CONTENTS

2  Report on Enrollment and Teaching, 1996 to 2001
—Constantin Fasolt
W hen I began my term as Chair of the Council on Teaching in the summer of 2001, there were three things I knew: that we were reaching the halfway mark on the road towards increasing the size of the College to 4,500; that the College’s new core curriculum had come into effect in 1999; and that both changes had provoked considerable discussion in the University. What I did not know was how these changes were affecting the faculty teaching our classes and the students taking them. I therefore tried to find out.

I am writing now to communicate what I have learned. I use the first person singular advisedly. One person’s point of view, clearly presented, strikes me as a more effective means of initiating a discussion than the homogenized prose that usually results from efforts to reduce the many voices of a committee to a single one. My understanding of the data may well be in error. But truth, as Bacon said, emerges more readily from error than from confusion.

This report will help those who have no time but want to know the gist:

• The main points are highlighted with bullets and bold type.

• The main points are repeated in the summary at the end of this report.

Those who do have time and would like to know the more detail are encouraged to view, download, and print the files we have placed on the Web at http://www.uchicago.edu/docs/education/enrollment_teaching/6-01.pdf. What you will find there is a complete set of the tables on which this report is based.

By Constantin Fasolt,
Chair, Council on Teaching

June 20, 2002

The following will help those who have no time but want to know the gist:

1. Assumptions

When we began, we made a number of decisions about the data we were going to assemble. I would like to explain these first, because they are neither self-evident nor beyond dispute, but they are crucial for understanding the results that follow.

First of all, we decided to gather data about the University as a whole, not only the College, but also the graduate divisions and the professional schools. We did so in part because data about the College are difficult to interpret without knowing comparable data on the graduate level. We did so also because the personal and institutional connections between the College, the graduate divisions, and the professional schools are so deep and extensive that it is virtually impossible to obtain good data about the College in the first place without considering the other units of the University as well. But we did so above all because we think of the University as an integral whole—all of whose parts cohere with each other and depend upon each other in many different ways.

• We decided to gather data about the University as a whole, including all of the graduate divisions and professional schools.

Second, we decided to gather data for the period from 1996–97 to 2000–01. We chose 1996 as the beginning point because that was when the College’s original plan to increase the College to 4,500 and made a commitment to monitor our implementation of that plan; because four years were necessary to see if we were able to discern real trends beneath the clutter of short-term fluctuations; and because, thanks to the efforts of previous researchers, good data were relatively easy to obtain for the years since 1996. We chose 2000–01 as the end point because that was the most recent year for which the data were complete when we began this process.

• We decided to gather data for the period from 1996 to 2001.

One of our most important desiderata for the future is to extend these limits. We would very much like not only to bring this report up to date by adding the data for 2001–02 but also to add data from at least one or two years lying further back in time, say, 1990–91, or 1985–86. These will be more useful when we formulate and interpret our findings, but we will still not have a complete picture.

Third, we decided to focus on individuals. Our primary task was to find out how many students the members of the faculty actually face in their graduate and undergraduate courses. Our basic units of analysis, therefore, were the individual faculty member, the individual student, and above all the individual course enrollment. One course enrollment means one student formally registered in one course for one quarter.

• We decided to focus on individuals. We used course enrollments and faculty members as our basic units of analysis.

At the same time course enrollments alone are obviously not enough. We also looked at the numbers of courses taught on the graduate and undergraduate level. These are crucial for understanding the reality of teaching at the University. So are averages and medians of class size.

• We counted course numbers, average class sizes, and median class sizes.

More to the point, perhaps, in order to be able to look at enrollments and course numbers in conjunction, we counted courses not merely in the aggregate, but tracked them according to class size. We therefore divided courses into seven different size brackets: courses taught to 1 student; 2–9 students; 10–18 students; 19–25 students; 26–40 students; 41–80 students; and more than 80 students. We chose these brackets because we thought that they correspond reasonably well to courses with a recognizable different character requiring different kinds of effort, both of the graduate and the undergraduate level.

• We counted courses according to class size, separately tracking courses taught to 1 student; 2–9 students; 10–18 students; 19–25 students; 26–40 students; 41–80 students; and more than 80 students.

