



ASSOCIATION OF
ATLANTIC
UNIVERSITIES

ASSOCIATION DES
UNIVERSITÉS DE
L'ATLANTIQUE

Awards for Excellence in Teaching

2002

**Presentations to the
Atlantic University Presidents**

**by the recipients of the
2002 Association of Atlantic Universities**

Distinguished Teacher Award

Katherine Frego
Department of Biology
University of New Brunswick in Saint John

Douglas Hunter
Department of Physics
St. Francis Xavier University

Instructional Leadership Award

Pierre Zundel
Faculty of Forestry & Environmental Management
University of New Brunswick in Fredericton

September, 2002

The Importance of Good Teaching

by

Dr. Kate Frego

Department of Biology, University of New Brunswick in Saint John

Good evening, ladies and gentlemen....
When I first learned that I was to be called to speak to you for 10 minutes on the subject of “**The importance of good teaching**”, I found my thoughts ranging over extremes. My first thought, I must admit, was, “Well, these are university presidents... if they don’t know by now....!” Then I thought, “Well, thank goodness they didn’t ask me to DEFINE “good teaching!”” And that led to the deeper, “Thank goodness they didn’t ask me to define TEACHING!” I thought about describing my own unplanned journey into teaching, stumbling through dark valleys, and slogging up steep learning curves, governed more by serendipity than by map.

But, being trained in the great academic tradition, I didn’t trust my gut reactions or my personal story; **I had to collect data...!** Of course, I say this somewhat facetiously; my data collection was hardly scientifically rigorous. But it served its purpose: to open several new avenues of thought, focus my thoughts, and to light a fire in me.

First I asked my colleagues... through an email distribution list that is used to announce teaching-related activities, to seek volunteers, or to poll those with an interest in teaching for their opinions. I took the topic to them. I received over a dozen replies in an hour!

Second, I asked my current botany students – to say they all had opinions would be an understatement! (Of course, it could have been a ploy to distract me from the lecture topic!) But even after class, several sent emails to clarify or expand on their thoughts on the subject.

It seems that there is a lot say on “the importance of good teaching” – I fear that 10 minutes is not going to be enough! So please sit back and get comfortable... this should only take a couple of hours!

I’d like to summarize three important themes:

1. Good teaching is more than information

transfer

2. Good teaching stimulates learning, and changes the learner.
3. Good teaching has costs as well as benefits.

THEME 1: Good teaching is more than information transfer

Most respondents, teachers and students, began by speaking of what defines good teaching, and an overwhelming consensus emerged:

5 good teaching is NOT a transference of a package of content, material or technical knowledge... the written word in textbooks, journals is much more efficient...

5 Nor is it that content, coupled with a performance, or a “dazzling show of expertise”... entertaining video or audio presentations are much more effective.

Then, what is it? How can good teaching be recognized? If you forgive my botanical slant, “you shall know good teaching by the fruit it bears”.... good teaching, like a wind, is seen in its effects: in **learning**. **THEME 2: Good teaching is the kind that stimulates learning.**

Yes, but **why is good teaching IMPORTANT?** Surely a good student will learn from anyone, in any situation... good teaching is almost irrelevant.

In what I consider to be a burst of true insight, one of my colleagues turned the question on its head: To see why good teaching is important, imagine the university **without it**... look at the fruits of poor teaching!

Where to begin.... when students describe their experiences with poor teaching, they speak of being bored, of withdrawing from the discourse by avoiding classes,... to many, poor teaching is the kind that is no more than information content. As one student said, “I might as well stay home and read the textbook!” A fate worse than death....

Poor teaching, (students and teachers tell me),

results in students being confused and frustrated, in passivity, in loss of interest, loss of sight of greater goals, dropping out of university, and in some cases, the worst I can imagine: loss of self-confidence and self esteem.

THEME 2, revised: Good teaching transforms the learner.

