"ombudsman"

One of the things that you, the students at this University, would like to get out of your university career is, probably, a good education. Most people recognize that this requires good teachers. This university apparently accepts both of the above propositions: consequently, it tends to stress (at least in the Faculties of Arts and Sciences) excellence of teaching as being the single most important criterion in granting tenure to its staff, and in promoting staff from Assistant to Associate to Full Professor.

This means that, according to university principles, Full Professors are better teachers than Associates, and Associates better than Assistants. The last group, consisting in part of people who have not yet achieved tenure (this normally takes four years) and thus have hardly been evaluated for teaching competence at all, *may* not be much "better" than graduate assistants or part-time, sessional instructors.

Unfortunately, for the professors, going up through the ranks to Full Professor means not only certification of your excellence as a teacher, but also status. And it is further true that of all the activities a professor can engage in, teaching (particularly teaching undergraduates) is the least likely to increase his personal fame or fortune.

And so we have a dilemma; on the one hand, Full Professors are acknowledged to be the best teachers; on the other hand, they may want to do the least teaching, and may have enough local power (within their departments) to see to it that they don't have to do much teaching. Put another way: on the one hand, you the student, should want to be taught — perhaps even have a right to *expect* to be taught — by as many Full Professors as possible; on the other hand, it is in the Professors' best interests not to waste their time teaching undergraduates.

How is the dilemma resolved?

Alan Martin and I have been spending the last several weeks mulling over statistics relating to this question, in an attempt to find out just what the actual teaching practices are at this university, in the Faculties of Arts and Science—which are the two largest and most clearly "educational" in the broad sense of that word. Our findings are interesting, complex, and, I think, fairly revealing. They're presented in tabular form below; but before talking about that table, I have to throw in a few words of caution.

Trying to get data on how much teaching is done by the various levels of staff at this University (Full, Associate, Assistant Professor, and everybody else — the last category including graduate students, visitors, part-time outsiders, etc.) is extraordinarily difficult. People teach in different departments, even different faculties, from those that pay their salaries; "courses" are not confined to departments (e.g.Sciences gives several courses in "Biology" of which there is no such department—they are taught by botanists, zoologists, geneticists, etc.); some people don't teach at all, either because they don't or because they're on leave; etc. etc. Because of all this, the numbers in this table may be somewhat different from those that would be generated using a different classification system, and may not be 100 per cent accurate—but what is? They're good approximations, though, I think.

Data Base

What we did in setting up this table, was start with the Registrar's list of all courses given in Arts and Science this year and try to develop our departmental counts out of that list. "Courses" was defined as anything the Registrar called a "lecture": labs, seminars and individual studies were excluded. Enrolments per course ranged from one to more than 400. Any course that was broken into more than one section was counted for as many sections as were given; full-year courses were counted twice.

Usually all of this was straightforward enough; when it proved not to work, in the case of faculty teaching courses outside their own departments, the course was credited to the faculty member's home department, rather than the department it was taught in. Ultimately, then, our basic starting point turned out to be the list of staff in any department, credited with teaching undergraduate courses regardless of where they were taught, as long as it was in Arts or Sciences.

Trying to get accurate data on who was on leave proved more difficult however, so that we finally decided simply not to consider that factor (We'll try to show later that this doesn't really make much difference.) Thus, the only staff left out of our count are honorary faculty, and one Full Professor of Chemistry who also happens to be president of this university.

With that much introduction, we can get to the table itself. What it *gives,* department by department, is a breakdown of the percentages of students and courses taught by faculty of different ranks, along with the percentage of staff that that rank makes up, within the department. What that *tells* you is, simply, the likelihood that you will be taught by a Full Professor (or Associate, or Assistant, or somebody else) if you take a course in that department; or the likelihood of courses being taught by faculty of different rank. The third row, which gives the percentage of staff at the given ranks, provides sort of a baseline: if Full Professors, say, taught undergraduates as much as anybody else, the percentages of students and courses taught (the first two rows) should be the same as the percentage they make up of the staff. To the extent that this last number differs from the first two, Professors are teaching either a larger or smaller share of students than they "ought" to be.

The other numbers in the table give the average number of students per class in that department (listed directly across from the name of the department), and the total number of students, total number of courses, and total number of faculty (counting only Full, Associate and Assistant Professors), within each department.