In addition to class size, we also wanted to know about the composition of classes. We therefore distinguished between three different types of courses: courses in which there were only graduate students; courses in which there were only undergraduates; and courses in which there were both graduates and undergraduates. Indeed, for courses taken by a mixture of undergraduates and graduate students we went even further than that and counted each size bracket for graduate and undergraduate students separately. That makes it possible to establish, for example, how many courses taught by regular divisional faculty in 1996–97 were composed of 2–9 undergraduates and 10–18 graduate students (60), and how many such courses were composed of 2–9 graduate students and 41–80 undergraduate students (15).

• We distinguished between courses in which there were only graduate students; courses in which there were only undergraduates; and courses in which there were both graduates and undergraduates.

Finally, we did of course want to determine the differential impact of the growth of the College and the changes in the core curriculum on different types of instructors. We therefore divided courses into five broad categories: regular faculty (tenured or on tenure-track appointments), named instructors/collegiate assistant professors, visiting and retired faculty, students, and all others.

• We divided instructors into five categories: tenure and tenure-track faculty; named instructors and collegiate assistant professors visiting and retired faculty; students; and all other instructors.

The class of “named instructors and collegiate assistant professors” includes the formerly so-called Harper/Schmidt Instructors, Dickson Instructors in the Department of Mathematics, and the recently created category of collegiate assistant professors. The class of “other instructors” includes senior lecturers, lecturers (only those who are not also students), clinical faculty, and research associates in the Division of the Biological Sciences.

2. Cautions

What I learned was, first and foremost, how easily accurate data can lead to erroneous conclusions. This is not because the data are unreliable. It is because their meaning is impossible to gather without interpretation. Knowing how difficult that can be, I would very much like to urge the readers of this report to exercise due caution in moving from data to conclusions.

• The meaning of the data is rarely obvious.

Consider this example. From 1996 to 2001, the number of graduate students in the Division of the Biological Sciences (BSD) has increased by almost 99 percent (from 1,831 to 3,569). On its face, the conclusion seems obvious: There was a significant increase in the number of courses taken by graduate students in the BSD. But that conclusion is false. The less obvious truth turns on factors like bridge programs linking the BSD to Pritzker School of Medicine and pathologists in the medical school are counted as teaching in the BSD because they have no medical license. There was no significant increase in the number of courses taken by graduate students in the BSD. But that becomes apparent only if you look at the figures for the BSD and the medical school in conjunction. This is but one of many possible examples to illustrate a fundamental point about our university: We neither teach nor study according to the artificial limits imposed by administrative structures. Faculty in the humanities teach students in the social sciences and vice versa. Students in the Graduate School of Business earn a living as lecturers or tutors in language courses in the Division of the Humanities. Clinical faculty teach in the core. And so on. That is the reality.

But that reality is difficult to count. In order to be able to count at all, you have no choice but to set up artificial categories (a student, an instructor, a course, or a course enrollment) to a given unit (departments, divisions, schools). No wonder the result is no more than a passing resemblance to the reality of our daily work. Speaking from my own experience, the Department of History I know best includes faculty who are not and do not consist of the thirty-five faculty members whose primary appointment was in...
that department at the time. It included at least ten others whose primary appoint-
ments happened to lie elsewhere (not even to mention associate faculty members from
other departments without joint appoint-
ments in the Department of History). But I
know no way to capture that reality with-
out introducing a level of complexity that
can only increase the distance from the data
to their meaning even further.

• The data simplify complex realities.

I will therefore refrain from stating conclusions with a degree of specificity that is only apparently, not really, war-
rented by the figures presented on our tables. We are teaching more than 12,000
students in more than 5,500 courses across 12 schools and divisions. That is a fact. But how that fact affects particular depart-
ments is knowledge beyond the reach of this report.

• The data do not support conclusions beyond a relatively modest degree of specificity.

This is, of course, not to deny that in many cases individual colleagues may real-
ize just what light a certain set of figures casts on the experience of their department.
But I would be surprised if in this instance, as in so many others, Will Rogers’s assess-
ment of the problem were not to be appro-
priate as well. “The problem,” he said, “is
not what people don’t know. The problem is
what people know that just isn’t so.” If I
have one hope for this report, it is that it may serve to correct some knowledge of
things that just ain’t so.

Having said all of that, however, it still seems to me that data, systematically gath-
ered according to known criteria, inter-
preted in the light of explicit assumptions, and publicly discussed, are much more
useful to the University than opinions, no matter how strongly held.

• Data systematically gathered, clearly interpreted, and publicly discussed are more useful than opinions.

That is why I wrote this report.