My reverse logic may not survive the scrutiny of my colleagues in philosophy, but my conclusions are these: good teaching is important because it is **synergistic**... along with information content, it stimulates, motivates, encourages, develops personal and professional confidence, opens doors to new possibilities of thought and action. It is important because it is **transformational**. (This process is, of course, incremental... one student told me after the Introductory Botany course, "I'll never look at my dinner plate the same way again!!" A small step, but the beginning of a transformation!)

But herein is a paradox. In a well-known **model of communication**, a teacher would be the **sender**, the content is the **message**, and the student is the **receiver**, with a **medium** that varies from classroom to laboratory to discussion group to library. Our goal is to not only deliver a message (information, skills, etc.) to the receiver, who may or may not be receptive – our goal is to transform the receiver, to somehow make it able to receive other messages, from other media, and even to become a sender him/herself!

I am no electronics wizard, but I am painfully aware that I cannot send an electrical message to my telephone, and by the very nature of that message, rewire it to receive video images....

And yet I try, on a daily basis, through the message in my teaching, to open my students minds... students who don't WANT to study plants, who come to me with their receivers turned OFF... not only use the message to connect up their satellite dishes, but to retune them, so that they are "turned on" to the wonders of plants, to the scientific method; to see their world differently because they understand the costs and benefits of flower design, and why some plants are edible and some aren't....

For the miracle of teaching that transforms the

learner, I believe the model needs another element: sort of a "power source": an additional channel of communication that operates at the most human level... a personal connection or relationship between teacher and learner as adults.

Interestingly, more STUDENTS speak of this key element than do faculty. They speak of an atmosphere or relationship of trust, of mutual respect, and yes, even of warmth, nurturing and personal encouragement that lowers their anxieties about performance and risk, and (in their words) "opens them up to learning".

To me, transformational teaching recognizes the emotional and spiritual aspects of students as humans -- their hopes, their fears, their broader life commitments -- it validates these aspects, helps to alleviate fears, and even more importantly: it models -- not just content but **connection**, not just fairness but **compassion**, and reiterates that the teacher has been, and is still, a **fellow learner** who struggled with all the same barriers and challenges but is there to serve as a **guide**, not a gate-keeper.

THEME 3: Good teaching has costs, as well as benefits.

While your presence at this event tells me you believe that good teaching is important, I cannot end without expressing my thoughts on the **cost** of good teaching, and the importance of **support**. Good teaching, ANY teaching, takes time and energy. Development and maintenance of these one-on-one relationships that nurture our students – new classes full of them every term, and many of the relationships, the best of them, continuing far after graduation – takes a stunning amount of time and energy on a daily basis. How do we, as teaching professors, manage this in the context of the university?

It's a balancing act.... there is no question that time spent on teaching takes up time that could be spent on other responsibilities... like research. Am I advocating reduction or removal of research from the job description of those who teach? **Absolutely not!** Research and teaching are two sides of the same coin that defines the university. Research in our areas of expertise is what makes us "creators of knowledge" and what marks us as lifelong learners, engaged in the same process

and discourse as our students.

Is institutional support for good teaching important? Well, as before... imagine a university without it. The good teachers burn out or become disillusioned; beginning teachers, mediocre and poor teachers fail to develop to their potential. Good teaching becomes rare, and learning suffers....

Then HOW can the university encourage or even facilitate good teaching? Well, there is no evidence that increased or more rigorous evaluation of teaching results in improved teaching. **Awards** like this one, as wonderful as they are, aren't likely to motivate mediocre or poor teachers to improve – they function more as summative feedback, rather like a final exam. My observation is that most good teachers teach for the love of the subject and the love of their students -- **pursuit of awards is just not on their radar**... even if it was, let's face it: unlike research, awards for teaching are pretty SCARCE!

So, while I'd like to think we are ALL self-motivated, and awards are not needed as incentive for us as teachers ---- **regular and timely recognition** for effort, for enthusiasm, for the pursuit of excellence in teaching – now THAT is where an institution can make a difference!

5 First, to recognize that good teaching is a labour-and time-intensive **professional and scholarly pursuit**, not just a personality trait; and that it can be developed through effort and practice.

