



---

DISTINGUISHED ACADEMIC AWARD 2007

---



# Embracing the New Metaphor for 21<sup>st</sup> Century Universities

AWARD ACCEPTANCE ADDRESS

**Chad Gaffield**

Professor of History  
University of Ottawa (on leave)  
President, Social Sciences and  
Humanities Research Council of Canada



**Chad Gaffield** received his BA (Hons) and MA (History) from McGill University and his PhD from the University of Toronto (History and Philosophy of Education). After teaching part-time at York University and the University of Toronto, he served as Visiting Assistant Professor at McGill University from 1978-1979. Gaffield then joined the Department of History at the University of Victoria where he became Associate Professor in 1984. Since 1985, he has been a member of the Department of History at the University of Ottawa where he served as Vice-Dean of the School of Graduate Studies and Research (1990-1996) and became the founding Director of the Institute of Canadian Studies (1997-2003). He served on the Board of Governors at the University of Ottawa from 1992-2006. Gaffield has won many awards for his teaching and research on Canada's socio-cultural history and his innovations in theory and method involving computer-based, interdisciplinary and multi-institutional collaborations. The Royal Society of Canada awarded him the J.B. Tyrrell Medal in 2004 for his outstanding contribution to the study of Canada. The Association of Professors of the University of Ottawa named him Researcher of the Year (1995) and Professor of the Year (2002), only the second time that a professor has been chosen for both awards. Gaffield has played a leading role in promoting the social sciences and humanities, including serving terms as President of the Canadian History of Education Association, the Canadian Historical Association and the Canadian Federation of the Humanities and Social Sciences. He is now on leave from the University of Ottawa following his appointment in September 2006 as President of the Social Sciences and Humanities Research Council of Canada.

Chad Gaffield's work in each of the domains of academic life: teaching, research and service to the institution and to the community has been honoured with a CAUT Distinguished Academic Award. This is a copy of his acceptance speech delivered during CAUT Council events in Ottawa, April 28, 2007.



©2007 Chad Gaffield  
CAUT Bulletin Special Supplement, October 2007  
Published by the Canadian Association of University Teachers  
2705 Queensview Drive, Ottawa, Ontario K2B 8K2  
For information on CAUT's Distinguished Academic Award  
visit [www.caut.ca](http://www.caut.ca).

# Embracing the New Metaphor for 21<sup>st</sup> Century Universities

## Chad Gaffield

LET ME FIRST EMPHASIZE how honoured I am to be receiving the Canadian Association of University Teachers' Distinguished Academic Award for 2007. The chance to represent so many outstanding academics across Canada is a truly special privilege.

I am indebted to Lori Burns, Associate Dean of Research in the Faculty of Arts for thinking of me and for all the work to submit a dossier for the award, and to Robert Major, the Provost, and Howard Alper, former Vice-President (Research) who helped me in so many ways at the University of Ottawa. Under the leadership of Marcel Hamelin and Gilles Patry, and with splendid colleagues and students in the Department of History, in the Institute of Canadian Studies and across campus, UOttawa has been at the heart of my academic activities for more than two decades. The enthusiastic support that I have received since my arrival there in 1985 explains significantly why I am standing here today.

But the key reason why I am standing here is Pam Gaffield whom I met when we were registering as first-year students at McGill University in 1969, and who has travelled with me every step of the way across the changing landscape of higher education. Our wonderful children and

grandchildren will not be lining up for hours in a hot gymnasium to sign up for courses but I hope that they find a way to win the lottery like I did when it comes to finding a partner for life's journey.

In describing how indebted I am to CAUT and to colleagues and family, my emphasis is on the collective nature of what we do. Prizes usually highlight individuals but the goal is not to recognize personal activities as much as to celebrate achievements that are important to us as a community and which inevitably reflect collective effort. No productive professor has ever really been a "solitary scholar" and no effective teaching or research has ever really been done in isolation. We may give prizes to individuals but we all know that learning and advancing knowledge are inherently collaborative activities.

In this spirit, I would like to take the opportunity today to engage the larger debate about the future of higher education. How are our campuses changing? What does it mean now to be a professor or a student? How can universities best contribute to society? Across Canada and internationally, these questions are increasingly puzzling parents and public policymakers as well as students, professors and administrators faced with increasing expectations and limited resources. As a result, conferences and commissions have been focusing on higher education both at the federal and provincial levels across Canada. This CAUT award offers an opportunity to address specifically the key questions of teaching, research, and campus-community connections within current debate about the past, the present, and what future we would like to create for universities.

