

TO: The Working Groups of the UC Commission on the Future

AT: Their public Meeting on the Berkeley Campus, December 3, 2009

FROM: Charles Schwartz, Professor Emeritus [Schwartz@physics.berkeley.edu](mailto:Schwartz@physics.berkeley.edu)

For Your Consideration, I submit the enclosed proposal:

A BETTER PLAN FOR THE FUTURE OF THE UNIVERSITY OF CALIFORNIA

3 pages summarizing this comprehensive PLAN, followed by 20 pages of relevant background material from my recent seminar on this topic.

In submitting this proposal, I request a thoroughgoing review that will produce a critical response: first identifying any faults you may find in my assertions of fact or logic; then offering whatever opinions you may develop about the feasibility and desirability of the changes that are proposed. That is the caliber of work we expect in the University.

The overall concept of this PLAN is to seek a partial renewal of state funding for the University of California *together with* substantial changes in the way that UC handles the money it receives. This approach (“walking on two legs”) should be the best way to bring the University and California together again and thus avoid the perils of UC either decaying from its preeminent academic standing or abandoning its invaluable public character.

To be perfectly frank, these proposals do step on the toes of certain factions of the University, namely, the Board of Regents and their chosen executives. But, please remember, our primary goal is to preserve the University, this center of great learning in the service of the public good.

I will be happy to provide an electronic copy of this presentation, so that it can be posted on the central website of the Commission for any interested persons to access.

Thank you,

Charles Schwartz

I shall in any case post this on my academic website  
<http://socrates.berkeley.edu/~schwartz>

**A BETTER PLAN**  
**for the FUTURE of the UNIVERSITY of CALIFORNIA**

by Charles Schwartz, Professor Emeritus, UC Berkeley  
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Fall 2009

Pages 2-4: Summary of the PLAN

Pages 5-24: Background materials from the Research Seminar

# A BETTER PLAN for UC's FUTURE

## Preamble

Most ongoing discussions about the financial future of the University of California fall into one of two camps:

PLAN A: We must get the State of California to return to its old ways of full funding for the public missions of UC; or

PLAN B: We must recognize that state funding will not return to what it was and therefore increased privatization is necessary to preserve the excellence of UC.

The present PLAN finds a different footing; it is compatible with Plan A, though less ambitious for now, and it is an alternative to Plan B.

## Overall Concept

The overall concept is to seek a partial renewal of state funding for the University of California *together with* substantial changes in the way that UC handles the money it receives. This approach (“walking on two legs”) should be the best way to bring the University and California together again and thus avoid the perils of UC either decaying from its preeminent academic standing or abandoning its invaluable public character.

The goals of Quality, Access and Affordability are held central to the three missions of teaching, research and public service. A singular new feature of this PLAN is that, while we continue to recognize the interrelation between teaching and research, we also recognize that substantial distinctions need to be made between funding for undergraduate teaching and funding for research and related graduate programs.

Once that basic financial lesson is learned and put into place, several other longstanding problems at UC – such as bureaucratic bloat and the excesses of executive compensation – can be addressed through a renewal of the basic philosophy that the university is a place for learning in the service of the public good, rather than just another place where a smart person can make a buck. The inadequacy of The Regents is also noted.

## Background

In the past, the state provided all of the core funding - that means: state appropriations provided for all the academic year salaries of the faculty plus their departmental support, institutional infrastructure and overhead - and there was no need to distinguish between money for research and money for teaching.<sup>1</sup> That whole bundle is called the I&R Budget (for Instruction and Research). With the rapid rise in student fees at UC, by far most of which are paid by undergraduate students (and their families), that old financial arrangement must be revised.

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<sup>1</sup> There is also a lot of external money for research projects, but that is outside of the core funding.

When UC continues to announce that student fees now cover 30% of the Cost of Education, that is a very misleading representation of the present situation. That calculation looks at student fee revenues compared to UC expenditures for that entire I&R Budget and then presents the result as if it referred only to the Instructional component. That habit of (mis)accounting is not unique to UC, but is endemic to all of higher education, infecting private research universities even more severely than the public ones. That bad old habit has serious consequences; it misleads the public and their representatives in Sacramento, it distorts internal funding priorities and it paves the way for this great public university to move more and more in the direction of privatization.

### **Summary of the PLAN**

The overall PLAN consists of twelve actions, which are summarized below.

1. UC must acknowledge that its calculation of “The Cost of Education” is really the Cost of the Core Bundle - undergraduate education and graduate education and faculty research throughout the academic year – and UC shall commit itself to disaggregate that bundle to the extent of providing an accurate average Cost of Undergraduate Education.
2. That calculation of the Cost of Undergraduate Education shall be carried out by a rational and objective method, using the best available input data. The best model now known for this disaggregation is the work of Professor Emeritus Charles Schwartz of UC Berkeley. (Schwartz’ latest work<sup>2</sup> concludes that undergraduate fees at UC amount to 100%, not 30%, of the actual per-student Cost of Undergraduate Education. He acknowledges that this result may be refined by better data and further analysis.) The process adopted by UC for defining this calculation shall involve full participation by the most relevant parties, including student representatives and state representatives along with faculty and administrative staff.
3. The Regents shall declare as a matter of firm policy that mandatory fees (tuition) for resident undergraduate students at UC shall never exceed the average per-student Cost of Undergraduate Education, as determined above. This has implications for some other aspects of UC finances; it also sets a nationwide precedent.
4. The State of California shall commit itself to providing UC with reliable funding for the remaining portion of that total Cost of the Core Bundle, that is, for the maintenance of the core research funding (faculty salaries and graduate students and support staff and institutional overhead) that is necessary to maintain the breadth and the quality of UC as a top ranking research university. The details of this commitment remain to be negotiated between UC leaders and state officials (and perhaps, also, leaders from the private sector); and it must be realized that failure to reach some agreement will likely lead to the collapse of UC’s excellence as the top research faculty flee for greener pastures.

