The Undergraduate Academic Experience at Oregon State University: Analysis and Scenarios

Faculty Senate Budgets & Fiscal Planning Committee

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Introduction

Resident undergraduate students at Oregon State University have faced significant increases in tuition and fees in the past five years. Meanwhile, a large number of professorial-rank faculty members have retired or resigned without being replaced. Term after term, the number of students seeking access to certain key courses exceeds the number of available seats. There is a perception that the quality of the undergraduate academic experience has declined. Are undergraduate students paying more and getting less? We have looked for evidence that might support or refute this perception. In this report, we present our findings, our conclusion, and three scenarios for Oregon State University to move forward.

Findings

In the past five years, despite difficult economic conditions, Washington and California have continued to increase funding for higher education. Meanwhile, Oregon cut its funding by 8%, even as enrollments climbed. Between 1995 and 2000, Washington and California managed to increase higher education funding by 47% and 79%, respectively, while Oregon lagged behind at 36%. The overall trend is clear: the State of Oregon has been disinvesting in its public university system.

Figure 1. Growth in state spending on higher education in Oregon has lagged well behind California and Washington [5].
Oregon State University has responded to the cuts in state funding by significantly raising tuition and fees. In FY 2000, tuition and fees represented about 40% of the total E&G funding. By FY 2005, the share represented by tuition and fees had risen to about 55%. Even with these tuition and fee increases, total funding per student FTE has declined about 3% in inflation-adjusted dollars (Figure 2). The effective reduction in funding has been much greater than 3% because costs associated with health care benefits and the Public Employee Retirement System have risen much faster than the Consumer Price Index.

Figure 2. Adjusted for inflation, total funding per student FTE is lower now than it was in 2000, and the share borne by students has risen substantially [3].

OSU has aggressively pursued new sources of research funding to support its research mission. Research expenditures increased about 20% between FY 2000 and FY 2005 (Figure 3). Unfortunately, the total cost of facilitating research exceeds the indirect costs recovered [8]. Hence the increase in research funding represents another strain on other campus activities, including the undergraduate academic program.
Financial pressure on OSU has resulted in a significant drop in the number of tenure-track faculty members, the increased use of instructors, and growth in the typical lecture size. The percentage of undergraduate teaching allocated to professors at OSU has dropped from 68% to 41% in the past decade [7]. Typical undergraduate lecture sizes increased significantly between FY 2000 and FY 2003 (Figure 4). Typical lower-division lecture sizes increased by about 25%, while typical upper-division lecture sizes increased by about 18%. Senior “seminars” with 80 students are clearly contrary to public expectations about what constitutes a quality undergraduate educational experience.

**Figure 3.** Indirect cost recovery on research amounts to only about 20% of direct costs [3].

**Figure 4.** The typical fall-term undergraduate lecture size on the Corvallis campus rose significantly between 2000 to 2005 [6]. Note: “typical” lecture size is not the same as “average” lecture size. For example, suppose a department offers five lectures of size 10, 10, 10, 10, and 40, respectively. The “average” or “mean” lecture size is 80 / 5 = 16. The “typical” lecture size is 25, since half the students are in a lecture of size 40, and half the students are in a lecture of size 10.
Our participation in the National Survey of Student Engagement has revealed that OSU compares poorly against other doctoral-extensive universities (Table 1). In none of the categories does OSU place in the upper half, and in two key categories (level of academic challenge and enriching educational experience) OSU is ranked in the bottom 20%.

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<thead>
<tr>
<th>Percentage of Doctoral-Granting Universities Scoring Below OSU on Measures of Student Experience</th>
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<tbody>
<tr>
<td>First-Year Student</td>
</tr>
<tr>
<td>Level of academic challenge</td>
</tr>
<tr>
<td>Active and collaborative learning</td>
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<td>Student-faculty interaction</td>
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<td>Enriching educational experiences</td>
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<td>Supportive campus environment</td>
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Table 1. When it comes to the quality of the undergraduate experience, OSU compares unfavorably with other doctoral-granting universities [4].

With respect to four-year graduation rate, OSU is lagging behind most of its peer land-grant institutions (Figure 5). In FY 2003 the four-year graduation rate was about 29%.

Figure 5. The four-year graduation rate at OSU is below the average of its peer land-grant universities [1].
Finally, state funding for the Education and General Program is substantially below funding received by our peer public land-grant universities (Figure 6).

