

COUNCIL OF
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Dear Reader,

This is the fourth volume in the *Working Paper Series (2004 – 2005)* and represents the work of the COU Academic Colleagues who, in 2001-2002, began a series of working papers to provide input to Council on academic issues. The Series consists of papers prepared by Colleagues, alone or in partnership with others.

The author(s) prepare, present and revise their papers according to discussion at their meetings. In this sense, the papers remain the work of the author(s), but also reflect contributions from other Colleagues. They do not, however, represent COU policy.

Three papers were completed in 2004-2005:

- *Interdisciplinarity in a Disciplinary Universe: A Review of Key Issues* by Kathryn Shailer, Academic Colleague, Dean, Faculty of Liberal Studies, Ontario College of Art and Design
- *The Problems Faced by Academics at Various Stages in their Careers: The Need for Active Institutional Involvement* by Patrick Oosthuizen, Academic Colleague, Professor, Department of Mechanical Engineering, Queen's University; Linda McKay, Associate Professor, Faculty of Education, University of Windsor; and Bob Sharpe, Associate Professor, Department of Geography, Wilfrid Laurier University
- *Universities and Democracy* by George Fallis, Academic Colleague, Professor, Department of Economics and Division of Social Sciences, York University

Through these papers, we hope your understanding of academic issues facing Ontario's publicly assisted universities is broadened. If you have any comments or questions, please contact Jennie Piekos at COU (jpiekos@cou.on.ca or 416-979-2165 ext. 223).

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Interdisciplinarity in a Disciplinary Universe: A Review of Key Issues

By Kathryn Shailer, (COU Academic Colleague,
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The Working Papers Series consists of short papers on academic issues prepared by Academic Colleagues. The topics chosen by the caucus of Academic Colleagues are championed by one or two colleagues. Although drafts of each paper are discussed by the full caucus, the final version of the paper represents the opinions of the authors and not a consensus reached by the Colleagues. The authors present their paper to the full Council as a matter of interest and to stimulate discussion. The papers as finalized do not represent COU policy. They are simply a mechanism for investigating and opening discussion on matters of interest to the Colleagues and the Council—and their readership at large.

A cursory overview of the mission statements and academic plans of Ontario universities suggests widespread support of interdisciplinarity. Over the past five to ten years, virtually every university in the province—even the oldest and most traditional—has introduced interdisciplinary programs, if not developed institutional policies regarding interdisciplinarity, thus joining those institutions that have fostered this development for thirty years or more, e.g., Carleton, York, and Waterloo. The trend toward interdisciplinarity should not be construed as irresistible nor as a major threat to disciplinary, for during the same time period a countervailing movement toward greater specialization has been at least as forceful in some disciplines.¹

The purpose of this working paper is not to debate the efficacy of interdisciplinarity or to try to define best practices, but rather, in light of the burgeoning of new programs, to highlight some key issues in the interdisciplinarity debate that deserve renewed consideration and broader discussion. Another, perhaps more urgent reason for renewing the discussion is that the impetus for the current round of interest in interdisciplinarity comes from outside the university: from governments, granting agencies, foundations, industry and other stakeholders in the production of knowledge, whose agendas and time lines may be at odds with those of the university.

The disciplinary/interdisciplinarity debate directly challenges nothing less than the way the understanding, production, and dissemination of knowledge is structured within the academy, as well as the way and extent to which university researchers collaborate with other (non-institutional) producers of knowledge in society.

WORKING DEFINITIONS AND BASIC LINES OF THE DEBATE

Although there is no universally accepted definition of interdisciplinarity, Liora Salter and Alison Hearn's 1996 Canadian-based study on interdisciplinary research draws on the following distinctions cited in the groundbreaking report of the Centre for Education Research and Innovation (CERI), *Interdisciplinarity: Problems of Teaching and Research in Universities* (1972), which still can serve us well:

¹ This is particularly noticeable in the sciences: one need only think of the rapidly evolving new branches of physics. By the same token, many of these new specializations often find greater affinity with other departments or disciplines than their home department when it comes to the development and structuring of research projects. There is perhaps also something to be learned from the experiences of well-established interdisciplines such as Geography, where a (re)splintering along subdisciplinary lines has recently been noted.