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<sup>2</sup> <http://socrates.berkeley.edu/~schwrtz/> “Cost Accounting at a Research University”

5. The state shall also strive to reduce the financial burden on undergraduate students below that maximum amount specified above. Adequate funding for other components of public higher education (CSU, CCC) is a related issue that UC should support.
6. The state shall also commit to providing adequate funding for need-based financial aid for students throughout all of California's higher education.
7. The UC administration must justify or eliminate \$600 million/year of excess bureaucratic growth, which has been documented. (See [http://socrates.berkeley.edu/~schwartz/Seminar/Seminar10\\_13\\_09.pdf](http://socrates.berkeley.edu/~schwartz/Seminar/Seminar10_13_09.pdf) )
8. UC shall cap executive compensation, following a 1992 recommendation by the Berkeley faculty, at no more than twice the average compensation of Full Professors. <http://socrates.berkeley.edu/~schwartz/SacBee.html>
9. Acknowledge the need for more real transparency at UC. Budget discussions should be more open, so should policy discussions; use of discretionary funds reported; truth about intercollegiate athletics; more open management of the pension fund.
10. Reject the corrupting language in the University: the Market rules; the Entrepreneurial professor; Competition. Alternative: a learning community; a calling for teachers and researchers; a public service.
11. Acknowledge misdirection coming from the regents – corporate values rather than academic. How to change that?
12. Call for leadership on the national scene of higher education to control irrational inflation – these shortcomings are not unique to UC.

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The PLAN should have an objective and consistent logic: Reform UC's financial mismanagement while preserving its academic excellence. The goal (an intermediate if not ultimate goal) is to regain public support without demanding a return to the old ways of full state financing.

Another way of expressing this is: Undergraduate students are now paying their full share of the educational costs, so the state must carry its burden of providing for UC's top quality research mission, which benefits everyone.

Politically, this PLAN should earn strong support from University faculty and students and also from the general public of California. It does step on the toes of the existing UC leadership – The Board of Regents and their hired executives.

Some of the action points listed above do need detailed background discussion papers.

# Research Seminar, “Financial Futures for UC” at the University of California, Berkeley

September 15 – October 20, 2009

more details available at

<http://socrates.berkeley.edu/~schwartz/Seminar/Seminar.html>

## **First meeting**

### Organization

Thanks to the Department of Physics for its hospitality in providing the space for this seminar. This is open to all faculty and students, without prerequisites and without any formal status. There is no fixed syllabus; this is completely experimental. If any student wants course credit, that should be arranged with some faculty member as independent study.

My own style in this seminar is to invite interruptions, questions, challenges at any time. This should not be a lecture but a wide open discussion – within limits, of course. I will also be inviting you to suggest topics that you would like to have us look into, dig into more deeply. We may invite some other people to come and talk to us, to debate before us; and some members of this seminar may want to go off on investigations of their own, about which they might report back to the group.

I will try to keep a collection of papers for this seminar posted on my web site <http://socrates.berkeley.edu/~schwartz> under the heading of Seminar. It would be nice if some one or two people in the seminar would keep notes of what we discuss here; those could be added to the web site and, if we are successful in creating some new and useful ideas and analyses here, those notes would be important in some later publication.

### General Background

For some years the level of state support for UC (as with much of public higher education throughout the country) has been lagging at best and often decreasing. This year is particularly bad. For some time one has heard grumblings at the Board of Regents about what this trend portends for the future of this, the world’s greatest public research university. The new mantra at the top is “the old funding model is broken.” And now the regents have formed a new UC Commission on the Future, which is supposed to come up with a new financial model over the next six months.

I conceived of this seminar as an alternative effort – and we can talk more later about why that might be needed and how it might actually contribute. Our work here is academic in the sense that we hope to use intellectual skills to ask sharp questions and seek meaningful answers. But we are also dealing with institutions and issues embedded in a big political environment; and we should not shrink from discussing those “non-academic” aspects of the problem.

Experts?

UC officials repeatedly voice their three top goals for the University as: Quality, Access and Affordability. However, if one listens closely, there are hints, or outright statements, that if not all of those can be maintained, Quality is #1. The word Privatization is heard more and more commonly. So, let's start by understanding something of what that means.

### Public and Private Research Universities

Name some of each type

How are they similar? How do they differ?

The faculty: very similar in work and funding

Graduate students: very similar in work and funding

Undergraduate students: their numbers are very different and the philosophy is completely different. Admission in both is according to some measures of academic attainment and promise; but the privates are **exclusive** while the publics are **inclusive**. The key word here is ACCESS.

Comments?

### Where the Debate is Now

I have posted a recent (8/7/09) paper by Stan Glantz, who is a Professor at UCSF and former Chair of the Academic Senate's Committee on Planning and Budget. He gives an interesting analysis of how we got here and ends with a summary of three possible outcomes for the future of UC.

1. **The status quo:** There are continuing declines in quality with continuing rapid fee increases that are not adequate to replace state funds that have been cut because of the view that higher education should be a private not a public good. This situation will probably result in a fracturing of the UC system into a few high quality (and probably more expensive) campuses with a strong research base with the others coming to represent CSU. Except for a few centers that attract substantial private funding, high quality faculty and students will abandon the system. This is probably the worst outcome.
2. **Privatization while maintaining quality:** Priority is given to providing a quality educational experience for substantially fewer students that UC (and CSU) can afford to educate while maintaining the system as a whole. Implementing this model would require substantial reductions in enrollment (probably around 30%) tied with very large fee increases.
3. **Reinstatement of California's historic commitment to the Master Plan:** Such an option should be framed as restoring UC, CSU and the community colleges to levels of funding per student that were available in 2001 at the same real fees students and their families paid in 2001, the last year that the systems were in reasonable health financially and in terms of quality (see Futures Report). Doing so would only cost \$2.7 billion,<sup>8</sup> which is

only a few percent of the state budget and only about half the forgone revenues due to cutting the Vehicle License Fee.<sup>9</sup> It is not impossible to obtain these funds (despite such assumptions by the Regents and UC leadership), but it would require a change in fiscal (and probably tax) policy by the state, which would represent a major shift away from the current ideological positions.

Option #1, The Status Quo and the steady decline of UC as a leading research university, is what nobody wants, but what most people expect if no major changes are made.

Option #3, a return to the old ways of generous state funding for higher education, as “promised” in the Master Plan, is what everyone wishes for.

