

Call to action.

July 2008

Preface. My purpose in writing this is to suggest that there are changes we should make to our undergraduate teaching in the first two years to make it more meaningful and effective. Such changes ought to enhance the students' learning and ought to allow us to do the job better, with less frustration and hopefully less time, that time to be better used doing research and spending informal time with our students.

My 39 year old daughter Kate went back to college two years ago to retrain, moving from social work, where she had spent 15 demanding years, to home renovation. There were three of them in the program of her age (two women and a man) and the rest were 19-year old (mostly) males. She talked to me the other day about what made an adult learner different.

Now for a couple of years I've been pushing the idea that we should make Queen's a place for "real learners" but I always felt I had to stop and try to explain what I thought a "real learner" was. Listening to Kate, I realized that the concept I really wanted was that of an "adult learner." Somehow we all know what that means.

So my thesis is that Queen's should be a place for adult learners. I suggest that we all feel too sharply the press of other professional demands (and they are significant creative demands) to want to be bothered coping with "children."

Indeed, my colleagues all feel the push to keep their research programs running. Nevertheless they love teaching and are happy to do their bit (3 half courses plus graduate teaching). But what they don't care for at all is all the "stuff" that descends on them when their students start behaving like children. In fact I have to add one important comment. My colleagues worry about our graduate program and with good reason. The decline in faculty numbers have made it virtually impossible to offer enough graduate courses. The thought that there are inefficiencies in our undergraduate program leads us to think that by correcting these we might harvest more time at the graduate and research level. There is an undeniable tradeoff here.

Why do so many of our students behave like children? There are at least two reasons. First, it's an uncertain world and they are beset with anxieties, uncertainties and unreasonable expectations. And secondly they often arrive here without a clear understanding of what a university is and what learning is all about.

Expectations. In a talk at the Fields Institute last year, Miroslav Lovric from McMaster talked about the nature and significance of certain "rites of passage." A good example is marriage. The solemnity of the ceremony reflects the fact that this new state heralds a profound life change, with new privileges and new expectations and responsibilities. Of course there is great joy and dancing as well but even this is suffused with the gravity of the transformation. Entering university also signals a profound change in the life of the student, in her expectations, her responsibilities and her opportunities. *She simply cannot behave like a high school student any more.* This is also a significant rite of passage but we do not treat it as such. Our "academic" orientation is hardly academic but is really more socio-cultural and lacks challenge and gravity. And our curriculum (all aspects, content, homework, tests) especially in that crucial first year, is far too much like a heavy duty high school curriculum. No wonder they have the wrong expectations.

Queen's is the place. It is arguable that all Ontario Universities should be places for adult learners. But this is not the case, nor will it ever be the case as long as students with high marks in high school automatically go to university. But why should all Ontario Universities be more or less the same? Queen's, with its legendary strong academic reputation, could afford to be different. I suggest that Queen's design its academic programs for adult learners.

The primacy of first year. The place of course where this character of the institution must be clearly displayed is in the first year. As I observed above, whether we realize this or not, this is where we tell our students what this place is all about. For this reason, if for none other, this is the place where we ought to focus some imaginative thinking on our curriculum and our pedagogy, especially in the sciences. For example, we must think carefully about the number of large lectures our first-year students currently attend. Now I am in fact a fan of large lectures when they are lively and imaginative and do the things that lectures are particularly good at doing. But we don't actually need so many of these, not nearly so many as we have at present. [Cast your mind back to your own first year. Is it not true that when you left a lecture with an enticing problem, you were set for the rest of the day?] What besides lectures should we be offering?—experiences which put the students into an investigative mode and I have argued for some time that in the sciences we should make better use of our senior undergraduate students in this capacity—for example (by way of funding), the awards and scholarships we now give them should be assistantships instead.

Knowledge. Let me comment briefly on the idea that there is now a huge amount of knowledge that our students need to have in order to succeed in later life. This is of course not the case. Most of our grads use very little of the actual knowledge they (supposedly) acquire in their time with us. Those few that will need and will use that knowledge for the most part know where they are heading and are adult learners already. They work together to get what they need no matter what we do in class. The bottom line is that most of them don't need all that knowledge and those who do, learn how to get it. In fact "learning how to get it" could be regarded as the price of admission to grad school.

What our student do take away from their time with us are the habits of thought, of reflection, of self-expression, the talents of reading, writing and speaking well, of thinking clearly, and most of all, the capacity to learn.

Teaching students to learn. This takes time. It must be done carefully and caringly, but also, I think, presumptuously and daringly as effective learning involves risk-taking. Anyway we can't spend the time we need on this task and also "cover" all the material we now put into our courses.

The budget crunch. Our students are aware of this. They oppose higher tuition fees but they do sympathize with our tight and uncertain financial situation. I think we should give them a way to help out which they could embrace with some enthusiasm and I believe that asking them to behave like adult learners might be exactly what's needed.

