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http://socrates.berkeley.edu/~schwrtz

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"Financing the University"

"The Cost of Undergraduate Education at a Research University"

Mark Twain wrote:

"There are three kinds of lies – Lies, Damned Lies and Statistics"

What does that mean?

What does that have to do with education at a university?

We often talk about imparting "Numerical Literacy" to our students as one task of the university.

My focus is not on the arithmetic but rather on asking what do the numbers really mean? My examples are based right here, at UC; and they have to do with money, public money and also your money.

Please feel free to interrupt me with questions as we go along.

THE UNIVERSITY OF CALIFORNIA as of 6/30/2009

10 Campuses

5 Medical Centers

3 National Laboratories (DOE)

226,040 Students Enrolled

134,912 Faculty & Staff (FTE)

\$19,538,900,000. Current Funds Expenditures

which Total expenditures are composed of:

- \$ 5.1 billion in Restricted Funds (use specified by donor)
- \$14.4 billion in Unrestricted Funds (Regents control use)
 - >>> This distinction will come up later.

the Unrestricted further decompose into:

- \$ 3.4 billion in General Funds (~ state appropriations)
- \$11.0 billion in Designated Funds (~ other UC income)
 - >>> Give some examples of other sources of money.

Data Sources (available at www.ucop.edu):

UC Annual Financial Report

UC Campus Financial Schedules

Disaggregation of \$19.5 Billion Total UC Expenditures

by FUNCTION

(\$ millio	ons)
4,266	Instruction
3,741	Research
491	Public Service
1,492	Academic Support
5,226	Medical Centers
614	Student Services
1,055	Institutional Support
565	Operation and Maintenance of Plant
458	Student Financial Aid
970	Auxiliary Enterprises
662	DOE Laboratory

The University has a three-fold mission: Teaching, Research, Public Service. You might be tempted to think that the top three expenditure categories shown above represented what is spent on each of these three missions. But that would be a big mistake.

Let's look at the expenditure data for two UC campuses to uncover one layer of mystery.

Expenditures of Current Funds (2008-09)

Uniform Classification Category	Berkeley	Los Angeles
	\$ Millions	\$ Millions
Instruction	545	1,118
Research	482	635
Public Service	61	92
Academic Support	115	321
Medical Centers	-	1,225
Student Services	121	70
Institutional Support	132	144
Operation & Maint. of Plant	71	97
Student Financial Aid	78	71
Auxiliary Enterprises	<u>118</u>	244
Totals	1,723	4,017

These two campuses are very similar in size and character; the main difference is that UCLA has a Medical School and UCB does not. There is a lot of money in that sector. But wait, Why should the amount spent on Instruction at UCLA be twice the amount at Berkeley? Something is hidden here: lots of money flowing in from the medical practice is paid out to the Med School faculty and it is recorded as an expenditure for Instruction.

It turns out that some important research studies have used government data (IPEDS) that is infected in this way.

In UC's official Budget it says that the Average Cost of Education at UC was \$16,430 per student for 2007-08; and Student Fees paid for 31% of that cost.

Many other research universities make similar claims. While undergraduate tuitions and fees have climbed rapidly in recent years, they say students' education is still heavily subsidized by state funding or other university funds.

Independent experts, using this data, make similar claims.

THESE ARE ALL LIES

Not just because of the Medical School business; there is an even bigger fraud at work.

It turns out that official number is <u>not</u> the cost of undergraduate education; it is the cost for <u>all</u> of the university's core academic functions – undergraduate plus graduate instruction, plus faculty research.

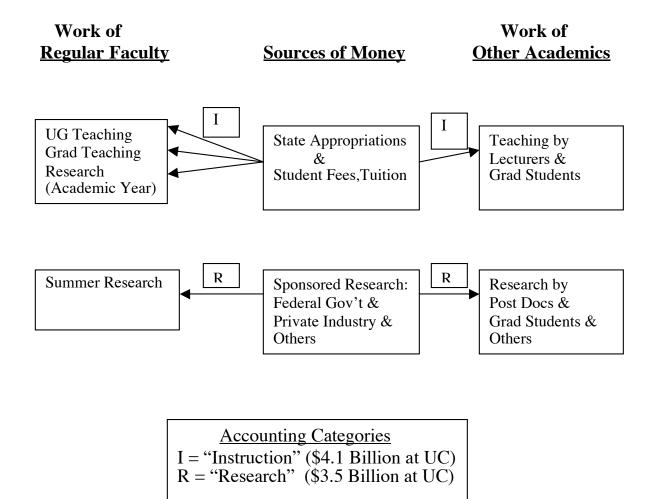
I have disaggregated this bundle, using official UC accounting records (for 2007-08) and find the average cost of Undergraduate Education at around \$7,400 per student.