## The New Metaphor

The presentation made by Professor Bernard Robaire at this time last year offers a superb point of departure for today. Professor Robaire celebrated the creation of an award that emphasizes the oneness of teaching, research and community. In doing so, he challenged the familiar metaphor of these activities as "pillars" of the academy. Rather, Professor Robaire portrayed teaching, research and community service as "interacting, intertwining, helical-like strands" whose combined strength depended upon each strand being at least "good." In this way, he not only dismantled the metaphor of distinct pillars but also rejected the possibility of excellence in one activity without competence in the other two. He challenged the possibility of a great researcher who

was not also at least a good educator and good contributor to the larger community, or of a great teacher who did not also engage in research and serve the community.

In proposing the image of interacting, intertwining, helical-like strands, Professor Robaire admitted that the metaphor of three pillars was the dominant image on campus and beyond, despite the fact that, from his perspective, this metaphor is based on misconceptions about teaching and research and between those activities and service to the community. He wondered about this fact: "I am not sure," he said, "why this misperception about academics has emerged."

My own thinking about this question reflects the characteristic conviction of historians that our ability to move forward depends upon our understanding of the past which enables us to understand the present. Thus, as a first step in pursuing Professor Robaire's insights, the following discussion begins historically to suggest that, rather than being a misperception, the image of distinct pillars accurately portrays the activities of teaching, research and community service as they were defined and undertaken in universities until quite recently. In other words, Professor Robaire's preferred metaphor of helical-like strands describes a fundamental rethinking of university life that only began recently and which is now significantly challenging well-established scholarly cultures and institutional structures. The implications of the new metaphor extend to the heart of how we see ourselves as professors, how we evaluate each other, and how we organize ourselves in disciplines, departments, visible and invisible colleges and cultures.

In addition to an historical perspective, my thinking about universities now also reflects my new position as President of the Social Sciences and Humanities Research Council of Canada (SSHRC). Although I am not speaking today in this role, my views certainly include the conviction that investments in research must be effectively situated within the larger context of higher education. Indeed, SSHRC's original mandate to help researchers develop talent and build understandings about individuals and groups in the past and present has become increasingly important to universities and the larger society. At the same time, how we pursue this mandate continues to evolve along with the changing character of higher education. Thus, we regularly update our programs and policies in collaboration with our partners across the research community and beyond. At the heart of this updating is indeed the changing conceptualizations of teaching, research and campus-community connections.

## Rethinking 20<sup>th</sup> Century Universities

The claim that the image of distinct pillars does, in fact, describe teaching, research and community service until late in the 20<sup>th</sup> century is supported by the evidence of institutional and disciplinary policies and structures. Neither the content nor the quality of these activities was subject to any systematic measurement and evaluation with the result that the “pillars” were thin and fragile if judged by early 21<sup>st</sup> century standards. For example, professors characteristically began teaching without any formal pedagogical preparation since it was assumed that disciplinary knowledge was the sole prerequisite for effective teaching. Certainly, some professors succeeded brilliantly in the classroom as a result of their own talent and initiative but it remains noteworthy that no formal efforts were made to promote top-quality teaching or to prevent poor pedagogy until the later 20<sup>th</sup> century.

Similarly, research activities were modest at best and were not a central focus of institutional or professional attention. Before the 1970s, few universities in Canada had well-developed graduate programs with the result that they hired professors who had characteristically received their advanced education in foreign institutions. Research funding only began to play a significant role in many disciplines after World War II. In this context, neither institutions nor academic associations claimed that effective university teaching depended upon continuous engagement with research. And while some universities developed substantive links with the larger community, professors rarely extended either teaching or research activities beyond the campus. Professors engaged in service roles but this work was indeed seen as a pillar that supported institutions and professional associations that were parallel to, rather than intertwined with, teaching and research.

My favourite illustration of how different the debate about teaching and research was in the earlier 20<sup>th</sup> century involves the discipline of History. While this illustration emerges from the corner of the campus that I know best, my sense is that the core changes in any academic field are connected to changes in other fields; in other words, the campus evolves organically as well as in fragmented ways. The illustration comes from the United States and it should be understood in that context but the main point certainly applies to Canada as well.

In 1927, the American Historical Association formed a group entitled The Committee on Preparing a Programme for Research and

Publication. This committee sent questionnaires to 500 holders of Ph.D. degrees in history who were teaching at the post-secondary level. The first two questions asked:

What in your opinion is the obligation or duty of a doctor of philosophy in history to teaching on the one hand and research on the other?