- “Multidisciplinarity” is defined as a juxtaposition of various disciplines, sometimes with no apparent connection between them.
- “Pluridisciplinarity” is defined as a juxtaposition of disciplines assumed to be more or less related: for example, mathematics and physics.
- “Transdisciplinarity” is a process of establishing a common system of axioms for a set of disciplines.
- “Interdisciplinarity” is defined as the interaction between two or more disciplines. This interaction may range from the simple communication of ideas to the mutual integration of organizing concepts, methodologies, procedures, epistemology, terminology, data, and the organization of research and education in a fairly large field. (Salter/Hearn, 186, n.1)

An example of multidisciplinarity would be a European Studies program composed of courses related to Europe drawn from a number of departments: literature, history, political science, economics, and business. A course specially developed for such a program that examines one broad issue, for example “European Identity,” through the distinctive lens of two or more of the above disciplines would be interdisciplinary in its narrower typological sense. On the other hand, a course that seeks to identify structures or principles shared by a number of disciplines—literature, science, philosophy, visual art—during a given epoch, for example the Romantic era, could be considered transdisciplinary.

The term “interdisciplinarity” is also used more generally and synonymously with “cross-disciplinarity,” to describe and embrace all of the above activities. This is the way it is used throughout this paper.

Julie Thompson Klein, one of the foremost contributors to the international discussion of interdisciplinarity, draws a distinction between *endogenous interdisciplinarity*, which is “concerned with the production of new knowledge,” and *exogenous interdisciplinarity*,

which “interrogates the disciplines on the demarcations they apply to 'real life' and demands that the University fulfil its social mission” (421, as cited in Salter and Hearn, 28). In times of economic constraint and tight funding for higher education, she suggests, research institutes and funding agencies tend to privilege exogenous interdisciplinary projects.

Salter and Hearn prefer to distinguish between *instrumental interdisciplinarity*, “a problem-solving activity that may be designed to cater to the demands of industry and government,” and *conceptual interdisciplinarity*, which is “concerned specifically with theoretical issues, epistemology, pedagogy, and the disciplining of knowledge,” and which may either “maintain a dependence on the integrity of the disciplines” or “pose a fundamental challenge to disciplinarity” (29). Some interdisciplinary programs or departments, e.g., Women's Studies, Canadian Studies, Environmental Studies, have at times housed faculty or research projects representative of all three.

Disciplinarity is in some ways even more problematic to define: on the one hand, it means adherence to and respect for the intellectual structures we call disciplines that were largely in place in the modern university by the end of the 19th century. In this vein, Salter and Hearn speak of disciplines as “recognizable communities of scholars that develop conventions governing the conduct of research and its adjudication...[that] rely upon technical language and particular methods of analysis...[and that] develop standards of evaluation specifically suited to their methodology and objects of analysis” (20). On the other hand, in the decades following publication of Michel Foucault's *Discipline and Punish: The Birth of the Prison*, and particularly in the 1990s, disciplinarity also took on the connotation of a repressive form of border control and academic disciplines were equated to prison houses. Speaking for those scholars whose work from the 1970s to the 1990s advocated a transcendence of disciplinary barriers and development of a unified or general knowledge, Stanley Fish

bemoaned the paradoxical creation of discrete interdisciplinary units within universities: “[B]eing interdisciplinary—breaking out of the prison houses of various specialities to the open range first of a general human knowledge and then of the employment of that knowledge in the great struggles of social and political life—is not a possible human achievement” (125).

In the Introduction to their 2000 anthology, *Practising Interdisciplinarity*, Peter Weingart and Nico Stehr, take a more moderate tack in describing disciplinarity:

...disciplines are not only intellectual but also social structures, organizations made up of human beings with vested interests based on time investments, acquired reputations, and established social networks that shape and bias their views on the relative importance of their knowledge. As social organizations, disciplines participate in and contribute to conflicts over political, economic, legal, and ethical decisions, over the distribution of resources and life chances. In all these functions, scientific disciplines constitute the modern *social order of knowledge*, and the order of knowledge is in this sense a political order as well. (xi)

Weingart and Stehr are also more hopeful in their assessment of the university environment: “Something quite fundamental is happening to the established order of knowledge...: the organizational matrix of disciplines is beginning to dissolve” (xi). On the other hand, they do not see this as a sign of the end of disciplines, but rather of a more hospitable culture for interdisciplinary work: “...disciplines, or more generally, structures of cognition and knowledge production are not dispensable as such but nor are they immutable—by practice” (272).