Option #2, some accelerated version of Privatization, is what seems most likely on the table, as the people in charge of UC see little chance of realizing Option #3 and want most to avoid Option #1.

Maybe we can, at some stage in this seminar, have people come in who will advocate strongly, for and against, Option #2 and Option #3.

Let me give my own view of where we are now.

Option #3 is ideal but difficult to achieve, but certainly worth a major effort to try. However, it will not happen very soon. The Regents have set up a timetable, which expects some major proposals from the Commission by next spring, and they will act on them promptly. They will say that they are all in favor of Option #3, but they must act quickly to prevent the loss of top faculty from UC. So they will go with some version of Option #2.

[Read some “Selected Quotes” from the July Regents’ meeting to support this view of how the UC leadership is thinking.]

President Yudof has announced plans for the 2010-2011 UC budget that pushes us farther down that path of privatization: increased student fees (up by 32% next year), differential fees, more nonresident undergraduates (paying super fees).

Option #2 carries great dangers in that steps toward privatization may lead to a very “slippery slope.” (describe some scenarios.) The loss of the “Public” character of UC, the loss of Access (and diversity) may accelerate and be irreversible.

*Therefore, one should seek substantial alternatives: that is the purpose of this Seminar.*

Discussion.

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**Second meeting**  
(originally a Power Point presentation)

Financing the Research University  
an examination of concepts and dollar flows

Two Basic Concepts from Philosophy and Economics

- PUBLIC GOOD
- PRIVATE GOOD
- discuss what those phrases mean

Schools K-12

- Public Schools for the Public Good; paid for by the taxpayers
- Private Schools for the Private Good; paid for by the parents of the students

Colleges – undergraduate

- Public ones and Private ones, as with K-12

Research Universities have 2 or 3 Basic Missions

- Teaching (undergraduate & graduate)
- Research (also professional schools)
- Public Service (in the public U's)

Public Research Universities in the Good Old Days

- Teaching and Research are both seen as Public Goods and are paid for with public funds: the whole “I&R Budget”

(There are additional funds from external sources: research contracts & grants)

Private Research Universities

- Teaching and Research are both seen as Private Goods and are paid for with student tuition (plus endowments).

(There are additional funds from external sources: research contracts & grants)

### How Privatization began

- In the 1990s Public Universities started charging students larger and larger fees on the grounds that their education was a Private Good and therefore they, the students, should pay for it, at least in part. The state still paid for the rest of their education, “the state subsidy.”

### Isn't There a Limit ?

- The Research mission of the Public University is still a Public Good; and it seems wrong to pass that cost on to students.
- Watch out when the state subsidy for education approaches zero!

### Accountability & Transparency

- These much touted words have never been applied to the archaic budget and accounting systems used by America's Research Universities.
- The cost of Departmental Research has always been hidden under the accounting category of “Instruction”.

### What is Departmental Research?

- It is any research activity that is not paid for by an explicit budget allocation or an external source.
- In other words, it is the research component of most Professors' work throughout the academic year.

### So, why is Departmental Research counted as a cost component of Instruction?

- It is an old habit.
- Maybe it is a bad habit.
- Questioning that habit is frowned upon.

### Any Bad Consequences?

- The University of California says that Student Fees now cover 30% of the Cost of Education.
- That is *very misleading*, because

- They include Departmental Research when they calculate that Cost.

#### Can One Separate the Costs?

- This is controversial, but
- My calculations conclude that:
  - Undergraduate Student Fees now amount to 100% (not 30%) of the average per-student Cost to UC for providing Undergraduate Education.

#### UC's Bad Accounting is not just Dishonest, it is Stupid

- When you tell the public and their lawmakers that students are now paying only 30% of the cost of their education, that tells them that there is plenty of room to keep cutting state funds for UC - because they can just raise the fees some more!

#### Next

- Next week, we shall look closely into the universities' accounting system and explore the mystery of NACUBO

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### Third meeting

The University of California, the world's greatest institution of higher education, is facing a crisis. It is a financial crisis; it is also a moral and political crisis. It seems that the future must lead in only one of two alternative directions: either to the collapse of UC's great reputation as a premier research institution; or to the abandonment of UC's public mission, being open to all eligible students regardless of their financial status.

We talk often about privatization: and right there is the crux of what that word means. Private universities select their undergraduate students as an exercise in exclusivity; we public universities do it based on inclusivity. Right there is the moral and political issue of institutional purpose. The question is often put as a choice: Do you want to preserve Quality (which means research excellence) or do you want to preserve Access (which means open to all qualified students)? Are those two goals in competition? Can't we achieve both?

It really is about money. But it also requires that everyone who cares about this story (this history in the making) learn in some detail about the financial aspects of this choice. This is not a simple subject; and the people usually in charge of the financial management of the University are not to be trusted.

This lesson starts to study the accounting system of UC (and all other research universities). This is a subject full of mysteries and surprises.

Let's start with one page of the annual accounting report called "Campus Financial Schedules", which may be found at <http://www.universityofcalifornia.edu/finreports/>.

First, we look at Schedule 12-C (<http://socrates.berkeley.edu/~schwartz/Seminar/08sch12c.pdf>), which shows Expenditures of Current Funds (for 2007-08) by Fund Source and by Campus.

A common idea is to ask how much of the total funding comes from the State of California. So we divide the "General Funds" number by the "Total" number.

For Berkeley, that ratio is  $491/1652 = 30\%$ . For UCLA it is  $625/3734 = 17\%$ . How do you understand the considerable difference in those two numbers? It has something to do with the Medical School – which LA has and Berkeley does not have. The denominator (the Total funding) at UCLA is over twice what it is at Berkeley. This may be seen by noting the entry for "Sales and Services of Medical Centers" and also the entry for "Sales and Services for Educational Activities", which happens to be an accounting euphemism for the clinical (outpatient) medical practice activity associated with every Medical School. Many of the Medical School faculty are practicing doctors; they see patients, collect money for that service, and that is a business conducted by the University. So we learn to be careful about asking the simple question: What fraction of our money comes from the state?