5 Second, to recognize it as a scholarly pursuit **on a par with research**, requiring similar levels of talent, reading/research, commitment and deserving of similar respect. Together these two entail providing the explicit inclusion of teaching as **criteria** in hiring, promotion and salary decisions, **opportunities** for professional development, and if not incentives, then thoughtful consideration of

what may constitute **DIS-incentives** to pursue teaching excellence.

5 Third, to offer to teachers, at the institutional level, the **very things that good teachers offer their students**:

- 5 clear targets;
- 5 guidance and encouragement to find and master the tools;
- 5 reassurance that it is okay to risk trying, and to try again;
- 5 recognition of **progress** on the journey to excellence, providing that formative feedback that helps all learners to know whether they are on or off the path to their goal... and
- 5 recognition that teaching is not a one-size-fits-all formula-driven enterprise, but a **personal, creative and dynamic scholarly relationship** to our discipline and our colleagues as well as to our students...
- 5 in short, a **transformational relationship** that opens a future of lifelong pursuit of excellence in teaching.

I would like to conclude by thanking:

- my wonderful **colleagues and students** over the past 25 years, who cared enough about my growth and development to provide formative feedback on my own personal journey in teaching,
- and of course those who generously gave their time and effort to nominate me for this award.

I thank my **family**, and especially my **husband**, for not only putting up with the teaching demands that take so much of my time, but actually encouraging me to do my very best and to always aim higher ...

and I thank YOU for considering me **worthy** of this recognition, and for allowing me the **opportunity** to put into words my thoughts and hopes on the subject of good teaching.

The Importance of Good Teaching

by

Dr. Douglas L. Hunter

Department of Physics, St. Francis Xavier University

It is an honour to receive this award but I feel somewhat out of place because I think awards such as this should go to innovative teachers.

I am not on the cutting edge of technology, creating new ways to interest students. I am not someone who experiments with new pedagogy. Rather I am a very conventional teacher who lectures in a very traditional way, but who cares deeply about his students and whether or not they succeed. So, in that regard, I am sure that I am only one among hundreds in your institutions who are equally deserving of this award.

In recent years there has been much more emphasis placed on the quality of teaching in Canadian universities. Most universities have created teaching resource centres and/or faculty development committees and are placing much more emphasis on teaching effectiveness in rank and tenure decisions. This may be due, in part, to student demands for accountability and for teaching and course evaluations. The Atlantic Universities have been leaders in the promotion of good teaching and they are to be congratulated for all their faculty development efforts and for creating these teaching and instructional development awards.

As a freshly minted Ph.D. in 1967, I had the distinct impression that teaching was just something one had to do, in order to enjoy the privilege of doing research in a Canadian university. When I was an undergraduate teaching did not seem to be a priority. My instructors ranged across the spectrum, from the truly inspiring to one instructor who spent the first half of every class correcting the mistakes of the previous lecture and the last half making fresh mistakes. His lack of preparation was an insult to his students, but it did not prevent, or even slow, his rise through the ranks and the administration.

When I first found myself at the front of a classroom, I felt woefully unprepared. I had studied physics and had been pronounced sufficiently full, but I had no preparation for

teaching whatsoever. For the first couple of years I thought primarily of myself. It took some time before I could relax and put myself in the position of the students. Now I believe that concern for the students is the single most important thing for a teacher to develop. It is important to get to know the students, to appreciate their often widely varying backgrounds, abilities, learning styles and degrees of preparation. A lot of my teaching effort has been directed toward a large introductory level physics course for physical science and engineering students. I discovered quite early that some first year students had real difficulty grasping more abstract concepts like the motion of conduction electrons through a metal. However a very concrete analogy as mundane as the game of PLINKO on "The Price is Right" (with which they were all familiar) was useful in getting the point across. It was years later, at the first science teaching workshop that we organized at StFX, that I learned of Piaget and theories of cognitive development. That would have been very useful knowledge to have had when I started teaching. I am glad that such workshops are now offered routinely and other resources are available to help university instructors, particularly those starting out, so that they don't have to discover things like that for themselves.