3. Findings

The data do reveal some things about the condition of the University that are indeed
so. I take a certain pleasure in communicat-
ing them to you because I found them to
be reassuring. That is not to say that they
reveal no difficulties or strains. They do.
Much less is it to say that they reflect no
difficulties or strains. They do. (See figure 1.) During the same
period, course enrollments in the College
rose from 36,560 to 41,422, an increase of
13.3 percent—somewhat larger than the
increase in the number of students. (See figure 2.) We have more students in the
College taking more courses.

• In 2000–01, there were 10.5 percent
more students producing the College
enrollment with 13.3 percent more course enrollments than

The data reflect the changes in the core curriculum with equal clarity. In 1996–97,
enrollments in core courses amounted to
17,496, while enrollments in non-core courses were 19,064. In percentage terms, 47.9 percent of course enrollments by
College students were in core courses, and
52.1 percent were in non-core courses. It is
important to note, however, that the fig-
ures for enrollments in core courses do not
include enrollments in language courses, be-
cause it is simply too difficult to distin-
guish course enrollments that were intended
to meet core curriculum requirements from
course enrollments that were not. Even so the
figures correspond closely to a curricu-

lum requiring students at that time to take
each half of their courses in the core (21
core courses out of a total of 42 courses
required to graduate).

The new core curriculum took effect in
1999–2000. The single largest change it
made consisted of the introduction of a require-
ment to demonstrate competency in
reading, writing, and speaking a foreign
language at a level equivalent to one year of
college-level study, and the simultaneous
abolition of the requirement to take a mini-
mum of three courses in a foreign language.
That reduced the required number of core
courses from 21 to 18 while maintaining
the requirement that students show mas-
tery of a foreign language by the time they
graduate. Since enrollments in language
courses, for the reason just stated, are not included in the number of core course en-
rollments before or after the change in the
curriculum, that aspect of the change is not
reflected in our data. I might, therefore,
note in passing that all the evidence I have
seen shows not a decrease but, quite to the
contrary, a significant increase in the study
of foreign languages by our undergradu-
ates since 1996.

The data do allow us to track other changes to the core. These reduced the
required number of core courses to fifteen
by establishing a combined six-course require-
ment in humanities, civilization studies,
physical sciences, and biological sciences;
and a minimum one-course requirement
in mathematical sciences and dramatics,
musical, or visual arts. The three-course
requirement in social sciences was not
changed.

Accordingly, by 2000–01, enrollments in core courses (not counting language
courses) had fallen to 16,313—less in both
absolute and relative terms than in 1999–
97—while enrollments in non-core courses had risen to 25,109—more in both
absolute and relative terms. In percentage
terms, 39.4 percent of course enrollments
by College students in 2000–01 were in
core courses, and 60.6 percent were in non-
core courses. Those figures correspond once
again relatively closely to the curriculum,
which now requires students to take roughly
one third of their courses (15 out of 42)
in the core.

• Reflecting the new core curriculum,
enrollments in core courses (not including
language courses) fell from 47.9 percent of
all College course enrollments in 1996–97
to 39.4 percent in 2000–01.

The picture is more complicated if one looks at the number of enrollments in each
segment of the core. (See figure 5.) In some
areas—such as social sciences, art, and
civilization studies abroad—numbers have risen,
reflecting not only the growth of the
College but also increased interest in the
arts and study abroad. In the humanities
and in the quantitative component of the
core, numbers have held steady, reflecting
a combination of the changes in the core
curriculum and the growth in the College.
In the physical sciences and natural sci-
cences sequences, by contrast, numbers have
dropped steadily, and in the biological
sciences they have dropped by about half.
And in almost all areas the numbers for
1998–99 and 1999–2000 are erratic, clearly
because students were postponing deci-
sions to take or not to take certain core
courses at a time when they already knew
that the core curriculum would change,
but did not know exactly how.

Growth, however, has by no means
been limited to the College. The faculty has
grown as well, and so has the number of
graduate students. In 1996–97, the
Provost’s records show 601.1 tenured and
tenure-track faculty members in the graduate divisions. By 2000–01, that number had risen to 624.8, an increase of 3.9 percent. (I know: Who are the 0.1 and 0.8 faculty members? Of course there aren’t any. The numbers reflect part-year appointments of other ineligible variables.) During the same period the number of faculty in the professional schools rose from 193.0 to 206.9 (an increase of 7.2 percent).