Next, let's look at Schedule 12-B

(<http://socrates.berkeley.edu/~schwartz/Seminar/08sch12b.pdf>), which shows the expenditure data, by function. Here we see, for each campus, the expenditure broken down according to the Uniform Classification Category: Instruction, Research, Public Service, etc. Here, again, you see the big entry for Medical Centers at UCLA but not at Berkeley. But look at the other categories. Research is noticeably larger at UCLA: that probably is due to the Medical Schools and their large amounts of research funding from the NIH. But also notice that Instruction and Academic Support are about twice as big at UCLA as they are at Berkeley. Why is that? It turns out that that is how the money from the clinical practice is reported. There are office and clerical expenses, which happen to be accounted for as "Academic Support"; and then there is the huge amount of money paid out to the Medical School faculty, under the Clinical Compensation Plans, which happens to be recorded as an expenditure for "Instruction."

What we are learning here is that the university bookkeeping system is full of boobytraps for the unwary. The numbers are perfect; what the numbers mean must always be open to questioning. The examples I have cited above are not abstract quibbles; some of the most respected data resources and some of the most respected researchers in the field of financing for higher education have been misled by thinking that something called "expenditure for instruction" really meant what it seemed to mean.

When we look at the budget documents coming from the UC administration, there is a separation of the Health Sciences from the General Campuses; so the particular problem I described above is not our main concern here. Something more mysterious is now ready for our attention; it goes by the name of Departmental Research.

To learn about this, let us look at the UC Accounting Manual, Section u-751-17 (<http://socrates.berkeley.edu/~schwartz/Seminar/u-751-17.pdf>), which gives us the formal definition of what is to be counted as Expenditures for Instruction. There you see that the accounting category "Instruction" includes "departmental research and public service that are not separately budgeted." What is that? and Why is it counted as a cost of Instruction rather than a cost of Research?

To get a bit more input on this question, let me quote something from UC's official budget. In the chapter headed General Campus Instruction, we read this.

#### **Instructional Program Overview**

The general campus Instruction and Research (I&R) budget includes direct instructional resources associated with schools and colleges located on the nine UC general campuses.

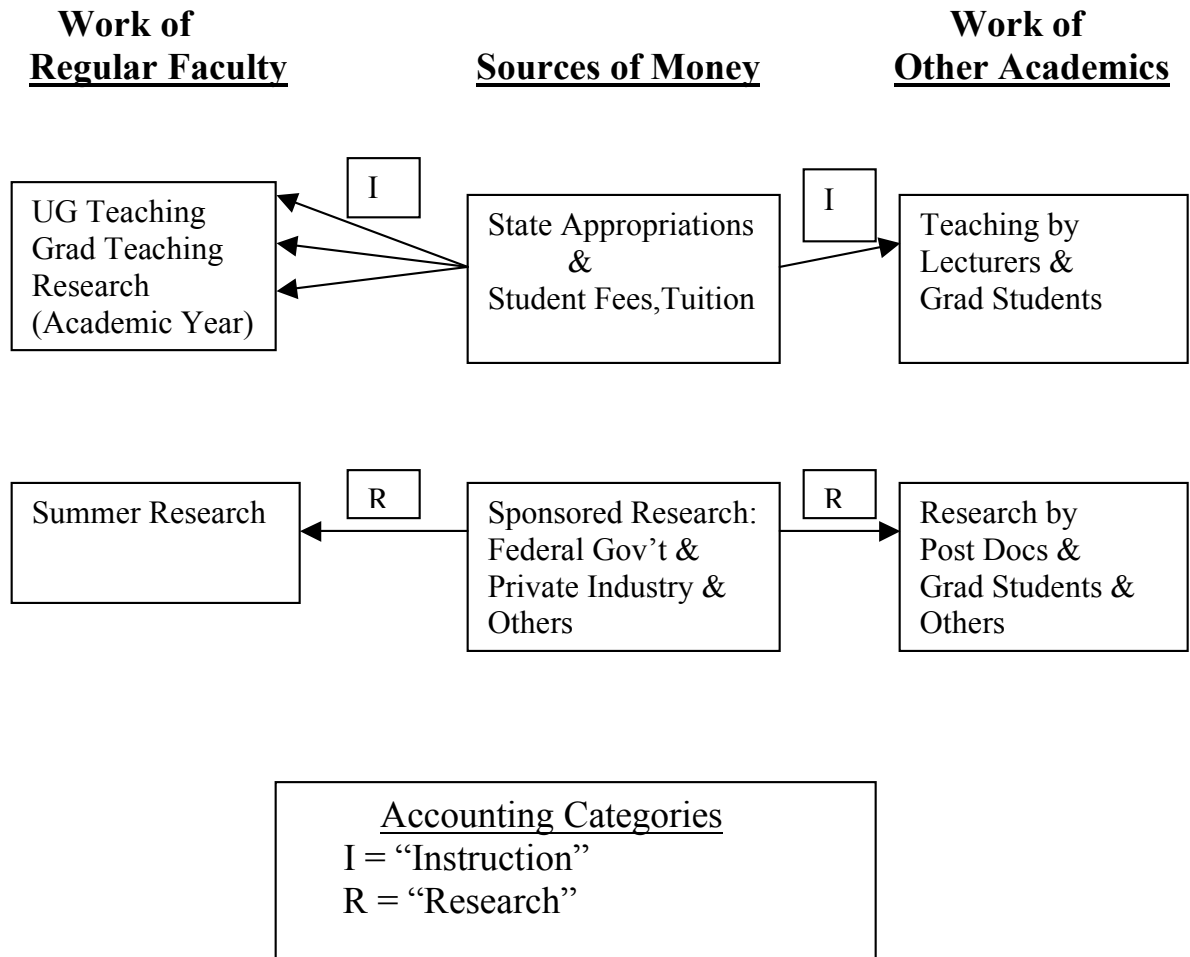
...

Major budget elements and their proportions of the general campus I&R base budget are: faculty and teaching assistant salaries and benefits, 58%; instructional support, 37%, which includes salaries and benefits of instructional support staff such as laboratory assistants, supervisory, clerical, and technical personnel, some academic administrators, and some costs of instructional department supplies; and funds for instructional equipment replacement and technology, 5%.

Did you figure that out? Faculty salaries – *the whole of faculty academic salaries* – is part of “Instruction”, in both the budget and in the accounting, even though we know that the faculty at a research university are hired for and perform at both teaching and research.

