

On Being a Professor

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1. Teaching

Teaching is the most visible part of a professor's job but, paradoxically, it is probably the least understood. Most people are probably familiar with what high school teachers do and it is reasonable to assume that university teaching is similar. In fact, the teaching done by professors is only superficially similar to teaching by high school teachers. For example, schoolteachers follow a curriculum prescribed by an external agency, such as the Department of Education. Schoolteachers teach material that changes little from year to year and tend to teach several classes on the same material. In contrast, professors establish the curriculum for their courses and, in senior courses, the content varies considerably from year to year. In fact, the best professors seldom use old course notes or texts from year to year. In addition, professors seldom teach more than one section of the same course at a time, so every class is different. This requires a familiarity with the primary literature in several different fields.

Professors are also teaching courses with more complicated material than high school teachers. Much of this material is new and must first be understood before it can be presented. As a result, preparation time can be substantial. It is usual to spend 4 to 5 hours preparing for a single hour lecture. One of the principal goals of University lecturing is to teach critical thinking and the associated ability to express this critical approach in written work. If the professor is successful, then students will be able to trip them up, which adds another dimension to 'class preparation'. Also, if a professor is successful students will seek them out of class to ask questions, even questions related to other courses taught by other professors. In a sense, this is hidden teaching and it can be very time consuming. It is, however, also a time in which students may learn a great deal. Finally, the students routinely evaluate professors' teaching. This is a peculiar aspect of the job in that salary and career progress can be influenced significantly by anonymous evaluations by students.

Another hidden part of university teaching is the 'independent study'. This may take many forms but they normally involve a weekly meeting with the student and it is not unusual to spend several hours a week with a single student, especially at the beginning or end of the project. This teaching does not appear in the assigned teaching list. Similarly, there are graduate students and postdoctoral fellows who work with professors. This includes not only students working directly with a given professor but also students working with others, even at other universities. In Canada, most Master's theses and virtually all Ph.D. theses are read by someone at a different university. The reader must write an analysis of the thesis and frequently must travel to the examining institution to participate in an oral examination of the candidate. This too is teaching.

Of course, university teaching has many similarities to high school teaching. There is the marking of papers and essays. There is talking to students about course material. There is advising students about careers. And, there are the reference letters for scholarships, other universities, professional schools, and jobs. Most professors write dozens of these annually and they each take time.

In sum, although university teaching includes only six or nine hours a week in the classroom there are a lot of hidden hours giving individual instruction, preparing lectures, holding review or tutorial sessions, or holding laboratories. It would not be unreasonable to suppose that a ratio of 5 hours of hidden teaching to each hour in the classroom is common.

2. Scholarly activity

Scholarly activity means different things in different fields. For a scientist it normally means doing experiments and publishing the results in a professional journal. For a historian this may mean researching an event or person and writing a book that provides a novel analysis. This sounds straight forward, but there is more involved than may be immediately apparent. First, in many fields it is first necessary to procure funding for the research, usually in the form of a grant from a provincial or federal agency. Indeed, this is a unique aspect of professorial work. It is equivalent to a company hiring someone to make 'widgets' and then saying that the company will not provide any equipment, technical assistance, nor space for making the widgets. Nonetheless, success in the job will be dependent upon selling widgets. Hence, in many fields of science or social science grant writing becomes an annual job that may take literally weeks to complete. This is largely because grant applications often include extensive literature reviews and analyses of prior work.

Second, it is necessary to discover or to analyze something. In the sciences this may mean getting sophisticated techniques to work, running experiments, analyzing data, and so on. In the humanities it may be necessary to search world wide to find specific literature and, in many cases, to translate the literature into English.

Publication is not merely the act of writing a paper or book that is sent to a journal or publisher. Manuscripts are reviewed anonymously and in most fields the rejection rate for work that may have taken years to complete is over 50% and in some fields it is upwards of 80-90%. Furthermore, if manuscripts and research grants are being reviewed, it is obvious that someone is doing the reviewing. Most professors thus frequently must review the work of others, which normally means writing a sometimes lengthy analysis. This is eventually sent to the authors but is not published and remains an anonymous effort. In other words, this work too is hidden.

