The setting is a university administration office. The scene is a meeting between the president and a group of parents. The action begins when one vocal father, an executive with an electronics company, demands to know why the cost of attending this private institution has gone up 57 percent over the last 10 years. The president says that it could be worse - the price of attending a public university has risen 79 percent. Undeterred, the father points out that over the same period the Consumer Price Index has gone up just 27 percent and the median family income a mere 38 percent.

"I understand," the president answers soothingly. "But we have made enormous economies recently." Then she coughs gently into a tissue. "Excuse me," she demurs, "but there's a case of Baumol's disease going around."

The parents recoil. "Baumol's disease! What's that?"

Well, it's not a disease in the traditional sense. But it's real nevertheless.

More about the diagnosis later.

First, was the aggressive father exaggerating? Hardly. The cost of higher education has exceeded the rate of inflation, not just in the last decade but in the last 40 years. This fact is highlighted regularly in the press. One article in The Philadelphia Inquirer trumpeted that babies born in 1998 could expect to pay $250,000 tuition at a top college.

Tuition inflation was also the topic of the 1998 National Commission on the Cost of Higher Education convened by Republican lawmakers in Washington. The panel stopped short of calling for federal intervention in the form of penalties for institutions that didn't control costs, but it warned that colleges and universities risk "an erosion of public trust" if the price continues to soar.

In fact, the public is already concerned, though parents tend to overestimate the costs - by as much as 212 percent, according to a recent study by the American Council on Education. (For the record, tuition at a four-year public university averages $3,500 annually; $15,000 at a private one.) At the same time, many families are unaware of or don't take full advantage of the nearly $60 billion available to help meet payments.

But the public has it right: Higher education is expensive and becoming more
It isn't as though administrators haven't made efforts to hold down costs. Most institutions, from the most prestigious to the most modest, have cut budgets and cut them again. Syracuse University, for one, went through a major restructuring in the early 90's, when an economic downturn and a dwindling population of college-bound 18-year-olds created a near-crisis situation. Between 1990 and 1998, $66 million was trimmed from expense budgets, 350 staff positions were eliminated and resignation packages were created for 170 faculty members. These cuts were offset by a corresponding decline in enrollment, holding the faculty/ student ratio constant.

Even so, tuition increases averaged 5 percent during that period, and tuition is now $20,380. Where did the money go? Much of it went to sweetening the financial aid pot to compete for top students and diversify the campus. But most of it went to faculty and staff compensation, which was barely competitive.

Paradoxically, technology is partly to blame. Students want majors that promise a high monetary return after graduation - information technology, for example, or aerospace engineering, pre-med biology or chemistry concentrations. Between 1970 and 1995, the number of computer science degrees rose by 900 percent and engineering degrees by 38 percent, according to the federal Department of Education. These are the most expensive forms of instruction to deliver because of the cost of essential hardware and software and faculty. The average salary of an engineering full professor is $91,000, while a professor of English - a far less expensive major - of the same rank earns $64,000.

But what's also happening here is Baumol's disease, an affliction common to service institutions like hospitals and higher education. Reduced to its essence, the condition explains why productivity in service industries lags behind that of manufacturing, and probably always will.

The good news is that the disease isn't contagious, nor is it terminal. The not-so-good news is that it is a chronic condition for which a cure has yet to emerge.

According to its namesake, William J. Baumol, any service that is inherently labor intensive - education, law, social work, health care - will experience a productivity gap when compared to "hard" industries. That is, the cost of delivering these services goes up, not down, over time.

Dr. Baumol, director of the C.V. Starr Center for Applied Economics at New York University, likes to explain the disease by using Mozart as an example. In the centuries since the composer's death in 1791, playing one of his quartets for string still requires four instruments and four players and the same number of minutes. No way has ever been found to make this process more efficient, even though huge gains in industrial productivity have occurred during the same time.
Consider the health-care industry. Since 1948 the cost of a visit to the doctor has risen 100 percent in dollars of constant purchasing power and the cost of a day in the hospital has risen 700 percent. Some would argue that many efficiencies - shorter hospital stays, more outpatient procedures - have been realized. But these have been more than offset by the high cost of the technologies, new drugs and better trained providers that today's medical miracles depend on. And for the most part, doctors still see one patient at a time, perform one surgery at a time and write one prescription at a time.

Education provides another example. Compare the starting wages of two scholars: An assistant professor in economics starts teaching in 1982; his graduate student starts her first job in academe in 2000. The real (inflation adjusted) costs of putting an assistant professor into the classroom has increased 67 percent over 18 years. Yet the number of students taught by each has remained constant. No increase in productivity but a higher cost for the institution.

To increase this new and costlier professor's productivity, the university could require her to teach larger classes (not popular among students or faculty because of diminished educational quality) or require her to teach more classes (not popular among faculty members, the best of whom are sought by institutions that offer a reduced teaching load). Another option is spreading responsibilities to more teaching assistants and adjunct faculty (not popular among students and parents, who say that the teachers are less qualified).

It turns out Dr. Baumol is right. Colleges and universities must rely on the labor-intensive process of teaching and discovery. Human beings are heavily involved in every step of the education experience from admissions through commencement. And it is in the classroom, albeit augmented with the latest technology, that the reason for our existence becomes evident.

"Wait," says the disbelieving father, "what about the fat endowments we've been hearing about? Can't those millions cure this disease and reduce tuition?"

"It's true," says the university president, "our endowment has grown." She goes on to explain that only heavily endowed universities like Princeton and Harvard have enough unrestricted funds to use for tuition relief. Endowments are usually limited by donors who are supporting particular programs.

"Well, passing along prices like that would kill my business!" the father exclaims.

"But that's my point," she says. "For the last 25 years, despite all the price increases, international students are flocking to our universities and paying full cost. Their numbers have increased by 108 percent. We must be doing something right.

"Don't be deceived that your sons and daughters can be educated on the cheap. It still takes a dedicated faculty and strong support staff plus a high-quality
It still takes a dedicated faculty and strong support staff plus a high-quality library and up-to-date facilities to do the job. I know you wouldn't settle for less."

She thinks to herself, "Darned Baumol's disease. Wonder if the chem lab is working on a vaccine?"

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