You were then paying 100% of the actual cost of your undergraduate education. Now it is even more.

The state subsidy has vanished.

How can this be true? What does it mean?

Basic Financial Picture of the Research University



NOTES

Other Costs – Libraries, Facilities, Administration, Student Services – are to be added on.

The official "Cost of Education" (\$16,430 per student) covers all of the "Instruction" expenditures (excl. Health Sciences).

An honest evaluation of the "Cost of Undergraduate Education" requires that we **disaggregate** that bundle of Faculty Work.

How the Faculty Spend their Time UC Faculty Time-Use Survey 1983-84

Principal Activity Hou	<u>ırs/week</u>
All UC-related Activities	Total = 61.3
Instructional Activities	26.0
Original Research/Creative Activities	23.2
University Service	6.6
Professional Activities/Public Service	5.5

Hours/week
5.1
2.5
0.7
3.2
0.2
10.1
ng
etc.) 4.1
26.0

Breakdown of "In-Class" Hours/Week by Level of Instruction Lower Div. Upper Div. Grad Regularly Scheduled Courses 1.1 2.3 1.8 Supervising Indep./Special Study 0.0 0.5 2.1

+ 5.8 Hours/Week of Research also contributes to Instruction

***** Conclusion: <u>Faculty spend about 23% of their work time at undergraduate education</u>. See elsewhere details of the full calculation that leads to UG unit cost = \$7,400.

The results of this analysis can be carried over to other research universities with the formula C = aF + bS

Estimated Actual Costs for Undergraduate Education (2004-05)

	S/F Ratio	Cost-per-Student	Tuition & Fees
U. California	18	\$7,000	\$7,000
Harvard U.	7.0	\$18,000	\$32,000
M.I.T.	3.5(?)	\$26,000	\$32,000
Stanford U.	6.4	\$16,000	\$31,000
Yale U.	6.6	\$19,000	\$31,000
U. Illinois	14	\$7,000	\$9,000
U. Michigan	15	\$7,000	\$9,000
SUNY-Buffalo	17	\$6,000	\$5,000
U. Virginia	15	\$7,000	\$7,000

Stanford is another school that can't talk straight about where their money goes. Their official statement is that tuition covers only 60% of the cost of undergraduate education. My calculation says it is more like 200%!!

Recently I wrote to the president of Stanford suggesting an alternative statement of where their money goes:

While the actual expenditure directed to undergraduate education at Stanford is only about half of that tuition (\$32,994 per student per year), it is important to recognize the importance of the other half, which is mostly spent in support of the university faculty's research endeavors and related graduate programs. The research accomplishments of our faculty are of great significance to the whole of society and are responsible for the outstanding international reputation of Stanford University. That reputation adds greatly to the value of any diploma Stanford awards to its students; and we believe this justifies the added cost which we pass on as tuition.

How did all these great universities get into the habit of misleading their publics about how they spend the money they collect? (I&R)

Let's look at the recent UC budget deliberations and see how these various complications of the university accounting system play into controversies.

The President presents a plan and says things are tough and there are few options: The University's "core funds" come from state money and student fees; there are other sources, he says, but "Use of these funds is restricted." NOT SO. (See our earlier data.) In fact, only about ¼ of all UC operating funds are restricted as to how they can be used. The Regents, and their executives, have complete legal authority to use all the rest of the money as they see fit.

In November of 2008 I wrote up a paper on Budget Alternatives, showing how there was plenty of unrestricted money available for the Regents to redistribute in this emergency budget situation. My proposal avoided the choices of increasing student fees or curtailing enrollment, which were in the official plan. My approach involved the idea of shared sacrifice in a progressive manner. My plan got no response from UC officials.

In April, UCOP issues a glossy brochure called Budget Myths & Facts, which reasserted that same false claim about restricted funds. I wrote to President Yudof complaining about that lie; and he had one of his vice presidents write a letter in reply, admitting that I was right. But then they went right ahead and continued to use that line about restricted funds.

Here is their latest version of "Myths & Facts".

THE UC BUDGET

MYTHS & FACTS

UNIVERSITY of CALIFORNIA

Why are there budget cuts when buildings are going up? Why do student fees have to be increased while we're doing well in attracting federal research funding? Why are some people being hired at high salaries when we're in a recession?