Meaning?

So what's it all mean?

Let's begin with two assumptions: 1)you'd like to be taught by the best qualified people available; 2) you'd like small classes. Our table helps you decide where to find those conditions.

Unfortunately, they're hard to meet, as a set of demands or desires, since the general trend of our data is that the smaller the class size (on the average, within a department), the less likelihood there is of being taught by a Full Professor. The correlation between these measures, if you're into statistics, is .51, which is sizable and significant, as they say. Thus, our first conclusion is that if you're into quality education, you have to learn to suffer large classes.

Second, Science is a better place for you than Arts: in Science, about one third of the courses are given by Full Professors; in Arts, less than one-sixth. Within Science, your best overall bet appears to be Genetics and Zoology: class sizes run slightly over the average for Science, but you stand roughly two chances out of three of drawing a Full Professor as your instructor. That's pretty good: in fact, the only thing that's better is Comparative Literature, where you stand a 50-50 chance of drawing a Full Prof., in any of their courses, while average class enrolment is only 10 students, the second lowest number in these Faculties.

Third, Arts and Science seem to resolve the dilemma created by the problems of students and faculties in quite distinct manners. Arts, which is processing about57,000student-classes this year, runs some 25 per cent higher than Science, which is handling only about 46,000 students. The difference in number of classes is much more striking, however: Arts divides its 57,000 classes into some 1,500 classes or sections, for an overall average of about 38 students per class. Science, with less than half as many classes (668), thus winds up with an average of 68 students per class. In Arts, only Sociology and Psychology average that high. (Incidentally, since Psychology appears in both the Arts and Science Faculties, we've counted that department into both sets of totals).

Thus, the general policy in Arts seems to be to shoot for small classes—even at the risk of having half or more of them taught by TA's and other sessionals. In five of the 15 Arts depts. they teach more than half the students; in seven more, they teach more than one-third, but less than one-half). In Science, on the other hand, TA's and sessionals account for as much as one-third of the teaching in only one department (Physics), but, as noted, classes run larger.

Conclusion

A final conclusion, already implied above, is that departments differ widely in how they handle these question. For example, the average class size in Sociology, Psychology, Microbiology, Zoology, and Genetics, is roughly the same (70 to 90); but in Sociology you have only about one chance in ten of drawing a Full Professor, in Psychology one in four, in Microbiology one in three; and in Zoology and Genetics better than two in three. Similarly, average class size in Religious Studies, Romance Languages, German, Slavic Languages, and Comparative Lit is about the same (16 or fewer per class), but in the first three you stand less than one chance in ten of drawing a Full Prof., in Slavic it's one chance in six, and in Comp Lit. it's one in two. (Again a caution—some of these are small departments, and thus more likely to be affected by temporary fluctuations in staff size if only one person goes on leave; in these departments, next year's figures might be quite different).

Okay, so here are some conclusions: where does that leave us? Well, two places. First, this table describes the realities of the situation with regard to quality teaching as it is currently played out in Arts and Science at this university. Realistically, it may serve as a guide to you in selecting courses, departments or majors: and if it isn't clear from what I've said above, let me re-iterate that the single *best* department with regard to these data is Comparative Literature; that otherwise Science seems to be a better bet than Arts unless you detest large classes; that within Science Geology, Zoology, and Genetics are your best departments; and finally that, overall, Anthropology, Economics, Geography, and Sociology, each with average class sizes of 45 to 70 and each offering less than one chance in seven of your drawing a Full Professor as instructor, would seem to represent your *worst* bets. Things are almost as bad in Psychology and Chemistry, where class sizes average 85 to 120, and your chances of drawing a Full Professor are less than three in ten. In defense of these, it may be worth noting that in all but Anthropology, you stand at least one chance in two of drawing either a Full *or* Associate Prof., which may be somewhat more reassuring. In Geography, in fact, your chances of this are three in four, which is pretty good, even so.

Second, however, is an issue that we haven't considered at all in merely looking at existing realities: is this a good situation, and if not, what can be done to improve it? We'll get to that in our next column.