WHERE IN THE UNIVERSITY IS INTERDISCIPLINARITY PRACTISED AND WHAT DRIVES IT?

The short answer is everywhere: within departments or other similar organizing units, under the auspices of interdepartmental steering committees, in research centres and institutes, in undergraduate programs, in graduate programs and in the university-sponsored research of individual faculty members.

What drives the interest in interdisciplinarity in each of these places?

Interdisciplinary Research: Funding opportunities from granting agencies, governments, and industry are credited to a large extent for the renewed surge in interest that began in the late 1990s (Weingart/Stehr, 270). The proceedings of a recent international conference entitled *Transdisciplinarity: Joint Problem Solving among Science, Technology, and Society* (Klein et al) tout global collaboration led by the university sector as the best hope for solving the major global problems of our time, such as environmental degradation and sustainable development (Schneidewind, 94). But there is more at work here than marshalling the synergy of collective minds from multiple disciplines to address broad societal issues, and also more at stake. Increasingly industry-based research and development is moving out of commercial-ly funded research departments and labs, and into public-private collaborations. As Klein pointed out twenty years ago, the economic circumstances of universities are ripe for privileging exogenous interdisciplinary projects.

- The complexity of new Intellectual Property policies is one indication of the new world of university-industry research collaborations. Does this put new constraints on the ability of university researchers to develop individual research projects?

- As exogenous projects are privileged, perhaps if only because they generate much needed funding for the universities, what research remains unsupported?

Interdisciplinary undergraduate programs have been on the increase over the past five to ten years. Some are geared toward providing students with an enriched entry experience that develops problem solving and writing skills in the context of a core text/history of ideas course. The highly successful “Arts One” program at UBC, now in its 39th year, has served as a model for other high calibre programs such as the Foundation Year Programme at the University of Kings College in Halifax and the Humanities Program at Concordia; it has also spawned similar programs in the same institution: “Science One” and also the more recent “Foundations Program,” that adds social science to the blend of humanities disciplines. In 2003, Victoria University in the University of Toronto launched “Vic One” with streams honouring illustrious alumni (Frye, Pearson) and is adding a science stream (Stowe-Gullen) in September 2005. Also coming this September is “LS One” at OCAD, an interdisciplinary Liberal Studies program that will replace three mandatory first-year courses.

Other institutions offer full undergraduate “majors” that are interdisciplinary: Carleton, Waterloo and York, among others, offer Cognitive Science programs, Women's Studies, and others such as Social and Political Thought, Management Studies, Public Policy and Administration. Carleton and Waterloo also offer Directed Interdisciplinary Studies or Independent Studies options that enable students to build their own programs of study. Ryerson has recently introduced a new BA in Arts and Contemporary Studies that combines a core texts program with management studies and four major themes that cut across a number of disciplines: Culture & Entertainment, Diversity, Globalization, and Science & Technology.

What drives the development of these programs is a fairly recent acknowledgement that the two basic goals of an undergraduate education—to prepare young people for active participation as fully productive citizens of Canada, and to maintain a steady supply of teachers and academics—are not necessarily well served by the same curriculum. Students who have no intention of joining the ranks of their professors have become more demanding of explicit linkages between theory and practice, just as the world of work and the knowledge economy are demanding so-called “employability skills” (e.g., the Conference Board of Canada). According to this view, university graduates need breadth and flexibility of mind to cope with a rapidly changing world, and perhaps an interdisciplinary education is the best preparation for this.

- To what extent should an interdisciplinary program have a disciplinary foundation?
- What advanced study opportunities exist or should be developed for the graduates of interdisciplinary bachelor's programs?
- Will this result in a greater streaming or silo-ing of undergraduates than currently obtains?

The impetus for interdisciplinary graduate programs seems to have two main sources: a) the recognized need for advanced study and research in an interdiscipline that has (nearly) achieved the status and recognition of a discipline, e.g., Cognitive Science, with both academic and industry career opportunities available to the graduates of these programs, and b) the desire for advanced degrees (for a competitive edge in the job market?) that reflect the interdisciplinary culture of new technologies and new industries and that develop interdisciplinary problem-solving skills. Examples of programs in this second category are more extensive, e.g., the program in Social and Political Thought at York, the joint York-Ryerson program in Communications and Culture, as well as a multitude of Special Arrangements or Individual Interdisciplinary Master's and Ph.D/ doctoral programs where students develop their own program of study under the wing of a faculty program.

