

Seminar “Financial Futures for UC”
October 6, 2009 – Charles Schwartz

Tentative Schedule for the coming weeks:

Oct 6 – True Calculation of the Cost of Undergraduate Education

Oct 13 – Excess Administrative Bureaucracy at UC

Oct 20 – First Draft: A Better Plan for UC’s Financial Future

Next ?? – Further discussion of the above;

Follow the Regents’ Commission;

Outreach – what to do with what we have learned here.

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.