Third, there are thousands of professors in universities around the world so information is constantly changing and it is necessary to keep up. I recently attended the Society for Neuroscience annual meeting, which was attended by over 22,000 other neuroscientists, most of whom presented the results of recent experiments. It is thus not only a daunting task to keep abreast of one's field, but in the sciences especially it is routinely necessary to learn the content of whole new fields that simply did not exist twenty or thirty years ago when one was a student. This learning is not superficial: it is not unusual to end up teaching courses in fields that did not exist when one graduated with a Ph.D. It is one thing to have a working knowledge of new information. It is quite another to lecture on the information.

Not only must one keep up with research but also one must help others keep up. Thus, there is a steady stream of requests for information, further explanation, and so on, from

other scholars around the world. In a real sense, one is teaching other academics what one knows. This too can be very time consuming and is completely hidden work.

One curious aspect of creative activity is that it is difficult to be 'creative' in small bits of time. Rather, most people need large blocks of time, such as days or weeks, in which to write. Since this is often not possible during the teaching semesters it is normally during the summer months that professors write. Writing is not a vacation.

One of the things that is often suggested is that 'professors should get in the classroom where they belong and stop doing research'. This is an interesting view that neglects an important fact of Canadian society. In many countries of the world, especially in Europe, research is done in research 'Institutes'. Thus, specialists are hired specifically to do research. Others are hired to teach at Universities. Typically, the very best research people in a given field are therefore to be found in Institutes and not in universities. Canada has few research institutes. Instead, universities provide the place for research to be done. This has the disadvantage that people are less productive when they must also teach but it has the advantage that the top people in a field are also teaching. If Canada were to stop doing research in universities, Canada would almost stop doing research. In a real sense this would mean that Canada would have to import all its information, which has a price. Professors who are not doing scholarship would quickly fall out of touch with their fields and Canada would fast become a third world country. An associated problem with reduced scholarship is that it often takes academics to understand much of the information that is needed in a modern society. Thus, if research activity declines significantly, the ability to understand the research activity by others also declines.

In sum, scholarship is not only an integral part of the North American University system but it is also an essential component of Canadian society. Universities are not only a place to disseminate information but they are a place to create it and to understand the information disseminated by others. One need only look to some of the effects of the Cultural Revolution in China to witness the long-term consequences of reducing scholarship in universities.

3. Service

'Service' is the final aspect of the job and is probably the most diverse. There is a common misconception that professors work for 'The University'. In fact, professors ARE the university. The professorate at every university designs and implements every aspect of the university. It is much like having a provincial Department of Education in every university. As a result, there are committees for everything imaginable. There are committees to approve courses, to approve research proposals, to develop long-term plans, to admit students, etc. In addition, there are committees to consider student grade appeals and various discipline matters. There are committees to evaluate colleagues and to make recommendations regarding salary, tenure, and promotion. Then, there are administrative jobs such as department chair, departmental student advisor, and so on. There are also public service talks to the community and talks to student groups. Finally, there is an implicit assumption by the community at large that professors ought to provide information to anyone who asks, free of charge, and at the questioner's convenience. This is a reasonable assumption but curiously it is not one normally made for other professional groups, such as physicians, lawyers, or engineers. People in the general public have no inhibition in phoning or writing professors to request answers to

questions. Professors are usually happy to answer and to provide references and often to lend materials. Again, this is a form of hidden teaching.

Not all 'service' is done for a university or for the public. Professors are members of an 'invisible college', which is their discipline. Thus, historians belong to the invisible college of historians and chemists to a college of chemists. This often represents a major time commitment. For example, a scientist may be asked to serve to represent one's specific discipline as a member of the appropriate grant selection committee for the National Science and Engineering Research Council, Medical Research Council, etc. Such an appointment represents about two full weeks work per year. It also represents travel time to Ottawa, which is not insignificant from Lethbridge. Similarly, there are provincial, federal, and international associations in one's discipline. These also often represent significant time commitments.

In sum, being a professor is a privilege and most professors would be hard pressed to imagine a better job. The unfortunate thing is that so few people understand what professors really do, in large part because most of a professor's job is hidden from public view.