- Again at this level there is the question of whether these programs should have a disciplinary foundation, i.e., should the graduate students have a home discipline and perhaps even pursue a more traditional discipline-specific dissertation topic before embarking on interdisciplinary research?
- Are students who enter these programs, especially individually tailored programs, aware of the pitfalls of privileging breadth over depth? There is certainly evidence of newly-minted interdisciplinary Ph.Ds applying to teach courses in each of the disciplines they have combined in their studies. Do they have the depth of knowledge to teach even introductory undergraduate courses in multiple disciplines? More pressing, are they even aware of the depth issue with regard to their education and career preparation.

There are no pat answers to these questions, but jobs—whether in academe or in private industry—seem to lie at the heart of both the questions and the possible answers.

BENEFITS AND PITFALLS OF INTERDISCIPLINARITY

In brief, experience with interdisciplinarity points to the following benefits and drawbacks:

Benefits

- Broad-based liberal arts and sciences learning (perhaps the original interdisciplinary studies) as a solid foundation for specialized learning.
- Synergy of multiple perspectives and discipline-specific methodologies in addressing major social and political issues.
- Explicit linkage between theoretical and applied learning.
- Engagement with real-world problems, cultures, environments.

Pitfalls

- “Pidgin minds” (Long/Cerroni-Long), lack of depth of knowledge, lack of program coherence.
- Career risks for young scholars who choose interdisciplinary research topics at the doctoral stage or even embark on interdisciplinary research prior to obtaining tenure (Sperber; Green).
- Lack of interdisciplinary experience/knowledge among committees adjudicating interdisciplinary grant applications (Sperber; Wekerle).
- Difficulty of assessing the quality of interdisciplinary programs and projects (Wekerle; Mansilla/Gardner).
- Difficulty within the reward structures of the university for a department and faculty member to receive “credit” for supervising interdisciplinary graduate students and for faculty members with cross-departmental appointments to meet the service demands of two departments (or for the departments, especially small ones, to get the service they feel they need).

DEFUSING TENSIONS AND NEGOTIATING PATHS FOR INTERDISCIPLINARITY

Universities have tended to respond to the demand for interdisciplinary programs in one of two ways:

- 1) Encouraging the development of interdisciplinary courses and programs by cultivating an interdisciplinary culture or mindset in the absence of or in advance of specific institutional guidelines or policies that would address the above noted pitfalls. The institutions in Ontario best known for their interdisciplinary “accent” fall into this category: York, Carleton, Waterloo. Commitment to interdisciplinarity and established policies do not necessarily go hand in hand, e.g., York University's current Academic Plan Review suggests an even greater embedding of interdisciplinarity as a planning principle in the restructuring of academic units and the development of strategic objectives (www.yorku.ca/secretariat/senate/committees/appc/reports/w004-05/041028.htm).

2) Developing comprehensive guidelines and policies in anticipation of the expansion of interdisciplinary courses and programs. The University of Calgary Undergraduate Curriculum Redesign Team (1998) felt the need to define interdisciplinarity and to establish four “defining elements” to “effect the success of an interdisciplinary component with the Institutional Framework”: a) a strong disciplinary foundation, b) interdisciplinary expertise, c) rewards, and d) structure (www.ucalgary.ca/Transformation/INTERDIS.html). The University of Ottawa recently completed an extensive exercise in producing a discussion paper and comprehensive policy recommendations regarding “the vision, coherence, objectives, relevance and governance of interdisciplinary programs and initiatives.” The recommendations may be found at www.uottawa.ca/vr-etudes-academique/en/senate-rec-inter.html and the full report at www.uottawa.ca/vr-etudes-academique/en/reports/RapportInterEng.pdf.