There are many successful teaching styles. I have a colleague who regards himself as a coach rather than a teacher and his style is excellent for upper level undergraduate courses. Others have mastered the latest in technology in order to catch the interest of students and to enhance the presentation of material. Education research lauds the participatory approach, and there is plenty of evidence of its effectiveness, although it may take a little longer to cover the same material. I am, as I have said, a more traditional lecturer. I have found this works well for me. But even after 30 years each lecture has to be carefully prepared. The lectures are supplemented by tutorials, where I divide the class into four and meet each group of about 20 students for 3 hours every two weeks and

work with them individually on problem solving and helping them with any difficulties they may have. It is in the tutorials that I get to know the students, see their strengths and weaknesses, obtain immediate feedback on my teaching, and provide the first round of assistance to those who need it.

All these teaching styles can work, and it is healthy that students be exposed to as many of them as possible. However, it is extremely important not to let the methodology or the technology come between the instructor and the student. The most important thing for an instructor to do is to get to know each student and to let that student know that the instructor cares about him or her as a person and as a learner, cares whether she attends classes, and cares whether he passes or fails. If the student fails then the instructor has failed – either to motivate the student or to communicate the material. We cannot compromise our standards. The university establishes the standard and the instructor's job is to assist every student to meet or exceed that standard. Of course not everyone will. But they all deserve our best effort. I get upset by faculty members who believe that maintaining standards requires that they fail at least one third of the class.

While I derive tremendous satisfaction from teaching, it is important that teaching and research should not be divorced from each other at the university level. There is a growing trend in American universities for researchers to buy release from their teaching duties using their research funds. Some tenured faculty may prefer to emphasize research while others prefer to emphasize teaching. Universities should be flexible and develop mechanisms to allow for this, but never one at the exclusion of the other. A teacher at this level who is not participating in the advance of the field will lose the sense of immediacy or currency of the subject, and a researcher who is not passing on some of the excitement of discovery is depriving potential students by not doing so.

Teaching large first year classes for so long has made me very aware of the difficulties some students face in the transition from high school to university. Our department has tried, I think very successfully, to open a dialogue with high school

physics teachers. There is a natural suspicion, one of the other, when universities are critical of the students they receive and the high schools feel that they are being dictated to by the universities. We have found a comfortable meeting ground. We recently hosted the 29th in our series of Physics Teachers' Workshops. Twice a year typically about 10 – 16 high school teachers from Cape Breton and northern and central Nova Scotia, and 4 – 6 faculty members from StFX get together all day on a Saturday to share ideas. The majority of the program comes from the teachers themselves, sharing ideas about classroom demonstrations, lab experiments, computer software, or any other teaching tips. Sometimes a faculty member will make a presentation on some topic requested by the teachers and usually we have a guest who can relate some aspect of physics to a particular application such as medical imaging, remote sensing, aircraft flight and navigation, meteorology, global warming or automobile accident-scene reconstruction. Teachers and faculty alike have found these sessions to be very valuable, and they point to the opportunity to talk to each other as probably the most important aspect of all. Recently I met with several Physics faculty members at both Saint Mary's and Acadia who are interested in starting something similar at their universities. I commend this idea to other universities and to other disciplines.

I want to conclude by saying how fortunate I have been to have had StFX willing to pay me an adequate, although certainly not munificent, salary for doing something I like so much. I could not imagine doing anything that would have brought more enjoyment and satisfaction. The majority of that satisfaction comes from the thousands of students it has been my privilege to get to know over the years. Commitment to one's job such as this requires sacrifices in other areas. I am grateful to my departmental colleagues, but I particularly want to thank my wife, Paige, and our two daughters for the understanding, the support and the encouragement they have given me over the years. Finally I wish to thank the Association of Atlantic Universities for the honour of this award.

What Can University Presidents Do To Encourage Good Education

by

Dr. Pierre Zundel

Faculty of Forestry and Environmental Management

University of New Brunswick in Fredericton

Although the front line work of education is done by people like me, it is validated, motivated and facilitated by people like you.

So I thought it'd be useful for you to hear a faculty member's view of those things you, as university presidents, can do encourage good education.