What is the attitude of the president of the institution where you now hold a position toward research as compared to teaching?

The answers to these questions suggest the extent to which the debate about university priorities changed during the course of the 20<sup>th</sup> century. The committee found that “The opinion is almost unanimous that the main duty of a Ph.D. is to teach...” In keeping with this result, it was reported that an “analysis of the answers reveals the belief that at least 50% of the Presidents are hostile, or so lukewarm that little real encouragement is given to professors who wish to carry on with research. Either they are told that research is not expected or wanted; or if a professor does produce, no notice is taken of his work...as compared with the recognition given to teaching or to administrative work...Most Ph.D.s prefer the human contacts with their students or with their colleagues to the isolation, steady grind, and slowness of reward which are inevitably the lot of the man who sticks to productive scholarship. In other words, the average doctor of philosophy does not want to be a greasy grind all his life. He has to be till he gets his doctor’s degree, and in many cases, he says, ‘Thank God, I have got it’ and he quits...”

In this dichotomy of teaching and research, there was also a hierarchy with teaching on top. According to the responses given to the survey, research was not getting done for a variety of reasons including institutional priorities and personal factors. No connection was made between teaching and research.

While the questions and answers in this survey reflect the ideology of the 1920s and the specific character of American higher education, they also help us understand why the dominant image of teaching, research and community service during most of the 20<sup>th</sup> century has become less and less appropriate in recent years. Three interrelated developments are now evident on our campuses: the redefinition of how students learn; the redefinition of how we can advance knowledge and build understanding; and the redefinition of how teaching and research are related to each other and to activities beyond the campus.

# Redefining Teaching, Research and Campus-community Connections

In stylized terms, the redefinition of teaching now involves the move from a transmission-of-knowledge model based on “passive learning” (increasingly considered an oxymoron) to a construction-of-knowledge model based on “active learning.” In the former model, students are expected to learn by reading, memorizing and recounting the information and interpretations formulated by experts and provided to them through lectures and curriculum material. In the case of History, for example, students would study the past indirectly by reading the writings of historians (called secondary sources). This transmission-of-information approach explains why genuine historical research involving the direct engagement with historical evidence (called primary sources) did not play a major role in the undergraduate curriculum that became characteristic of 20<sup>th</sup> century programs. Rather, only senior graduate students were expected to undertake actual historical research and to confront the challenge of developing (instead of memorizing) historical interpretations. This pedagogical assumption underpinned the metaphor of an educational pyramid in which students moved from broad surveys of academic fields (to start undergraduate programs) to mastery of established wisdom on specific topics (in upper-level courses and initial graduate courses) as preparation for their own specialized attempt to advance knowledge through original research (primarily in thesis projects).

In recent years, an active learning model has increasingly been implemented in universities. In this approach, students are expected to learn about the research results of those who have gone before them through their own efforts to construct knowledge and formulate interpretations. In the case of History, for example, students are no longer asked to simply memorize the conclusions of established experts, but are also required to analyze historical evidence. In other words, the concept of an educational pyramid of increasing specialization with mastery preceding originality is being dismantled in favour of a mentoring-coaching-apprenticeship approach in which students are always actively engaged in the learning process.

The conceptual underpinnings of this approach have been considerably strengthened over the past two decades by research in

learning theory that emphasizes the importance of active participation in education. Most tellingly, cognitive psychologists have challenged the conventional belief that original scholarship best follows the mastery of current wisdom. Rather, researchers now believe that an exclusive focus on absorbing knowledge from ‘experts’ undermines, rather than enhances, the potential for subsequent creativity and innovation. The explanation for this phenomenon is that, by insisting that students learn all the reasons for the location of the current research frontier, they are implicitly and effectively encouraged to think so much like their predecessors that they become less able to push the frontier to a new place. These cognitive theories suggest, for example, that a secondary-source-based undergraduate History curriculum undermines the potential (rather than lays the foundation) for original scholarship at the graduate level. Although much more study needs to be undertaken on the complex process of creativity, the older transmission-of-knowledge structure of the curriculum may help explain a series of consistent findings about higher education during the 20<sup>th</sup> century: the weak correlation between grades even in graduate courses and the subsequent research activity of those who go on to become professors; the pattern of theoretical and methodological innovation coming from outside (more than inside) a discipline; and the association of ‘schools of thought’ with specific departments.