• From 1996–2001, faculty grew by 3.9 percent in the graduate divisions and by 7.2 percent in the professional schools.

Clinical tenured and tenure-track faculty deserve to be considered separately because of a strategic decision to shift towards non-tenure-track clinical appointments that reduced the numbers of tenured and tenure-track clinical faculty by 25.1 percent, from 259.0 to 194.0, without indicating any underlying contraction in the work of the University.

At the same time the number of graduate students has grown as well. In 1996–97, there were 3,300 students in the graduate divisions and 4,879 in the professional schools, for a total of 8,179. The corresponding enrollments were 16,568 and 39,414 in the professional schools, for a total of 55,982. (See figures 1 and 2.)

By 2000–01, those numbers had risen to 3,501 students in the graduate divisions (an increase of 201 students, or 6.1 percent), and 4,958 students in the professional schools (an increase of 79 students, or 1.6 percent). The corresponding enrollments rose from 16,568 to 17,560 in the graduate divisions (an increase of 6.0 percent), and from 39,414 to 39,761 in the professional schools (an increase of 0.9 percent). (See figures 1 and 2.)

• In 2000–01, there were 6.1 percent more students in the graduate divisions and 1.6 percent more students in the professional schools than in 1996–97.

At the same time, there are significant differences between the various schools and divisions. Broadly speaking, the number of graduate students has fallen in the Graduate School of Business (GSB) and the Division of the Social Sciences, and risen in all other units. The number of GSB students fell from 2,866 to 2,801, a change of -2.3 percent. The graduate divisions rose from 16,568 to 17,560 in the graduate divisions (an increase of 6.0 percent), and from 39,414 to 39,761 in the professional schools (an increase of 0.9 percent). (See figures 1 and 2.)

The figures for teaching done by graduate students in individual departments vary widely, both from each other and from fluctuations for the corresponding divisions, and that it is surprisingly difficult to understand the relationship between the size of the graduate student body in any given unit of the University and the corresponding enrollments in graduate courses.

3-2. Stability

No doubt there has been change. But there has been a surprising degree of stability as well. Whether you look at the mix of the type of instructors whom our students enroll in classes, or the size of the classes in which they are taught, or at enrollments per faculty member—in all cases the most important message is: no news.

• There has been a surprising degree of underlying stability.

Let me give you some details. In 1996–97, roughly 70 percent of all course enrollments in the College overall (most of them by far in core and language courses). In 2000–01, that number had not only not risen, but had actually fallen in both absolute and relative terms, to 72.5 percent or about 17.5 percent of the 41,422 course enrollments in the College overall (most of them by far still in core and language courses). (See figure 4.)

The case is only slightly different for “other” instructors. In 1996–97, “other” instructors taught 5,054 or about 13.8 percent of course enrollments in the College overall (most of them by far also in core and language courses). In 2000–01, that number had risen to 6,830 or 16.5 percent. (See figure 4.) Does this increase reflect increased reliance on “other” instructors in the core? No. The number of core enrollments taught by “other” instructors had actually fallen, from 1,911 to 1,857. It rather reflects a significant increase in language course enrollments (of which 1,725 were taught by “other” instructors in 2000–01, 736 more than in 1996–97), and an almost equally significant increase in enrollments in courses taught 7,530 or 20.6 percent of 36,560 course enrollments in the College overall (most of them by far in core and language courses). By 2000–01, that number had not only not risen, but had actually fallen in both absolute and relative terms, to 72.5 percent or about 17.5 percent of the 41,422 course enrollments in the College overall (most of them by far still in core and language courses).
taken abroad (of which 519 were taught by “other” instructors in 2000–01, 498 more than in 1996–97).

• Fears that the growth in the College would be met by increased reliance on graduate students and by a shrinking share of faculty teaching have proved unfounded.

A similar picture emerges from a look at class size. The average size of a class of undergraduate students has risen by 2 students, from 15 to 17. The median has also risen by 2, from 13 to 15, and so has the standard deviation, from 17 to 19. The class size of undergraduate courses has thus increased. But it has not increased by much. Classes are still small and the median is still as far below the average as it was, indicating a healthy preponderance of classes below the average size.