Let me show a picture that depicts this arrangement. Most of this is perfectly familiar to all faculty members at any research university.

## Basic Financial Picture of the Research University



Other Costs: Libraries, Facilities, Administration, Student Services

That box in the upper left corner plus the one in the upper right, that is the I&R bundle: it covers all of undergraduate education and graduate education and faculty research throughout the academic year. But it is recorded simply as “Instruction”.

This is the universal and long-established bookkeeping habit maintained by NACUBO – the National Association of College and University Business Officers. It has serious consequences.

In 2002, NACUBO issued a report telling Colleges and Universities how to calculate and inform the public about their Cost of Delivering Undergraduate Education (<http://socrates.berkeley.edu/~schwartz/Seminar/NACUBO2002.pdf>). They acknowledged (page 27) that “Several alternative proposals were considered, but NACUBO concluded that all departmental research costs should remain within instruction and student services.” They did some surveys with their methodology and reported (page 33), “NACUBO found that at almost every participating institution, the cost of providing the programs and services that were part of undergraduate education exceeded the price charged to students and their families in the form of tuition and related fees.”

### **See How Research Universities Describe Their Costs and Tuition Rates**

Average Expenditure for Education is \$17,390 per student (2007-08);  
Student Fees, net of financial aid, cover 30% of this.

-- *University of California*

The money the university collects from tuition (\$34,800 in 2007-08) covers only about 60% of the costs of educating an undergraduate.

-- *Stanford University*

Tuition and fees will increase to \$36,390 (in 2008-09); however, this figure represents less than half of what it costs MIT to educate an undergraduate.

-- *Massachusetts Institute of Technology*

These statements are all based on using that NACUBO methodology for calculating the Cost of Education. It is all very misleading. Some might even call it a fraud.

Now we know what “Departmental Research” means. Somebody has to pay for the everyday research work that the faculty do. This work is the very heart of what a research university is all about but there is no separate provision for this work in the standard way we construct our budgets. So, we’ll just bury that cost under the heading of “Instruction” and pass it on to whoever is paying the tuition. Certainly, faculty research does make some contribution to undergraduate education; but to put ALL of that cost on the bills of undergraduate students is just wrong.

Can one do a more honest job? Can one sensibly dis-aggregate the cost of Undergraduate Education from that big bundle? That will be our subject for next week.

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## Fourth meeting

Last time we learned about “Departmental Research” and how the standard accounting practices of research universities hides the cost of faculty research (that which is not paid for by external funds) under the category of “Instruction.” Today we will deal with the question: Is it possible to separate the actual cost (cost to the University) for providing undergraduate education, as that mission may be separated from other missions?

It has been customary for “experts” in higher education finance to say that such a separation is impossible or arbitrary and meaningless. Economists refer to it as the “joint production problem”. The industrial analog is this: If you have a business that makes two or more different products, all coming out from the same factory, how would you figure out how much it costs you to produce each one. You know how much you spend, overall, for materials and for labor and for rent and utilities, and for management, etc. Any suggestions about how one might do that dis-aggregation of costs in a rational and objective manner? This subject is called Cost Accounting.

The standard answer goes by the name Activity-Based Costing (ABC); and the simplest version is to measure the time that your employees spend working on each product, and thus you can allocate the proportional share of salaries and wages to each product. Overhead costs can then be allocated using the same proportions. This is not perfect, but it is sensible.

Now, it turns out that the University of California did conduct a Faculty Time-Use Survey some time ago. You can see the whole report for the 1983-84 academic year at <http://socrates.berkeley.edu/~schwartz/Seminar/FacultyTimeUse.pdf> ; and we shall now look at the resulting data

### page 3. Highlights of the Study Findings

Regular faculty members (100% I&R FTEs) spent an average of 61.3 hours a week on University-related activities of all kinds. This total includes:

- 26.0 hours on instructional activities;
- 23.2 hours on research/creative activities;
- 6.6 hours on university service;
- 5.5 hours on professional activities/public service.

There are further details showing the component activities. For example, within Instructional activities we learn that Regularly Scheduled Courses took an average of 5.1 hours/week, Supervising Independent Study averaged 2.5 hours/week, and Course Preparation time averaged 10.1 hours/week. [See page 3 of the report.]

Furthermore, we learn that the survey also asked faculty members to say if some portion of the non-instructional activities they reported also contributed to Instruction. The results are shown in Table 5 on page 41:



5.8 hours of the research/creative activities also contributed to instruction  
0.7 hours of the university service also contributed to instruction  
0.9 hours of the professional activities/public service also contributed to instruction

Comment 1. That second item above looks awfully small, since a fair portion of committee work (university service) would be related to courses and teaching. However, it turns out that the list of activities specified in the survey as components of Instructional activities already includes “informal or committee discussions regarding teaching, curriculum, etc.”

Comment 2. There is a common argument that the faculty’s research activity contributes in valuable (or maybe invaluable) ways to the quality of their undergraduate teaching. What we are trying to get at here is how much money the university spends on this mission, not how much it might be valued by the recipients of that education. We know that private universities charge exorbitant tuition and people are willing to pay that because they believe that the elite status implied by a diploma from that famous school is worth it. For the public university there may be some similar snob appeal (I graduated from Berkeley, not Merced); but our objective here is to get an honest accounting of where the money gets spent inside UC. The data used here are the best one could imagine: averaging the opinions of the faculty members themselves about what their hour-by-hour work as Professors is directed towards.

Comment 3. I can even make an argument that the “also contributed to instruction” items should be ignored in calculating the cost of undergraduate education. It goes back to our discussions of public good and private good. Faculty’s research work is entirely a public good. Faculty’s teaching work may be argued as part public good and part private good. Now we ask, How could that public good, which is the professor’s research work, be converted to a private good just because that same professor teaches an undergraduate class? If you insist that the undergraduate student gets a special educational benefit by being taught by a research professor (and this is a debatable issue), I would answer that the university’s admission process – which is a matter of public policy – selects those students who are most able to make good use of that advanced educational input. So that contribution is a public good and should not be part of our calculation of what the maximum private good (the cost to UC for providing the undergraduate education) amounts to. I shall not press this argument, however, and stay with the calculation as described above.