![Bar chart showing student-related expenditures per student FTE for various universities.](image)

**Figure 6.** Student-related expenditures at OSU are far below the average of its peer land-grant universities [1].

It all boils down to this relationship:

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\frac{\text{\$}}{\text{Student FTE}}
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Departments on campus are simply not getting enough dollars for the number of students they are educating. Recent events on campus suggest that the current level of funding per student is unsustainable. Some units on campus are attempting to increase the fraction by increasing the numerator:

- Many units asked permission to create or raise student fees
- The College of Engineering is lobbying for a significant increase in ETIC funding
- Faculty in Veterinary Medicine have proposed that the College receive a direct appropriation from the Legislature

Some units on campus are trying to increase the fraction by decreasing the denominator:

- The number of credits required for most B.S. programs in the College of Engineering has just been reduced from 192 to 180
- The College of Business has proposed limiting the number of business majors
• The number of class sections taught by the Departments of Art, Philosophy, Psychology, and Speech Communication may be greatly reduced in the 2006-2007 academic year

Conclusion

Oregon State University is a research-extensive, doctoral-granting institution, but undergraduate education is an important part of its mission. Student tuition and fees now represent the largest portion of OSU’s E&G budget, yet our committee has found evidence that class sizes are getting larger and that students are not getting a satisfactory academic experience compared with students at other doctoral-granting universities. It’s fair for students to ask, “Why am I paying more and getting less?” As OSU becomes more of a tuition-dependent institution, it is crucially important that it be able to deliver a quality undergraduate academic experience.

Three Scenarios

Here is a summary of Oregon State University’s current level of academic funding:
• Total state E&G funding: $82 million
• Total student tuition and fees (including summer session): $120 million
• Total student FTE: 20,937 (including summer session)
• Funding per student FTE: $9,700

This level of funding—under $10,000 per student FTE—is simply inadequate to enable Oregon State University to perform its roles as the leading research institution in the State of Oregon and as one of the largest producers of college graduates. The effects of the current level of funding are obvious: a steadily declining number of tenure-track faculty and undergraduate programs lacking rigor. We must find a way to increase funding to $12,500 per student FTE. Although this level of funding is well below that received by research-extensive universities in Washington and California, it would at least put Oregon State University in the middle of the pack with respect to its peer land-grant universities.

We present three scenarios for achieving this significantly higher level of funding.

Scenario 1: The State of Oregon increases its E&G appropriation to OSU by $60 million (72%).
• Total state appropriation: $142 million
• Student tuition and fees: $120 million
• Total student FTE: 20,900 (includes summer session)
• Funding per student FTE: $12,500
Scenario 2: The State of Oregon guarantees the same level of funding to OSU even as enrollments decline. Resident undergraduate tuition and fees increase by 35%, while the number of resident undergraduate student FTEs drops by 34%.

- Total state appropriation: $82.5 million
- Student tuition and fees: $112.3 million
- Total student FTE: 15,600 (includes summer session)
- Funding per student FTE: $12,500

Scenario 3: The State of Oregon decreases its funding to OSU as student credit hour production declines. Resident undergraduate tuition and fees increase by 50%, while the number of resident undergraduate student FTEs drops by 48%.

- Total state appropriation: $63 million
- Student tuition and fees: $105 million
- Total student FTE: 13,400 (includes summer session)
- Funding per student FTE: $12,500

These scenarios assume an immediate increase in revenues. As a practical matter, these increases might have to be phased in over several years. In that case, an inflation factor would have to be added, so that the eventual increase in funding per student FTE would still be 25% in constant dollars.

In two of these scenarios, the number of resident undergraduates declines significantly. We would expect a greater decline in lower-division enrollment than in upper-division enrollment. A greater percentage of students would begin at a community college and then transfer to OSU. Teaching at Oregon State University would become more oriented around upper-division and graduate classes. We believe this is a good fit for the institution, since upper-division and graduate students are in a better position to benefit from the research expertise of the tenure-track faculty. Since upper-division and graduate education is more expensive than lower-division education, our target of $12,500 may be too low if the number of lower-division classes drops too radically. If the number of undergraduates on campus is greatly reduced, the campus community must devise strategies to ensure that opportunities are still available to those students who would benefit most from an OSU education.

The price of an OSU undergraduate education would rise dramatically under all of these scenarios. Whether the cost is borne by the taxpayers, the students, or both, the University must be prepared to explain how the undergraduate experience will be enhanced after these changes are implemented. We suggest that, in return for the additional funding, Oregon State University guarantee:

- Reduction in typical class size
- Easier access to required classes
- Increase in four-year graduation rate
- More compelling academic experiences (such as the creation of residential learning communities for freshmen)
Without a significant increase in its funding, Oregon State University will continue along the path of slow decline. With a big budget boost, OSU will have the funds it needs to recruit and retain the best faculty and provide undergraduate students with the quality experience they deserve.

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References