A third approach worthy of mention is exemplified by the recommendations of a report compiled by the Centre for the Study of Co-operatives at the University of Saskatchewan, *Interdisciplinarity and the Transformation of the University* (2000). The authors argue for the nurturing of a culture for interdisciplinary research and studies through the creation of networks that build on the existing disciplinary structures of the university and its academic journals:

Whether in graduate or undergraduate education, in extension, or in research, the common theme is that the administrative-structural changes that are necessary to promote interdisciplinarity may

be less than one would at first assume. The real issue is where and how work is done. The real difficulties lie not so much in university rules, but in culture and attitudes, which are only partly embodied in rules and procedures. This has a positive side. Every member of the university—faculty, administrators, staff, and students—if they wish to be involved in interdisciplinary work, can begin to create the necessary culture by striving to embody it in their own thoughts and actions.... Working in an interdisciplinary, networked fashion requires tolerance and a willingness to share power. Seeing oneself as part of a network implies attaching respect to relationships, connections, and community. It also implies valuing people and ideas precisely for their differences, since it is the differences that add to the capabilities of a team. (40)

Recognizing that much encouragement and problem solving occurs at the departmental or faculty level, it is hard to judge which of the above approaches creates the best environment for interdisciplinary research and study, and the least frustration for all parties involved. More likely, the sterling examples are to be found at the program level, not the institutional, and an assessment of these certainly lies outside the parameters of this discussion paper. The attached Works Cited list and Recommended Readings and Websites offer some guidance for further investigation of the ongoing debate.

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RECOMMENDED READING AND USEFUL WEBSITES

“Rethinking Interdisciplinarity” online seminar guided by Chrisophe Heintz and Gloria Origgi (April 2003 - March 2004) at www.interdisciplines.org/interdisciplinarity/papers. “The overall aim of the www.interdisciplines.org project of which our seminar is a part, is to develop specific tools to investigate and promote interdisciplinary research. It creates a virtual locus where researchers from difference fields and disciplines can meet. It thus allows discussions that usually take place within the boundary of one's department or discipline to emancipate from such boundaries.” The eight papers and comments from this seminar, as well as papers from other interdisciplinary seminars, may be viewed or downloaded and printed from this web site.

University of Tennessee, Knoxville. “Interdisciplinarity Resources” maintained by the University Studies Program, a serendipitous collation of websites for programs in support of interdisciplinary programs and essays addressing interdisciplinarity: <http://notes.utk.edu/bio/unistudy.nsf>. The website includes a downloadable copy of *A Blueprint for American's Research Universities - The Boyer Commission on Educating Undergraduate in the Research University - 1998*, and links to many sites including:

The Association for Integrative Studies. “An organized voice and a national source of information on integrative and interdisciplinary approaches to the discovery, transmission and application of knowledge”: www.units.muohio.edu/aisorg/. This website includes a list of sponsored publications and current online issues of *Issues in Integrative Studies*.

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Universities and Democracy

By *George Fallis, (COU Academic Colleague,
York University)*¹

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OUR POST-INDUSTRIAL SOCIETY

Daniel Bell, in his book, *The Coming of Post-Industrial Society*, identifies its characteristics: the economy is no longer dominated by goods production but by services (such as finance, communications, education, government, and health); the rise to pre-eminence of the professional and technical class; and theoretical knowledge becomes central to innovation and to policy formation.² Workers in the service industries manipulate symbols and ideas rather than physical objects. They are the knowledge workers. Of course, knowledge has always been central to the functioning of any society. But the post-industrial society, as no society before it, engages in self-conscious research programs to advance theoretical knowledge and to solve real-world problems. Post-industrial society requires both highly skilled workers and advanced research.

The university becomes a primary institution of post-industrial society. Its research makes it one of the chief innovative forces of the economy, and it educates the knowledge workers. In 1967, Daniel Bell wrote: “if

the business firm was the key institution of the past one hundred years, because of its role in organizing production for the mass creation of products, the university will become the central institution of the next one hundred years because of its role as the new source of innovation and knowledge.”³ The emergence of post-industrial society moved the university’s mission to centre stage.

A university is defined both by its function and its institutional form.⁴ It is a place of teaching—undergraduate education, graduate education, and professional education—and it is a place of research. These functions are vital in post-industrial society. Both teaching and research are best fulfilled in a spirit of free inquiry. Thus a university takes a particular institutional form: universities (although financially supported by government grants and tuition fees) are autonomous institutions, whose professors and students have academic freedom, and which operate, on academic matters, with a system of collegial self-governance.