One other set of data tells us how their classroom teaching time is distributed among the different levels of instruction, including primary classes (lecture or seminar) and independent study; and the result is that it splits 50% for undergraduate courses and 50% for graduate courses. [See Appendix Tables A-3 and A-4 in the report.]

Putting these numbers together I come out with the result: 23% of faculty work time, on average, is devoted to undergraduate instruction. The details of how I combine these numbers is given in the paper, “The Cost of Undergraduate Education at the University of

California – Improved Calculation”, December 15, 2007, which is posted at <http://socrates.berkeley.edu/~schwartz/recost.html> . There is room for some disagreement on the details of my arithmetic, which I won’t go into here. The crudest summary can be stated as: on average, faculty at a first rate comprehensive research university spend one-half of their work time at teaching, and one-half of that is directed to undergraduate students.

Questions and comments about the overall ABC method and about this calculation?

- Is that data too old to be used nowadays?
- Are there alternatives to the simple time-weighted allocation of costs?
- Would it be reasonable to use this same result (23%) and apply it to comparable research universities?

How do we use this information to proceed with a calculation of all the components of university expenditure that go into the total Cost of Undergraduate Education? This is what we shall explore now. The last calculation I did, in December 2007, is posted here: <http://socrates.berkeley.edu/~schwartz/recost.html> . (Go through the steps of that paper.)

The result I got, for the academic year 2007-08, was that mandatory fees for resident undergraduate students at UC amounted to 95% to 105% of the actual per-student average expenditure by UC to deliver undergraduate education.

- This result says that the state subsidy for undergraduate education has vanished.
- Undergraduate Education at the University of California is now completely privatized.
- This must have a number of serious implications for public policy, and not just in CA.

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## **Fifth meeting**

### **Excess Administrative Bureaucracy at UC**

This is a summary of recent investigations, based upon statistical employment data from UC's own offices, that finds and asks questions about excessive growth in administration for the whole University and its individual campuses. It is also a sad story about top UC officials' failure to treat this problem seriously.

The University of California provides a regular tally of its employees, going back over many years, posted at <http://www.ucop.edu/ucophome/uwnews/stat/>. Here one can see twice-yearly statistics of FTE (Full Time Equivalent) counts in three major categories, with two-dozen subcategories:

Management (Senior Management Group, Management & Senior Professionals)

Academic Staff (Faculty, Researchers, Librarians, Student Assistants, etc.)

Professional and Support Staff (Clerical, Fiscal, Health Care, Technical, Craft, etc.)

I have written up several studies starting with this data, and they are posted at <http://socrates.berkeley.edu/~schwrtz> under the series heading, "Financing the University."

In "Part 6" of that series, posted 9/1/2003, I noted that over the period Oct 1996 to Oct 2002, Total Academic Staff had grown by 22%, Total PSS Staff had grown by 21%, and Management had grown by 69%. I also noted that one particular subdivision of PSS - Fiscal, Management and Staff Services - also showed abnormal growth at 68%. I recommended that "UC should bring in some independent business efficiency experts to look critically at administration spending and identify possible savings." That paper, widely distributed to UC leadership, received no response.

A year later, when Berkeley's new Chancellor Robert Birgeneau made his first appearance before the local Academic Senate, I presented him with a similar page of employment data for this campus and asked him to look into this apparent burgeoning of our bureaucracy. He said that he would look into this but, in fact, I never heard from him about that.

Early in 2006, I wrote this up again and mailed it to UC President Bob Dynes, with a specific request that he look into this and see if there was any reasonable explanation for why UC's management staff continued to grow at such an inordinate pace. He never replied. However, I also sent copies of that letter to a couple of faculty Senate leaders and one of them did respond in a responsible manner. Professor Stan Glantz (of UCSF), as Chair of the system-wide Committee on Planning and Budget, looked into this data with his staff, wrote up his own findings and forwarded that to the head of the Academic Senate with the following conclusions.

The growth in management relative to faculty and students is disturbing, however, because it is difficult to reconcile with the notion that research and teaching are the University's top priorities.

UCPB would like this analysis to be forwarded to President Dynes with a request for an explanation of the noted trends and disparities. We would also appreciate knowing whether UC's future growth plans will continue in the same direction or be modified and, if so, based on what factors.

On June 14, 2006, President Dynes, speaking to the Assembly of the Academic Senate, said that he had appointed a special task force (some Vice Presidents and Senate leaders) to look into this matter; and he added his opinion that the outsized growth in management positions was probably attributable to the University's medical centers. That prompted me to write him another letter, pointing out that his hypothesis was very doubtful, since the two campuses that showed the highest rate of management growth, namely Berkeley and Santa Cruz, had no medical schools. I also offered to meet with his special task force and provide some background from my earlier studies of UC's administrative bureaucracy. I never heard from the President, nor have I heard of any further activity by that special task force he appointed to look into this matter.

On May 2, 2007, I issued "Part 12" of that same series of papers, updating this study of UC employment data. Looking at the 10-year interval, Oct 1996 to Oct 2006, it showed:

Academic Staff grew by 34%

Professional and Support Staff grew by 27%

Management grew by 118% -- to 7,381 FTE

and that subdivision Fiscal, Management, etc. grew by 98% -- to 17,345 FTE

With the total UC employment having grown by 31%, I calculated the apparent excess of positions in those two management categories and estimated that this cost the University about \$600 million per year in salaries. I wrote that this looks like a lot of wasteful administrative bloat and asked, Who cares? Again, no response.

The next step involved getting more detailed employment data. Working under the California Public Records Act, and with assistance from the relevant staff at UCOP, I was able to obtain (at a moderate cost) Excel files listing over 1500 Job descriptions, with the FTE counts for each, as of those same dates in 1996 and 2006. This let me identify the main sub-sub-categories involved in that rapid growth and consider how to regard each one. The Executive Program held nearly constant in size, at around 300. The MSO positions (the chief staff administrator in each academic department) also showed very little change. So I put those groups aside. I also noticed that there was rapid growth in the jobs related to Computer technical work; but that seemed like an area of rapid growth for an obvious real need. So I put those aside also.