This interpretation gains added strength if you also look at mixed classes taken by undergraduate and graduate students together. The average size of such classes remained unchanged at 24 over the years in question. The median dropped slightly, from 18 to 17, and so did the standard deviation, from 23 to 22. If one combines these figures to look at all classes in which undergraduates were enrolled, both those taken exclusively by undergraduates and those in which there were also graduate students, the basic measures show virtually no change at all. The average class size has remained stable at 19, the median class size has remained at 15, and the standard deviation has dropped from 21 to 20.

• The average size of undergraduate classes has remained at 19, and the median has remained at 15.

It should therefore come as no surprise that the percentage of undergraduate courses taught to classes of 25 undergraduates or fewer (and no graduate students) has remained exactly the same. That figure was 80 percent in 1996–97, and it was still 80 percent in 2000–01.

• The percentage of undergraduate courses taught to classes of fewer than 25 students has remained at 80 percent.

Lost in thought that average class size has possibly held steady only because under-graduates have moved increasingly into graduate courses, it may be worth pointing out that the opposite is closer to the truth. Of the courses taken by undergraduates in 1996–97, 55 percent had no graduate students in them at all, 26 percent did, and 19 percent were courses in which a single undergraduate sat in a graduate class, or a single graduate student sat in an undergraduate class. In 2000–01, the share of undergraduate courses taken exclusively by undergraduates had risen to 59 percent, while that of mixed courses with both graduate and undergraduate students had dropped to 24 percent, and that of courses with a single graduate student in an undergraduate class or a single undergraduate in a graduate class had dropped to 16 percent.

The picture for class sizes in the graduate divisions and the professional schools is equally stable. Average class size has gone up from 41 to 42 in the Graduate School of Business, down from 33 to 32 in the Law School, and from 18 to 17 in the Harris School of Public Policy, and up from 13 to 14 in the School of Social Service Administration. In most of the professional schools, the average class size has thus changed by no more than one. The exceptions are the Pitzer School of Medicine and the Divinity School, in both of which the average class size is much smaller to begin with but has risen by 3, from 9 to 12.

Average class size in the graduate divisions overall has moved randomly in tandem with the parallel measures for the College. The average size of classes taken solely by graduate students has gone up from 5 to 7. The median for those classes has risen from 2 to 3, and the standard deviation from 9 to 12. Mixed classes, on the other hand, taken by both undergraduate students and graduate students in one of the divisions, have decreased in size. There the average has gone down from 23 to 22, the median from 17 to 16, and the standard deviation from 23 to 21.

For all classes taken by graduate stu-dents in one of the 4 divisions, the average has gone up from 10 to 12, and the median from 4 to 6, while the standard deviation has remained at 17.

• The average size of classes in the gradu-ate divisions and professional schools has remained stable or gone up only slightly.

Finally, total course enrollments per faculty member per year have not budged at all. In 1996–97, the average faculty member in one of the graduate divisions taught a total of 55 course enrollments on the graduate and undergraduate level combined. In 2000–01, that number had not changed. The same is true of faculty in the professional schools (other than clinical faculty). The average faculty member in the Division of the Social Sciences is still far from the average faculty member in the Division of the Social Sciences had taught 119 course enrollments in 1996–97, and still taught exactly the same number of course enrollments in 2000–01. Only clinical members of the faculty saw a change, from 17 in 1996–97 to 11 in 2000–01.

This is, of course, a very crude measure. It masks significant differences between the experiences of individual schools, divisions, and departments—not to mention individual faculty members. But it does suggest that those differences, significant as they certainly are, have either balanced out or not been large enough to affect the average overall.

• Average total course enrollments per faculty member per year have remained unchanged at 55 in the graduate divisions and 119 in the professional schools.

Overall, it thus seems fair to say, the stabilization of the class size phenomenon described above has been remarkable. Graduate enrollments still dwarf those in the College by a factor of more than two to one. The Division of the Social Sciences is still far larger than any other division. The Graduate School of Business still has more graduate students than any other school or division. Class sizes in the College, the graduate divisions, and the professional schools still vary greatly from each other, but have changed barely or not at all. Whatever change there may have been seems to have happened at the margins. The underlying character of the University has not changed.

• Graduate course enrollments still dwarf those in the College.

• The Division of the Social Sciences is still far larger than any other division.

• The Graduate School of Business still has far more graduate students than any other unit.

• The fundamental character of the University has not changed.

3.3-How Did We Manage? One wonders, of course, how this is possible. How did we manage to adjust to changes that are very real without allowing them to change the substance of the institution? The answer, as far as I can tell, does not consist of one big thing, but many smaller ones. Let me go through the ones I noticed one by one.