The mission of the university in such a knowledge-based society is well-recognized. However, if we view our society and social change through a different prism, another mission of the university becomes evident. We live in a post-industrial society; but we also live in a liberal democracy—a democracy of a particular sort, developing in a particular way over the twentieth century, and with particular needs today. What is less recognized is that universities have become fundamental institutions of our democracy. The argument of this paper is that the university has a democratic mission—this mission should be articulated and universities held accountable for its achievement. This new function is entirely compatible with the university’s institutional form. The democratic responsibilities of universities also require institutional autonomy, academic freedom, and collegial self-governance.

LIBERAL DEMOCRACY, THE WELFARE STATE, AND THE UNIVERSITY

Canada was transformed into a post-industrial society during the postwar period. Another profound change of the postwar period which also reshaped the university was the development of our liberal democracy: the implementation of the welfare state. After the Second World War, the role of government expanded—the nature of our democracy changed fundamentally. There was a new relationship between citizens and their government—a new social contract. Liberal democracies assumed new responsibilities for the welfare of their citizens—hence the term welfare state—rather than allowing private markets to fully determine the outcomes.⁵

The welfare state was built upon a number of basic commitments of governments to their citizens. The first was the commitment to pursue employment for all. The private market economy would not be left on its own; rather, the government would intervene to reduce unemployment, to encourage economic growth, and to ensure price stability. The second was the provision of public insurance against certain risks. People should not be destitute because of unemployment, old age, or ill health. Government would provide unemployment insurance, old age pensions, and health insurance. And finally, the government recognized that citizenship in a democracy implies not only civil and political rights, but also certain social rights.

Thomas H. Marshall, the English sociologist, articulated the concept of social rights of citizenship in his famous 1949 essay: “Citizenship and Social Class.” Marshall said citizenship has three elements: civil, political and social citizenship. “The civil element is composed of the rights necessary for individual freedom – liberty of the person, freedom of speech, thought and faith, the right to own property and to conclude valid contracts, and the right to justice.” The institutions most associated with civil citizenship are the courts of law. Political citizenship, for Marshall, means “the right to participate in the exercise of political power, as a member of the body invested with political authority or as an elector of the members of

such a body. The corresponding institutions are parliament and councils of local government.” Social citizenship means “the whole range from the right to a modicum of economic welfare and security to the right to share to the full in the social heritage and to live the life of a civilized being according to the standards prevailing in the society. The institutions most closely connected with it are the educational system and the social services.”⁶

Civil citizenship was extended during the eighteenth century with the emergence of the middle class. Political citizenship was extended during the nineteenth and early twentieth centuries, accommodating the working class and extending the suffrage to all men, and belatedly, after much struggle, to all women. Social citizenship was extended in the postwar period; it is the citizenship of the welfare state.

Since the 1970s, there has been a vigorous debate about the appropriate role for government in our society, and many calls to cut taxes and government spending. Some taxes have been cut and in some areas spending has been greatly curtailed, but the core responsibilities of the welfare state remain unchanged. Citizens want their government to be involved in economic management, to provide unemployment insurance, old age pensions, and health insurance. The ideas of social citizenship—of full inclusion—are even more strongly held.

Education becomes a core public commitment for social citizenship, because full membership in society requires equality of opportunity, which education can help to provide. Also, civil and political rights are designed for reasonable and intelligent persons, and therefore, education is a necessary prerequisite to individual and political freedom. Education is so necessary that primary and secondary education should be free—and compulsory. Universities, though not compulsory, would become increasingly important to social citizenship, until in today’s post-industrial society, accessible university education is a necessary component of social citizenship. One of the major commitments—and accomplishments—of the welfare state is the provision of mass higher education.

The university's democratic role goes much beyond mass higher education. Each component of the bundle which is the university—undergraduate education, the professional schools, graduate education and research—has a crucial role in the liberal democracy of post-industrial society. Undergraduate liberal education has always been, in part, an education for political citizenship. The universities are the gateways to the professions, and democracy requires equality of access to the professions. Furthermore, the practice of all professions involves an imbalance between the professional and the client; and virtually all professions have been granted self-regulation rather than being regulated by government. Therefore, in a democratic society, it is important that all professionals be attentive to issues of the client's interest and the public interest. The university shares the responsibility to educate professionals for this attentiveness, on behalf of our democracy. In our knowledge-based post-industrial society, political choices require assessment of complex questions. Sometimes, the assessment requires scientific knowledge: for example, what are the environmental risks of automobile pollution and what technology might reduce that pollution? At other times, the assessment can involve social science: for example, how will new information technologies influence the practice of democratic politics? And the assessment can involve knowledge of the humanities: for example, the history of Islam and of Orientalism can help us to evaluate proposals for peace in the Middle East. The university can contribute this scientific, social scientific, and humanistic knowledge to political deliberation. And finally, the multiversity as a research institution, financed by our democratic governments, is crucial in the dynamic of generating new ideas which so influence our society. The universities have a democratic obligation to ask what questions are being studied, and to assess the impact of the new knowledge. They must ask: ideas for whom?