Additional information about job descriptions left the strong impression that the major positions in "Fiscal, Management and Staff Services" were fairly sophisticated (e.g.,

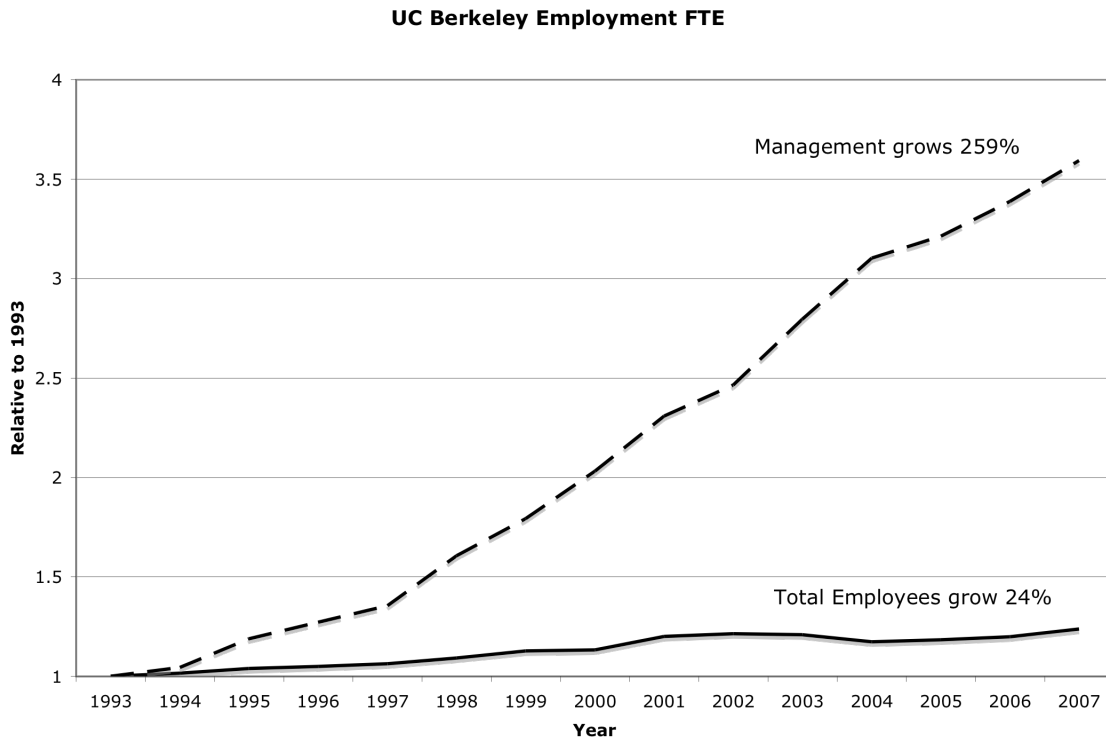
requiring a college degree) and served as immediate support for the higher level of managers in the MSP class. This was a picture of what one would call a bureaucracy.

What was thus isolated – and this is shown in my paper “Part 13” of 9/30/07 – was a reduced set of administrative positions, showing even more rapid growth rates, yielding the same overall estimate of \$600 million per year in apparent wastage. That paper closed with, “I do not claim it is proven that all of that \$600 Million is wasted but, given the data presented here, I do challenge UC officials to demonstrate that it is not.”

Finally, “Part 14”, published 2/13/08, reported on newer data that let me separate the Health Sciences (showing a total wastage of \$263 million) and the remaining General Campuses (at \$342 million). Additionally, the latter was separated campus-by-campus, with the worst examples of this apparent bureaucratic bloat in terms of dollars wasted per year being: Berkeley - \$91 million; UCLA – \$54 million.

That paper closed with the suggestion that people on each campus should confront their top officials with this data and ask for explanations. The Faculty Association at UCLA did contact me and then undertook their own study of this data, confirming and extending my findings. See [http://www.uclafaculty.org/FASite/Admin.\\_Growth.html](http://www.uclafaculty.org/FASite/Admin._Growth.html)

In November of 2008 I went to a meeting arranged by the local Academic Senate and handed out copies of the following graph, which summarized this subject of bureaucratic growth for the Berkeley campus.



At that meeting Chancellor Birgeneau came over to talk to me and so I handed him a copy of this graph. (He is a physicist, like me, and so I am sure he was immediately able to appreciate what the data said.) I asked him to look into this problem. He said something about maybe it had to do with increases in research; and then he handed the paper back to me and walked away.

Well, I did try to see if increased research activity over the decade might have produced a need for more management positions on our campus. Without going into details, I'll just say that I did not find evidence for that.

In the spring of 2009, amidst the growing tensions over the UC budget crisis, I did write a letter to UC President Mark Yudof, complaining about “Budget Lies” coming out of his office. (See the April 11 letter to Yudof posted at <http://UniversityProbe.org> .) One issue I raised was this. “In previous papers, ‘Financing the University – Parts 12-14’, I have demonstrated that there is a much larger constellation of management bureaucracy throughout UC, which has grown enormously over the past decade and is now estimated to waste some \$600 million per year. The Senior Management Group, which you talk about here, is just the tip of that iceberg.”

A month later I received a detailed letter of response from Vice President Patrick Lenz, who said that he was writing on behalf of President Yudof. His full letter and my analysis of it are available at “Part 18”. Addressing my studies of excessive growth in management his first comments were;

“Regarding the growth in management and senior professional employment, the University is an increasingly complex and growing organization which necessitates an increase in staffing levels to provide management/administrative infrastructure and professional analytical support. Some of the forces driving these changes include student enrollment growth, . . . , and a very significant increase in the number of contracts and grants awarded.”