• We have managed by making many relatively small adjustments.

To begin with the tenured and tenure-track faculty, I have already noted that it increased by 3.9 percent in the graduate divisions, and by 7.2 percent in the professional schools (not counting clinical fac-ulty). That may not have been enough to match course enrollments growing by 10.5 percent in the College, but it was enough to make a difference.

Moreover, the faculty has very clearly responded to the challenge of increased College course enrollments. If in 1996–97 tenure and tenure-track faculty taught a total of 20,240 course enrollments in the College, in 2000–01 it taught 1,804 or 8.9 percent more, for a total of 22,064. Speak-ingly, broadly, the faculty thus increased its undergraduate teaching commitments by a significant percentage—not quite enough to match the growth in the College, but more than its own growth.

• The faculty has responded to the growth in the College by teaching 8.9 per-cent more College course enrollments than it did in 1996–97.
The overall increase, however, has by no means spread evenly across the divisions and the professional schools. The most significant increase has occurred in the Humanities and the Social Sciences. The number of undergraduate enrollments taught by faculty in the physical and biological sciences actually fell by 5.6 percent, from a combined total of 8,060 core enrollments in 1996–97 to 7,666 in 2000–01. During the same time the number of undergraduate course enrollments taught by faculty in the professional schools fell by 7.7 percent, from a total of 1,035 in 1996–97 to 935 in 2000–01. The number of undergraduate course enrollments taught by faculty in the Divisions of the Humanities and the Social Sciences, on the other hand, rose by 20.1 percent, from 10,807 to 12,978.

The faculty in the Divisions of the Humanities and the Social Sciences has responded by teaching 20.1 percent more College course enrollments than it did in 1996–97.

Another way of looking at the same figures is to point out that in 1996–97 the humanities and social sciences faculty were responsible for 53.3 percent of all undergraduate enrollments taught by tenure- and tenure-track faculty in the University, or 10,807 out of a total of 20,260. By 2000–01, that figure had risen to 58.8 percent, or 12,978 out of a total of 22,064.

Some of these differentials are surely due to changes in the core curriculum. As mentioned above, those changes have led to noticeably decreased enrollments in core courses in the physical and especially in the biological sciences. On the other hand, enrollments rose just about equally steeply in courses taught by regular faculty in the humanities and in the social sciences. Since the core humanities requirement was changed while the social sciences core requirement was not, changes in the core curriculum are insufficient to explain the differences between growth and decline of undergraduate enrollments in courses taught by faculty in the four graduate divisions.

As far as I can tell, the most important factor helping to understand how the faculty has managed to increase its commitment to undergraduate teaching over all consists of a definite measure of rationalization.

• The faculty is using its resources more efficiently.

This becomes particularly clear if one groups courses by class size. In 1996–97, regular faculty in the four graduate divisions taught a total of 3,194 courses, 76.4 percent of these, or 2.39 percent were taught to a single student, and 283 or 8.9 percent were courses taught to a single undergraduate. In other words, in 1996–97, almost a third of all courses taught by regular faculty in the four graduate divisions was taught to a single student.

That percentage has gone down a lot. In 2000–01, faculty in the graduate divisions taught a total of 2,479 courses, or 71.5 percent of these, or 23.9 percent were courses taught to a single undergraduate. In other words, in 1999–2000, the share of courses taught exclusively to undergraduates has fallen from 49 percent to 33 percent.

• The number of courses taught by divisional faculty to single graduate students fell by 73 percent from 764 to 206, and the number of courses taught to single undergraduate students fell by 39 percent from 283 to 174.

One may of course legitimately wonder what exactly this means, and even more so whether it is a good thing. Some faculty may consider single-student courses an important feature of this university. Others may consider them a luxury. And very possibly many of those courses are a statistical mirage, created by registration requirements for students in residence. But I think it likely that at least some of the drop in single-student courses reflects the effective efforts of our faculty to increase the number of classes taught to a significant margin.

This becomes particularly clear if one looks at how classes by a significant margin. In 1996–97, 57 percent of courses taught to 10–18 students rose by 49 percent from 214 (or a 16 percent share) to 311 (or 22 percent share), and courses taught to 19–25 students rose by 24 percent from 250 (18 percent share) to 311 (20 percent share).