Teaching is a lot like gardening - it is about creating conditions in which things grow.

In fact, words like *training* and *education* have their linguistic roots in agricultural and horticultural practice. As a result, I'm going to use gardening as a metaphor for education.

One of the most important things you can do is

Declare gardening a worthwhile activity

- 5 when I decided to take up gardening a few years ago, my wife had a choice to make about how she would view this latest obsession: she could either encourage it as something good for me and for the family or consider it a waste of time given all the other things that I had going on.
- 5 If she chose the latter, gardening would be an activity I did furtively. It would be something I did instead of the important things... something to feel guilty about.
- 5 Characteristically, her actual response was to buy me a hoe, thereby signalling that I could garden with her blessing. We've been enjoying the 'fruits' of that support ever since.
- 5 like gardening, good education takes time and energy
- 5 faculty members (particularly new, untenured ones) are unsure whether spending substantial amounts of time and energy in their courses and with their students will be seen as a positive thing by the tenure and promotion committees that control their futures.
- 5 The first thing you can do then, is signal that teaching is a high priority

5 As with politicians, academic leaders have to overcome cynicism about what they say, so they cannot depend on their words alone to send a credible signal - they have to speak through actions.

5 So, how do you send those signals?

Showing off your best teachers

What do you show visiting dignitaries? Do you show them only the flashy new DNA analysis lab and satellite imagery facility?

5 Have you taken them to meet your best teachers?

5 In the mid-nineties as my colleagues and I were developing and offering an 8 credit hour two-term problem-based learning course for first year forestry students, the Dean of Forestry brought a dignitary from Switzerland to meet with us to discuss our teaching innovations and practices.

5 We were very proud to be part of the 'showcase' for our faculty and this motivated us to continue the draining work of changing student's learning 'culture'.

Participating in Teaching

5 Have you considered attending and participating actively in some teaching related functions (effective teaching institutes or workshops). [Pause - Smile] - I don't mean just making an opening speech and then leaving - I mean staying and engaging in the conversation;

5 In the early nineties, our Dean and Department head took a group of five or six of us to a two-day conference in Quebec on the future of forestry education. This did four important things: 1) It built team spirit to spend a lot of concentrated time together 2) We all had exposure to some powerful educational ideas that helped us with planning what we ought to do. 3) It created a critical mass of people

committed to making change and, most importantly 4) By taking the time to come with us, our academic leaders showed us that teaching and learning was a top priority.

- 5 you might be surprised what would happen if you took a team of faculty and/or administrators to an educational conference

Check your tenure and promotion process

- 5 I can tell you from personal experience and countless conversations around the photocopier, faculty are keenly aware of what your collective agreement says about their various responsibilities
- 5 is the language of your collective agreement strong enough with respect to making effective teaching a necessary condition for promotion and tenure?
- 5 Are tenure and promotion committees applying those terms in ways that promote student learning?
- 5 One of the premier teaching institutions in the USA is Alverno College, in Milwaukee, Wisconsin. It is a small Catholic university that accepts the worst students - mostly first generation university and visible minority students - and has great success with retention and placement after university in both grad schools and work places. They have gotten substantial grants from the US Government and private foundations for their innovative teaching work. Their summer teaching workshops attract hundreds of people from all over the world.
- 5 They have committed themselves to the providing the highest quality education and their promotion standards reflect it.
- 5 Let me read a few of the promotion criteria:
- 5 Promotion to associate professor requires that faculty:
 - 5 Engage in dialogue about teaching in the higher education community
 - 5 pursue opportunities to improve the quality of teaching across the institution
 - 5 apply specialized scholarly research to improvement of teaching and curriculum development in the institution
- 5 Full professors are expected to influence professional dialogue about teaching scholarship in the higher education community

- 5 It might be useful for you to reflect whether your tenure and promotion process is providing as strong a signal in this area as you'd like.

- 5 Now, getting back to gardening - the second major way to promote good education is to ...