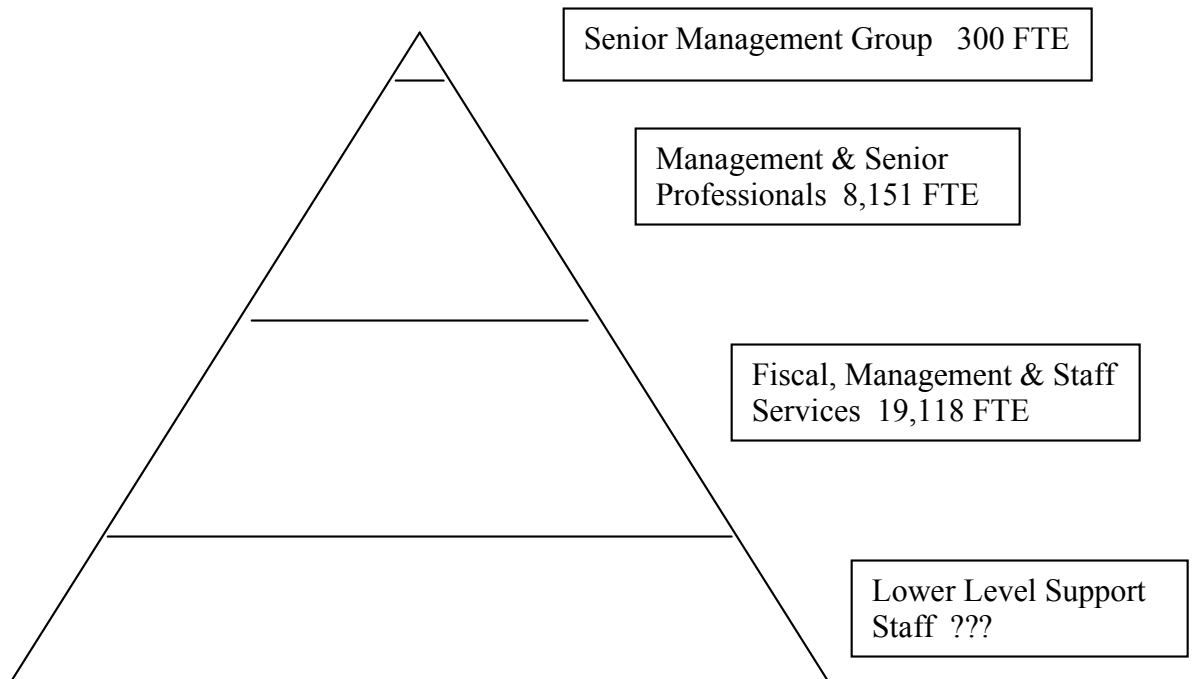
Allright, the University grows; but my analysis looked at the *difference* between management growth rates and total employee (or total enrollment) growth rates. That is what I called “excess” growth; and he has not explained any of that.

Then he went on to talk about the rapid growth in the use of “information systems and technology” and “the internet and computer technology” throughout the University; and he noted that this “has also created new needs for professional analysts to meet the needs of a modern organization.” I agree entirely with this observation; and that is why in my papers, I specifically removed the computer-related sub-categories from the list showing apparent excess in management positions.

In sum, then, Lenz found no shortcoming in my study of apparent excessive management; he could offer no justification for this bloat; and he had no quibble with my estimate that this is a wastage of \$600 million per year.

Just recently the Chancellor at Berkeley has announced Operation Excellence, bringing in outside management experts to help us do our jobs better. I have been invited to participate. I have some skepticism about what happens when top management hires an expert consulting firm to address a problem that top management was told about and should have taken care of long ago; but we shall see what transpires.

The Management Pyramid at UC (as of 4/09)



Further UC employment statistics

Total UC Employees = 136,478 FTE

Regular Teaching Faculty – Ladder Ranks = 8,868 FTE

For more details see <http://socrates.berkeley.edu/~schwartz/Seminar/UCemploy4-09.pdf>

## Sixth meeting

Today we start looking at alternative plans for the financial future of UC.

Most commonly in people's minds are two plans:

PLAN A: Restore the generous funding that UC enjoyed from the state of California in the past. This requires major political changes across the state.

PLAN B: Assuming that Plan A will not be achieved, save the quality of UC by various measures of privatization – with rapidly increasing student fees in the lead.

Here are two alternatives, in first draft form, for discussion:

[PLAN C](#) (A Better Plan – 3 pages): A comprehensive set of measures to restore some state funding while making some changes inside UC. – This appears at the beginning of this whole paper.

[PLAN D](#) (UC Watch – 1 page): A specific student initiative to oversee certain aspects of UC finances. – This follows.

Plans C and D are compatible with each other, and also compatible with Plan A.



## UC WATCH

First Draft 10/14/2009

### What?

A new organization of and for undergraduate students at the University of California, whose purpose is to oversee the use of student fee revenues collected by the UC administration.

### Why?

Student fees have been rising rapidly and there are serious concerns about how that money is being used. UC is a multi-mission university – a public trust, according to the California Constitution – yet the public has little trust about UC’s financial affairs. Total student fee revenues are now as large as state appropriations. The largest contribution comes from undergraduate students paying the Educational Fee. (For 2009-10, the official estimate is that this income will amount to about \$1.5 billion.) The first priority for the use of this fee revenue should be to provide the educational program that those students are paying for. But it seems that as students pay more to UC, they are getting less from UC.

### How?

The first objective of UC WATCH is to make sure that the UC administration is accountable and transparent in its spending of student fee money. A second objective will be to offer its advice as to the priorities that should guide UC in the allocation of those funds.

### Where?

There should be an active chapter of UC WATCH on each campus, in close contact with the Chancellor; and there should be a statewide coordinating group in contact with the UC President.

### Who?

The details for establishing this organization, defining its total membership and selecting its active representatives remain to be worked out. Fee-paying parents should be involved along with the students. This effort can certainly start with the existing student government apparatus; but it may need to define itself as more independent from the existing UC authority.

### Precedent?

The Registration Fee (different from the Educational Fee) has been long established as a means of funding student services that lie outside of the core instructional program of the University. Each campus has a Registration Fee Advisory Committee, through which students give their suggestions to the Chancellor regarding those funds. A recent study (initiated by former Student Regent Dartagnan Scorza), found some faults that needed correction in that advisory system. The present proposal enlarges upon those ideas, in recognition of the much larger size of the Educational Fee (more than 7 times the size of the Registration Fee) and its more critical importance to students.

### Graduate Students?

The financial picture for graduate students is much more varied and complex than it is for undergraduates. Perhaps a separate, but coordinated, structure should be established for the oversight of graduate student fees.