The number of College courses taught to a single graduate student has fallen by 34 percent, from 406 to 269, while the number of College courses taught to 2–9 students has risen by 42.9 percent from 693 to 990.

These are the most important factors I have been able to discover in order to meet increased enrollments in the College. In sum, the regular faculty has made a significant effort to fulfill increased teaching obligations in the College, but retired and visiting faculty have also played a significant role in allowing regular faculty almost tripled their share of graduate course enrollments. This must also have played a significant role in allowing regular faculty to shift some of their teaching effort towards the College.

• The share of enrollments in graduate course taught by visiting and retired faculty has increased from 2.4 percent to 6.4 percent.

At the same time the contribution of visiting and retired faculty has grown in the College as well, though by a much smaller margin. The share of core course enrollments taught by visiting and retired faculty has risen from 956 or 2.6 percent of all undergraduate enrollments in 1996–97 to 1,339 or 2.4 percent in 2000–01. (See figure 4.) And it is worth adding that most of that increase has not occurred in the core, but in elective or concentration courses. Visiting and retired faculty taught 276 or 1.7 percent of core course enrollments in 1996–97, and 386 or 2.4 percent in 2000–01. (See figure 6.)

• The share of College course enrollments taught by visiting and retired faculty has increased from 2.4 percent to 4.3 percent.

In sum, the regular faculty has made a significant effort to fulfill increased teaching obligations in the College, but retired and visiting faculty members as well as named instructors and collegiate assistants professors have taken up a part of the burden in many different areas of teaching. The former have become responsible for a larger share of graduate and especially of graduate course enrollments, while the latter have increased their share of core course enrollments.

4. Conclusion

If I were asked to sum up the impressions I have been able to form on the basis of these figures, I would say this: From the perspective of the students, the changes have been minimal. The students meet the same mix of teachers today as they did five years ago, and they still meet them in small classes. True enough, there are now named instructors and collegiate assistants registered in them. But I personally doubt that single student courses have been a specially important ingredient in the training graduate students. The share of College course enrollments taught by students on both the graduate and the undergraduate level.

• The share of enrollments in graduate course taught by named instructors and collegiate assistant professors has increased from 12.8 percent to 16.3 percent.

Visiting and retired faculty have also played a larger role in teaching our students than they did before. That is particularly clear on the graduate level. In the graduate divisions and the professional schools, retired and visiting faculty taught 1,339 or 2.4 percent of the total of 55,982 graduate course enrollments in 1996–97, and 3,669 or 6.4 percent of the total of 57,321 graduate course enrollments in 2000–01, a 4 percent greater share of the total. (See figure 3.) Though the absolute number and the relative share of graduate course enrollments taught by retired and visiting faculty members that remains small, it is also accurate to say that from 1996 to 2001 visiting and retired faculty almost tripled their share of graduate course enrollments. This must also have played a significant role in allowing regular faculty to shift some of their teaching effort towards the College.

• The share of enrollments in graduate course taught by visiting and retired faculty has increased from 2.4 percent to 6.4 percent.

At the same time the contribution of visiting and retired faculty has grown in the College as well, though by a much smaller margin. The share of core course enrollments taught by visiting and retired faculty has risen from 956 or 2.6 percent of all undergraduate enrollments in 1996–97 to 1,339 or 2.4 percent in 2000–01. (See figure 4.) And it is worth adding that most of that increase has not occurred in the core, but in elective or concentration courses. Visiting and retired faculty taught 276 or 1.7 percent of core course enrollments in 1996–97, and 386 or 2.4 percent in 2000–01. (See figure 6.)

• The share of College course enrollments taught by visiting and retired faculty has increased from 2.4 percent to 4.3 percent.

In sum, the regular faculty has made a significant effort to fulfill increased teaching obligations in the College, but retired and visiting faculty members as well as named instructors and collegiate assistants professors have taken up a part of the burden in many different areas of teaching. The former have become responsible for a larger share of graduate and especially of graduate course enrollments, while the latter have increased their share of core course enrollments.

4. Conclusion

If I were asked to sum up the impressions I have been able to form on the basis of these figures, I would say this: From the perspective of the students, the changes have been minimal. The students meet the same mix of teachers today as they did five years ago, and they still meet them in small classes. True enough, there are now named instructors and collegiate assistants registered in them. But I personally doubt that single student courses have been a specially important ingredient in the training graduate students. The share of College course enrollments taught by students on both the graduate and the undergraduate level.