The next Principal. We want someone for this position who has energy and imagination and does not shy away from a formidable challenge. A reform of the undergraduate program along the lines outlined here might help to attract such a person.

Tests and Exams. Assessment drives the curriculum; you have to test what you teach. A closely related principle is that the way you test has to be true to the way you teach. That is, the joint enterprise, teaching and testing, must have integrity, it must work as a whole. This is such a key idea that I devote an appendix to it below.

I propose to have a few sessions in which I sit down with a number of others, hopefully from a variety of departments and explore some of these ideas and actually carve out a strategy (in fact a structure!) which rises to meet some of the ideas and challenges outlined above. If you receive this document, you might be interested or you might know someone, perhaps in your department, who might be interested. I'd be happy to hear from them.

Some of the earlier documents relating to this initiative can be found at <http://www.mast.queensu.ca/~peter/teaching.htm>

Appendix: Changes to the exam system. I have been playing with different types of changes to the exam system in first and second year, and here I will summarize two of these. I have two objectives in mind, first to enhance student learning, and secondly to enhance and enable our teaching experience. Let me just first point out that I really don't regard the examination process in third and fourth year to be problematic. With generally smaller classes, more sophisticated material and the opportunity to know the students better, there are lots of excellent possibilities for a good assessment model.

Proposal 1. *Certification and feedback.*

This first proposal is to have no (or few) certification marks (marks used by a third party) in first and possibly second year, only feedback marks (marks seen only by teacher and student).

On the plus side, such a system will inevitably confront students squarely with the question of why they are learning. Without the certification pressure, they may well be more willing to experiment, take risks, and investigate "long-term" learning strategies. Large first- and second-year courses ought to be easier to handle. Students will be less anxious about marks, tests and assignments. In fact, tests could be done at home. Students could be told to hand in an assignment for grading only when it represents their best work. Marking might be easier and less frustrating.

But there are negatives. First, some students will not be able to rise to the challenge of such "openness," and might fail when reverting to a more traditional system. Some of these might be salvaged (and may have thereby learned a vital lesson) but others will be lost. [Perhaps Queen's was not the place for them.] And secondly, there are a few cases in which we do need certification marks in first year, for example, for students on probation (e.g. mature students) or for competitive admission to some programs. Strategies can be imagined for each of these. For the first, such students could be identified and given a "real" exam once or twice a term. For the second, perhaps a "pass-fail" admissions test of performance in problem-solving and writing based on general high school knowledge would serve our purpose well, perhaps even better.

Proposal 2. *The new significance of community.*

Students increasingly work “together” or in a community, if not with fellow residents and classmates, then with others who are accessible through email and internet channels. In fact, for the student generation, McLuhan’s global village has truly arrived. Of course it has arrived for the rest of us as well and we are all in urgent need of reinventing community, not only for ourselves but for our planet. Perhaps one of the important things we, as a university, ought to be doing is investigating new ways of working together.

Anyway, why do we examine them by cutting them off from that world, the world in which they’ve worked while they’ve been studying, and the world in which they will continue to work once they leave us? It’s a good question and of course it has a number of worthy answers, but I’ve been trying to hold some of these answers up to intense scrutiny, and I’m not sure they fare as well as we might think.

Suppose we went partway towards a more collaborative examination system in first and second year. For example, give the questions out a couple of weeks or so ahead of time and encourage them to work together where appropriate, but have them come in on exam day and write their own papers. Such a change ought to represent a significant learning opportunity and we would want to discuss with our students the importance of responsible collaboration, that in a community, everyone is a teacher as well as a learner. I suspect that such a change would cause our students to think in a new way about the question of what this place is all about, and why they are here, perhaps not only here in the university, but here in the world.

Of course we need aspects of the old system as well. Every student needs and deserves the opportunity to perform on his (or her) own. But the more I read and observe in today’s world, the more I feel that there a fundamental shift in the making and we ought to be investigating that in different ways.

Note added. In the recent EDUCAUSE Review I noticed an article by Chris Dede of the Harvard Grad School of Education on “A seismic shift in epistemology.”

<http://connect.educause.edu/Library/EDUCAUSE+Review/ASeismicShiftinEpistemolo/46613>

The article and many of the online comments it received focused on new meanings of and ways of thinking about knowledge in the world of Web 2.0 and Wikipedia and Facebook, etc. But for my money, what was interesting about the article was its implications, not for the nature of knowledge but rather for the construction and handling, and the teaching and learning of knowledge. That is, for me, the seismic shift is about pedagogy rather than epistemology. Incidentally I do not intend a value judgment here; I do not suggest that their way of being in the world is a better one than was ours. But it’s where they are, and by going there in our own way we can at least help them to find richer ways to work with one another.

Peter Taylor
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