As the University of California confronts the challenges brought about by the global economic crisis, a number of questions about the university's budget tend to come up routinely. And it's no surprise. UC is a large institution engaged in a wide array of activities, each with its own funding sources and market dynamics. The funding of UC is therefore complex.

To aid understanding, this document aims to provide members of the UC community with basic facts about how the university of California is funded. To illustrate a number of key issues, the document uses oft-repeated "myths" about the university's funding sources as a starting point.

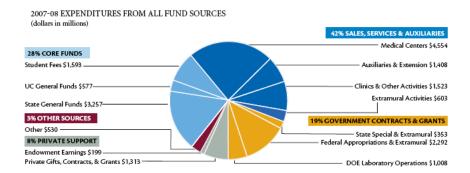
MYTH: UC doesn't really have a budget problem because it has so many different fund

sources it can dip into.

FACT: UC's budget is made up of many different fund sources, but most of them are restricted to specific uses and cannot be used for other purposes. A federal grant for laser beam research can't be used to fund a deficit in the English Department. A payment for a surgery in a UC hospital can't be redirected to fund graduate students. The university's total budget — for everything including sponsored research, teaching hospitals, University Extension, housing and dining services, the Lawrence Berkeley National Laboratory, and other activities — amounts to approximately \$19 billion.

But only a portion of that total is tied to the university's basic instructional program and the activities that support it. That "core funds" budget, which is about 28 percent of the university's total budget, consists solely of state funds, student fees, and what are referred to as UC general funds (mostly nonresident tuition and a portion of the overhead from federal and state contracts and grants).

The below pie chart shows the \$19 billion total UC budget. The 28 percent slice on the left represents the "core funds" budget, while the rest of the chart consists of funding for other programs. Those other funds generally come with restrictions on their use and can't be used to replace cuts in state support for the academic program:



This is now posted on the web site of the UC Commission on the Future – as a "Fact Sheet"

Another budget move they have chosen is to curtail freshman enrollment because their standard budget plan says the state should provide UC with \$11,000 for each additional student we enroll. And this year California has such a big budget shortfall that Sacramento will not be able to provide that funding.

My calculation says that undergraduate student fees cover the entire cost of undergraduate education. The state subsidy for undergraduate education has vanished. Thus, it makes no economic sense to turn away new students!

One of the worst consequences of this year's budget squeeze is what has happened to undergraduate education: they have cancelled courses, laid off GSIs and Lecturers, shortened library hours, etc. The familiar sad song is that students are paying more, in their Educational fees, and getting less, in their education from UC. President Yudof says that he is angry about this, too; but you shouldn't blame him; blame Sacramento.

But I ask the simple question: What are they doing with all the money that they take in from student fees? (This year all UC income from student fees amounts to more than all UC income from state appropriations.) I would like to imagine that the first priority for use of that money is to provide the education that the students are paying for. But, apparently, the top administrators of UC have some other set of priorities. I have been trying to find out where all that money has gone; and so far it is still a mystery.

Now, let's see how the Board of Regents plans for the longrange future financing this great public university.

A few years ago they adopted some principles to guide in setting budget priorities. Three principles encapsulated the ideals of California's Master Plan for Higher Education: UC should maintain Quality; Access; and Affordability. However, they made it clear that if state revenues were insufficient for all three, Quality would be priority #1. So student fees have risen sharply in recent years.

Recently the Regents formed a new UC Commission on the Future. This is supposed to seek viable plans for how to maintain the University's academic excellence and public character under the assumption that state funding will continue to decline.

I believe that many, if not most, of the regents have already accepted the idea of Privatization. That will mean rapidly rising student fees and probably a sharp decrease in access for those students who do not come from wealthy families.

I have submitted my own PLAN to that Commission; it involves dealing honestly with the false bookkeeping habits I have been talking about here. I don't expect too much.

More importantly, there is a lively awakening of students and faculty and other concerned citizens who are mounting strong campaigns to save public education in California. Another financial issue of contention:

Bureaucratic Accretion

From official UC data we can see how the major categories of employment have grown from 1996 to 2006:

Management	+118%
Academic Staff	+ 34%
Non-Academic Staff	+ 27%

I have estimated the excess cost at \$600 million per year.

UC officials have not offered any justification for this.

This graph shows the data for the Berkeley Campus.

UC Berkeley Employment FTE