• The share of enrollments in graduate course taught by named instructors and collegiate assistant professors has increased from 12.8 percent to 16.3 percent.

Visiting and retired faculty have also played a larger role in teaching our students than they did before. That is particularly clear on the graduate level. In the graduate divisions and the professional schools, retired and visiting faculty taught 1,339 or 2.4 percent of the total of 55,982 graduate course enrollments in 1996–97, and 3,669 or 6.4 percent of the total of 57,321 graduate course enrollments in 2000–01, a 4 percent greater share of the total. (See figure 3.) Though the absolute number and the relative share of graduate course enrollments taught by retired and visiting faculty members that remains small, it is also accurate to say that from 1996 to 2001 visiting and retired faculty almost tripled their share of gradu-
The faculty have felt the changes more keenly, and nowhere more so than in the Divisions of the Social Sciences and the Humanities. But so far they have managed to adjust successfully, in part by shifting some of their teaching towards the College, in part by consolidating courses, in part by relying more on visiting and retired faculty on the graduate level, and in part by relying more on named instructors and collegiate assistant professors in the core.

• The faculty have felt the changes more keenly, especially in the Divisions of the Humanities and the Social Sciences, but so far they have managed to adjust.

Overall, though much has changed, the University has managed to adjust to the increased enrollments in the College with a more efficient mixture of alacrity and ingenuity than I had thought I would discover when I began this work.

The question on my mind is whether or not this will continue in the future. I can equally well imagine that it will and that it will not. The measures taken so far have been enough to take us in good health to the midpoint in the expansion in the College. They may suffice to take us in equally good health to its conclusion. But they may not. Only time and further analyses can tell.

• The question is whether more basic change will be required in the future.

For this reason I would like to conclude with the hope that the data presented here will be discussed, refuted, refined, kept up to date, and reinterpreted in the future. As I have said before, my understanding of what they mean may well be wrong. I have no vested interest in the meaning I have attributed to them in this report. My interest is the good of the faculty, the students, and the University as a whole. It cannot be advanced by proving my interpretation wrong. I shall be pleased.

5. Summary

5-1. Assumptions

• We decided to gather data about the University as a whole, including all of the graduate divisions and professional schools.
• We decided to gather data for the period from 1996 to 2001.
• We decided to focus on individuals. We used course enrollments and faculty members as our basic units of analysis.
• We counted course numbers, average class sizes, and median class sizes.
• We counted courses according to class size, separately tracking courses taught to 1 student; 2–9 students; 10–18 students; 19–25 students; 26–40 students; 41–80 students; and more than 80 students.
• We distinguished between courses in which there were only graduate students; courses in which there were only undergraduates; and courses in which there were both graduates and undergraduates.
• We divided instructors into five categories: tenure and tenure-track faculty; named instructors and collegiate assistant professors; visiting and retired faculty; students; and all other instructors.

5-2. Cautions

• The meaning of the data is rarely obvious.
• The data simplify complex realities.
• The data do not support conclusions beyond a relatively modest degree of success.
• Data systematically gathered, clearly interpreted, and publicly discussed are more useful than opinions.

5-3. Findings

• The data reveal a picture of fundamental health and stability.

a. Change

• In 2000–01, there were 10.5 percent more students in the College producing 13.3 percent more course enrollments than in 1996–97.
• Reflecting the new core curriculum, enrollments in core courses (not including language courses) fell from 47.9 percent of all College course enrollments in 1996–97 to 39.4 percent in 2000–01.
• From 1996–2001, faculty grew by 3.9 percent in the graduate divisions and by 7.2 percent in the professional schools.
• In 2000–01, there were 6.1 percent more students in the graduate divisions and 1.6 percent more students in the professional schools than in 1996–97.

b. Stability

• There has been a surprising degree of underlying stability.
• In 1996–97, regular faculty, retired faculty, visiting faculty, and named instructors/collegiate assistant professors taught 75 percent of graduate course enrollments, 66 percent of College course enrollments, and 70 percent of College enrollments in core courses. The same was true in 2000–01.
• Fears that the growth in the College would be met by increased reliance on part-time faculty has increased from 2.4 percent to 6.4 percent.

5-4. Conclusion

• From the perspective of the students, the changes have been minimal.
• The faculty have felt the changes more keenly, especially in the Divisions of the Humanities and the Social Sciences, but so far they have managed to adjust.
• The question is whether more basic change will be required in the future.