Usually when we think of democracy, we do not think of universities. We generally think first of the institutions of government—a representative assembly, political parties, and elections. We think of choice between political parties and between party platforms. We often think of the importance of a free press to ensure democratic choice in elections. But if we reflect for a moment, we realize universities in post-industrial society are equally important to ensuring democratic choice. Democracies require the development and assessment of alternatives. In post-industrial society, propelled by the codification and application of theoretical knowledge, these tasks more than ever require the application of knowledge. The university should contribute to the development and assessment of alternatives as part of ensuring democratic choice.

Sometimes when we think of democracies, we think of the institutions of civil society, such as religious institutions, labor unions, and a free press, necessary to counteract concentrations of power in government and business. Now, in our post-industrial society, in our world where knowledge is the most important factor in economic and social growth, the university has become a crucial institution in civil society. The university is important in counteracting concentrations of power in government and business. It becomes especially critical today to recognize the democratic function of universities because universities are falling more and more under the influence government and business.

The link between democracy and education is as old as the discussion of each. It can be argued that all educational theory is at the same time political theory. Educational theory asks: what kind of person do we seek to create through education? Embedded in this question is another question: what sort of citizen do we want? However, most writing on education and democracy has dealt with education of the young, with primary and secondary education. But, we must keep primary and secondary education distinct from university education because the democratic functions of each are separate.

This distinction is clear in Amy Gutmann's reflections: *Democratic Education*. The book begins: "When citizens rule in a democracy, they determine among other things, how future citizens will be educated." There is a process, a conscious process, of social reproduction. One must ask what sort of moral character is to be cultivated, and who should share the authority for how future citizens are to be educated. Following the philosophical precepts of liberal democracy, she argues that the democratic purpose of primary and secondary education is the development of "deliberative," or what she calls interchangeably "democratic" character. Such character involves moral reasoning as well as "the development of capacities for criticism, rational argument, by being taught how to think logically, to argue coherently and fairly, and to consider relevant alternatives before coming to conclusions." Basic democratic virtues such as toleration, truthfulness, and a predisposition to nonviolence should be inculcated. Also, "children must learn not just to *behave* in accordance with authority but to *think* critically about authority if they are to live up to the democratic ideal of sharing political sovereignty as citizens."⁷ Authority to determine the goals and content of primary and secondary education, to determine this conscious process of social reproduction, Gutmann argues, should be shared between parents, the state, and professional educators. But, the government has the central role.

University education has related but different democratic purposes. In contrast to primary and secondary education, university education is not compulsory and involves only a portion of the eligible population. University education relies on the success of primary and secondary education. A university education is less explicitly about character formation; "although learning how to think carefully and critically about political problems, to articulate one's views and defend them before people with whom one disagrees is a form of moral education to which young adults are more receptive and for which universities are well suited." The university does continue the process of building democratic character,

but the fundamental democratic purpose of a university is protection against the democratic tyranny of ideas. Control of the creation of ideas—whether by a majority or a minority—subverts democracy. "As institutional sanctuaries for free scholarly inquiry, universities can help prevent such subversion. They can provide a realm where new and unorthodox ideas are judged on their intellectual merits; where the men and women who defend such ideas are not strangers but valuable members of the community. Universities thereby serve democracy as sanctuaries of nonrepression."⁸ Universities serve democracy, but paradoxically the authority of democratic governments over the university must be highly attenuated. Its democratic purposes are best served with institutional autonomy and academic freedom.