Encourage people to talk turnips

- 5 what I know about gardening I have learned in large part from what my wife would call endless conversations with experienced gardeners
- 5 the bustle of academic life is such that we spend too little time in scholarly reflection and analysis about what we are doing
- 5 My Renaissance College colleagues and I wrestled for two years with the issue of grading group projects, without any real progress. We could not seem to find the concentrated time in the midst of the semesters to deal with it. It was important, but we could never seem to make it urgent enough to act on it. It was not until we had a three day retreat this spring and were able to focus on this issue that we came up with a very elegant and practical solution.
- 5 This kind of discussion can go on at every level: the executive team at a university, the deans of faculties, department heads within a faculty, etc.
- 5 But talking alone won't make things happen - for results to come, there are certain conditions: 1) the talking process has to be effectively organized and facilitated, 2) a permanent record codifying the results has to be created and widely circulated and 3) someone, namely an academic leader, has to make sure that the decisions made there are followed up
- 5 as leaders, you can set the expectation and facilitate the process of setting aside "quality time" to talk about learning, e.g., by making trained facilitators accessible and scheduling time for 'turnip talk' in your university calendar.
- 5 The third major thing you can do is

Grow something new

- 5 each year I try to grow something new in my garden - this year it was potatoes and scarlet runner beans. The potatoes were a dismal

failure. The beans a wonderful success. I learned a lot about gardening from both experiments.

- 5 As with gardening, thoughtful and responsible experimentation in education is necessary to continually make progress.
- 5 One of the ways to encourage experimentation is very similar to hardening off young seedlings by introducing them to the full outdoors gradually
- 5 In the first years when we offered our 8 credit-hour problem-based learning course, the students were frustrated at having to take on much more responsibility for their learning - this resulted in substantial amounts of hate mail about that course (and us) to the Dean.
- 5 If our dean had hung us out to dry those first years, we might not have persevered with the important changes we made in our teaching.
- 5 Instead, our dean ran interference for us with the students, the registrar and anyone else who could have prevented us from keeping going. After two or three years, the course was mature enough (and our skills sufficiently improved) that it became a major asset to the Faculty and was getting very positive feedback from both students and employers.
- 5 The fourth thing is to

Hire Gardeners

- 5 If you were the head of a market gardening firm, you would want to staff your farms with people who know how to grow things.
- 5 Similarly, you probably want to hire faculty who are good teachers.
- 5 It might be useful to ask a few questions about this
- 5 How does the hiring process in your institution check candidate's teaching abilities and interests? Does it assess their thoughtfulness about teaching and learning?
- 5 What proportion of the interview time involves candidates making presentations or engaging in discussions about teaching? Do they actually try to teach students anything?
- 5 Do the academic job postings you send out reflect your institution's commitment to effective teaching, just as they do to equality of opportunity?
- 5 The language of job postings is a strong signal

to potential applicants that your institution values good teaching and learning.

- 5 This kind of posting is going to raise the odds that the applicant pool will contain some good teachers.
- 5 If your hiring process already includes these items, you might want to consider checking if it is being followed
- 5 Faculty members, like farm tractors, are long term investments.
- 5 Unlike farm tractors though, they can't be sold easily if they don't turn out to be what you need.
- 5 If you want good teachers, one of the best places to focus attention is on the hiring process.

Conclusion

- 5 In conclusion, I've identified four things you can do to encourage good education in your organization:
 - 1) By your actions and choices *rather than by your words alone*, signal the importance of good education;
 - 2) Encourage people to engage in structured discussion about education;
 - 3) Encourage and nurture responsible experimentation in teaching;
 - 4) Hire good teachers.

Any of these in isolation is likely to provide some benefit. Worked in concert with each other and with other initiatives, their effect will be even greater.

Bringing an organic garden to its peak production is the work of nearly a decade. Improving the education offered at a university is also a long term project. However, both those efforts yield a hundredfold.

Vice presidents, deans, department heads and individual faculty like me look to you for leadership as to what is important and how we ought to go about that work.

I hope that I have, if you will pardon the expression, "planted a few seeds" with you tonight about how you can exercise that leadership.