Just as we are re-conceptualizing teaching, we are also enlarging how we attempt to advance knowledge and build understanding through research. For me, the key word is connections: across disciplines, between the campus and the community, and from Canada to the world. Rather than imagining that we will advance knowledge only through increased specialization (in keeping with the metaphor of a pyramid), we are now moving to a deeper appreciation of the value of contextualizing and connecting our efforts to those working in other disciplines, institutions and the larger society. In other words, we are increasingly fostering on our campuses both specialization (the discipline of the discipline) and contextualization (discipline-based interdisciplinarity, campus-community collaboration, and Canadian-global connections). And we are attempting to move from an insistence on one strategy as “the best” to an embracing of multiple possibilities including both disciplinarity and interdisciplinarity as well as individual and collaborative activity on campuses or beyond.

# Computerization

It was in the changed conceptual context of teaching, research and campus-community connections that computerization began accelerating the transformation of universities. Unlike the 1960s and 1970s when controversy raged about the appropriateness of computer-based teaching and research, the past three decades have witnessed the computerization of almost all aspects of our work. The new conceptualizations of cognitive development explain this development especially in recent years. In other words, computerization has been facilitating, enhancing and influencing scholarly developments that were initiated for substantive reasons. The claim that current educational changes are not primarily technological may be surprising since so much debate has focused on the impact of mainframe computers in the 1970s, personal computers in the 1980s, the Internet in the 1990s, and the new media of the current decade. However, none of these technologies would have proliferated to the same extent if they had not been propelled by forceful conceptual change. Just as the typewriter only became pervasive after reconceptualizations of the workplace, computerization has become increasingly important in light of new attitudes toward learning by both students and professors. Computerization has particularly facilitated the redefinition of students as apprentice researchers by providing unprecedented resources that transcend the physical holdings of university libraries and laboratories. The new technologies have also fuelled the internationalization of university life and given new meaning to the invisible colleges of earlier times. In this sense, computerization is accelerating the new model of a horizontally-connected one-ness of scholarship in a global context.

As a result, we are rethinking the established scholarly distinctions between the baccalaureate, master's and doctoral levels. Over the past decade, the emerging pattern is for all levels to adopt a construction-of-knowledge approach to the curriculum and to view a healthy research environment as a necessary condition for educational quality. This pedagogical approach combines, in a dialectical way, a back-and-forth, active and passive, engagement with both previous scholarly findings and original research activities. It is in this sense that the baccalaureate is itself becoming a research degree.

The redefinition of undergraduate teaching in terms of research apprenticeship complements the increasing importance of graduate programs but certainly does not imply that more than a minority of

students will continue formal education after the baccalaureate. For the majority, the baccalaureate will continue to be an opportunity to develop an informed cultural and scientific framework and competency in order to lead a full and productive life as an engaged citizen able to help make a better world. The key difference is in how this opportunity is provided to students. In turn, students appear to be increasingly aware that the ability to think and work like a researcher is the prime characteristic of the "talent" now sought by employers across the private and public sectors as the epicentre of the economy continues the historic move from farm to factory to office to virtual space. This student awareness reflects the competitive global labour market for those who can combine established knowledge and understandings with independent analysis and articulate expression. In this way, the rethinking of the teaching-research dichotomy is intimately connected to the recognition that our era calls for more creativity, informed critical thinking, and campus-community collaborative experience.

Not surprisingly, those academic programs that successfully update their curricula are attracting increasing numbers of students. Those programs that cling to a transmission-of-knowledge model are being left behind to learn the hard lesson that students cannot be blamed for wanting to change with the times. At the undergraduate level, students are seeking programs that engage them both on campus (such as in research seminars at the introductory level) and beyond (such as in co-op programs, internships, and in-service learning opportunities). At the graduate level, innovative programs are, for example, abandoning the long-established comprehensive exams in favour of requiring "portfolios" with conference papers, journal manuscripts, and professional experience in research projects and campus-community interactions. Graduate programs are also including internships and professional training that complements academic work to produce graduates who have both specialized and contextualized knowledge and competencies.

The increasing emphasis on "active learning" through student engagement helps explain the establishment of course evaluations by the 1970s, centres for university teaching by the 1980s, and formal courses on university teaching by the 1990s. No longer is it assumed that a highly-knowledgeable professor is a successful educator. Similarly, increased attention is being paid to graduate instruction and thesis supervision including regular reporting on student progress and subsequent experience in the larger society. These developments reflect how teaching is now being taken far more seriously than at any point in the history of universities.

