accreditation reviews. For example, the state might rely on accreditation for in-depth analysis on a ten-year or similar cycle, with state review teams visiting the institution periodically between accreditation visits to maintain momentum and inform funding. Like accreditation reports, the state reports should be made public.
3. The federal government could help improve market information and stimulate change. The suggested actions would not require large outlays, but I believe they would make a significant difference.
- The Department of Education could produce in-depth studies of education quality work, activity based costing, and associated accountability methods as they are developing around the world and in the United States, and then use the results to develop policy recommendations and model guidelines.
 - The Department could encourage or seed the development of pilot projects at the state, regional accreditation, disciplinary association, institutional, and departmental levels. The projects might include consumer research to determine the kinds of information and formats that would be most useful to prospective students and their parents—and thus provide the most market discipline.
 - The Department could fund doctoral curriculum development. The effectiveness of quality work and cost analysis over the long run will depend on the skills and motivations of new generations of professors—people who now are trained primarily in conventional research and scholarship.
 - Over the longer term, colleges and universities could be asked to provide the public with annual self-reports on their education quality work and the value added they are providing in relation to cost. Institutional accreditation reviews could verify the broad

accuracy of these reports. Such reporting and verification does not seem unreasonable in light of the sector's tax advantages.

- Private enterprise could be encouraged to summarize, disseminate, and perhaps supplement the institutional reports and any available governmental data. More effective consumer guides would make perceived educational quality less dependent on prestige.
- Congress should continue to support the Malcolm Baldrige National Quality Award for non-profit entities, and it should encourage the development of criteria and review methods specific to higher education.