—ds

	Full	Assc.	Ass't.	Other	N
Botany (98)					
% St.	.45	.18	.35	.02	2537
% Co	.42	.35	.19	.04	26
% Fac	.47	.40	.13		15
Chem. (120)					
% St.	.34	.28	.27	.11	7066
% Co	.42	.34	.14	.10	59
% Fac	.51	.37	.12		41
Comp Sci (39)					
% St.	.11	.37	.22	.30	1999
% Co	.10	.33	.24	.33	51
% Fac	.22	.56	.22		18
Geog. (68)					
% St.	.10	.68	.16	.05	5050
% Co	.18	.57	.13	.12	74
% Fac	.26	.59	.15		27
Genetics. (88)					
% St.	.62	.34	.04		1761
% Co	.55	.35	.10		20
% Fac	.50	.36	.14		14
Geol. (53)					
% St.	.51	.21	.17	.11	2054
% Co	.54	.21	.18	.07	39
% Fac	.48	.24	.28		21
Math S. (41)					
% St.	.17	.45	.17	.21	10278
% Co	.19	.46	.16	.19	252
% Fac	.27	.46	.27		67
Microbio.					
% St.	.36	.64			955
% Co	.77	.23			13
% Fac	.56	.33	.11		9
Physics (47)					
% St.	.33	.27	.06	.34	4358
% Co	.37	.30	.04	.29	93
% Fac	.56	.40	.04		45
Psych. (87)					
% St.	.26	.24	.43	.07	6458
% Co	.26	.23	.39	.12	74
% Fac	.37	.33	.30		30
Zoology (76)					
% St.	.67	.19	.08	.06	3119
% Co	.39	.39	.20	.02	41
% Fac	.41	.44	.15		27
SCIENCE (68)					
% St.	.30	.36	.21	.13	45595
% Co	.32	.42	.17	.09	668
% Fac	.39	.43	.18		
Anthro. (43)					
% St.	.03	.31	.28	.38	3314
% Co	.09	.21	.27	.43	77
% Fac	.25	.38	.38		16
Classics (34)					
% St.	.12	.38	.17	.33	2021
% Co	.09	.31	.07	.53	59
% Fac	.30	.60	.10		10
Comp.Lit. (10)					
% St.	.52	.23		.25	145
% Co	.57	.29		.14	14
% Fac	.67	.33			9
Econ. (56)					
% St.	.14	.43	.09	.34	7093
% Co	.17	.30	.15	.38	127
% Fac	.32	.46	.22		28
English (28)					
% St.	.17	.28	.18	.37	9572
% Co	.18	.35	.16	.31	340
% Fac	.33	.49	.18		61
German (13)					
% St.	.09	.13	.05	.73	910
% Co	.11	.14	.08	.67	72
% Fac	.33	.45	.23		9
History (36)					
% St.	.13	.27	.27	.33	489[?]
% Co	.20	.38	.18	.24	196
% Fac	.34	.38	.28		2[?]
Ling. (29)					
% St.	.00	.20	.12	.68	79[?]
% Co	.00	.22	.22	.56	2[?]
% Fac	.38	.38	.25		8
Philos. (25)					
% St.	.11	.19	.12	.58	230[?]
% Co	.07	.19	.14	.60	9[?]
% Fac	.26	.48	.26		19
PoliSci (40)					
% St.	.18	.38	.14	.30	388[?]
% Co	.18	.35	.14	.33	9[8]
% Fac	.30	.44	.26		23
Psych. (87)					
% St.	.26	.24	.43	.07	64[?]
% Co	.26	.23	.39	.12	7[?]
% Fac	.37	.33	.30		30
Relig. (15)					
% St.	.00	.32	.13	.55	5[?]
% Co	.00	.38	.15	.37	3[?]
% Fac	.25	.50	.25		4
RomLang. (16)					
% St.	.06	.28	.15	.51	33[?]
% Co	.07	.30	.14	.49	2[?]
% Fac	.22	.47	.31		3[2]
SlavLang. (7)					
% St.	.16	.23	.28	.33	41[?]
% Co	.09	.26	.25	.40	5[?]
% Fac	.20	.50	.30		1[?]
Sociol. (70)					
% St.	.12	.51	.07	.29	11[?]
% Co	.14	.43	.09	.34	1[?]
% Fac	.22	.62	.16		3[?]
ARTS (38)					
% St.	.14	.34	.18	.34	569[?]
% Co	.16	.33	.13	.38	14[?]
% Fac	.31	.45	.24		