## Embracing the New Metaphor

Some commentators on higher education have recently claimed that “Undergraduate education should convey to each generation a body of organized knowledge, thought to be of great value to the individual and the society.” In contrast, my belief is that universities should never focus on what to think but rather on how to think since the effective learning of received wisdom can only occur in the context of learning how to construct wisdom. Some observers have said that “What students seek from university is the facts, lore, know-how and polish to pursue successful careers. For this purpose they have no need to do research themselves.” I think that to attempt to transmit knowledge without engaging the underpinnings of that knowledge implies to students a timeless and static image of “facts” that flies in the face of everything that universities stand for. Critics have claimed that “Most undergraduate students have neither the aptitude nor the inclination to engage in research of any kind.” My sense is that most undergraduate students have neither the aptitude nor the inclination for rote teaching or rote testing. Some argue that the problem in universities is the “continuing elevation of research and the systematic neglect of instruction.” Rather, I think that the evidence shows clearly that, until recent decades, little attention was devoted to research in Canadian universities and no concerted efforts were made to promote effective teaching. In other words, both research and teaching have been elevated considerably especially since the 1960s and only now are they becoming truly intertwined to the benefit of both.

At the same time, it must be emphasized that universities are becoming more expensive not less in a model of helical-like strands based on the construction of knowledge and understanding. Universities are becoming more labour intensive and now increasingly depend upon top-quality research infrastructure to support both undergraduate and graduate programs. In recent decades, increased public investment in research has allowed a greater number of students and professors to implement the new model of helical-like strands while enabling Canadian universities to establish graduate programs across all academic fields. This investment contributed significantly to Canada’s ability to come to grips with the post-industrial changes of the later 20<sup>th</sup> century. But overall university budgets including those for research activities have not kept pace with the emerging redefinition of teaching, research and campus-community connections. While

universities have been able thus far to provide enough seats for qualified applicants, the number of students for each professor has doubled in recent years in many undergraduate and graduate programs. At the same time, opportunities to undertake research including those exploiting the new technologies remain too limited for both students and professors. Current circumstances often work against the new research-oriented educational initiatives leaving too many students facing old-fashioned tests and rote learning in inappropriately large classes while their professors struggle to undertake research projects. In other words, universities do not always have appropriate resources to take full advantage of the opportunity to help Canada meet the demands of the globalized 21<sup>st</sup> century.

But the current challenges for universities are certainly not only financial. For example, the redefinition of teaching, research and campus-community connections is not always consistent with the privileging of individualism in many academic units. While universities historically created such units to connect individuals based on certain ways of knowing and objects of study, these structures have engendered a segmented academy with quite distinct cultures, organizational values, and professional associations. The deep conceptual changes of recent decades have begun exposing the limits of such segmentation. The “vertical” structures of academic units can isolate individuals from those outside their units and can work against collaboration across academic fields. In turn, the “vertical” structure of each university can discourage inter-university collaboration as well as collaboration involving other agencies, institutions and groups. While the difficulty of “horizontally” connecting individuals within distinct “vertical” structures does not in many cases undermine scholarship, it is also true that, in some cases, this difficulty discourages potentially innovative and creative collaboration, and thereby works against the ability of scholars to foster the creation of knowledge and understanding in multiple ways. For this reason, innovative efforts are increasing to embrace both specialization and contextualization in all aspects of university life including the support from research councils.

During the post-World War II expansion, Canadians showed that the choice is not necessarily between university quality and quantity. Indeed, a distinguishing feature of Canadian institutions has been their consistent production of well-educated graduates whose diplomas are internationally recognized as first-rate. Unlike some countries where institutional pedigree looms large, Canada established universities that

have all offered a highly-respected education. Few university presidents are content with their domestic and international rankings but all know that even the lowest ranked in Canada meets a fine standard at the moment. But no one should envisage successful universities in the 21<sup>st</sup> century without both increased investments and changes to scholarly and institutional policies and structures.

When the British North America Act allotted health, welfare and education to the provinces, these responsibilities played minor roles in Canadian society. One hundred and forty years later, they occupy centre stage at all political levels. Moreover, they are now recognized to be dependent on each other with universities playing a crucial role in enabling a healthy, prosperous and successful society. But what to keep, what to change and how to support our cultures, policies and structures to embrace the new metaphor of “interacting, intertwining, helical-like strands of teaching, research and service to the community” is, I think, the key question for universities. How we respond will play a major role in determining Canada’s prospects in the 21<sup>st</sup> century.



Canadian Association of University Teachers  
Association canadienne des professeurs et professeurs d'université

2705 Queensview Drive  
Ottawa, Ontario K2B 8K2  
Tel: 613-820-2270 Fax: 613-820-7244  
[www.caut.ca](http://www.caut.ca)