CRITIC, CONSCIENCE, AND PUBLIC INTELLECTUAL

During the 1980s, New Zealand was in political turmoil. The economy was shrinking; government deficits and debt were rising. Many critics, including the labor Party which formed the government, concluded the government programs of social democracy required radical redesign. Universities were not exempt, indeed were often the focus, because higher education was to be part of the redesign of economic policy. What followed was a "decade-long war" between the university and the government—the universities felt betrayed by what they saw as a crippling assault on institutional autonomy and academic freedom. During this war, the Education Amendment Act (1990) was passed. The Act is an extraordinary document because it reaffirms unequivocally the core ideals of academic freedom and institutional autonomy, even amidst political turmoil and radical redesign of the welfare state.

The Act defines universities as having certain essential characteristics: “(i)They are principally concerned with more advanced learning, the principal aim being to develop intellectual independence; (ii)Their research and teaching are closely interdependent and most of their teaching is done by people who are active in advancing knowledge; (iii)They meet international standards of research and teaching; (iv)They are repositories of knowledge and expertise.” These first four characteristics reaffirm the long-established nature of universities. What is extraordinary is the fifth essential characteristic of universities; (v)“They accept a role as critic and conscience of society.”⁹ Here we see a democratic function of universities made explicit. Universities in Canada should be given the same explicit function.

This responsibility of the modern university is connected to its responsibility for research, under the guarantees of autonomy and academic freedom. Unlike other democratic institutions such as political parties or the media, the university is committed to research; it is an institution which can allow research and sustained critical reflection to inform social criticism.

The New Zealand Amendment says universities “accept” a role as critic and conscience of society – the choice of verb acknowledges this may not be a role welcomed by everyone. Although many professors and students see themselves as “activists” and welcome the role; most professors and students are uneasy, as are boards of governors, presidents and senior administrators. They would prefer social criticism remain an indirect implication of autonomy and academic freedom, rather than an explicit responsibility to society. The university requires the support of the centers of political and economic power; the role of critic and conscience would bring it into conflict with the powerful.

The dangers to the university of this role are evident and many. Research and teaching, which should be founded upon curiosity and tolerance, might become advocacy and intolerance. It might be that social criticism, like participation in partisan politics, spoils the habits of good scholarship. Social criticism can become political protest, which in turn can slide into anti-democratic politics.

In accepting the role of critic and conscience, the university risks betraying its essential character of disinterested free inquiry, civil debate, and institutional autonomy. This risk is real and universities must guard against it vigilantly. Critical ideas and alternatives must be advanced according to the scholarly canons of respectful, evidence-based exchange. Furthermore, the university as an institution must remain neutral; it is its members who act as critic and conscience.

These reflections on democracy in a knowledge-based society lead toward an additional democratic responsibility of professors: the role of public intellectual. The university is a place of advancement and dissemination of knowledge, a place of research and teaching. Universities are the core of society’s research enterprise, the source of innovation and ideas. New knowledge is disseminated in the classroom through the teaching of undergraduate and graduate students, through continuing education, and through the publication of research. But, dissemination must not end there. The public has financed this research and therefore professors have a responsibility to discuss their research with the public. Public intellectuals help us to understand the world around us.

Jeffery C. Goldfarb, in *Civility and Subversion: The Intellectual in Democratic Society*, argues that “intellectuals are particularly able to address one of the most pressing needs of democracies: the need to deliberate about common problems. Intellectuals help societies to talk about their problems. They contribute to democratic life when

they civilize political contestation and when they subvert complacent consensus.”¹⁰ University professors should be among the most important public intellectuals of a democratic society. Also, public intellectuals have a Socratic function—they force people to examine why they think the way they do.

However, almost all publishing by professors is now through academic journals and academic presses; the intended audience is other professors, students, and specialists. Little writing is directed to the public. The professor’s role as a public intellectual has diminished because of increasing specialization in the search for new knowledge. The very success of the research enterprise has alienated it from the sponsoring public.

It is obviously in the selfish interests of professors and the university to speak publicly about the research enterprise, to engage the public imagination with the process and to explain the findings in language accessible to the curious educated public. When the public is engaged, they will be more likely to support universities. But the role of public intellectual cannot be motivated by this instrumental purpose; rather it must be recognized as an obligation to democratic society. In post-industrial society, theoretical knowledge and new knowledge are increasingly important. Society finances the research at universities. The university, with its enormous privileges, has an obligation to make this knowledge as accessible as possible, to disseminate it as a public intellectual. The responsibility has always existed, but tends to be ignored under the pressures to publish in peer-reviewed outlets.

Universities have not emphasized this responsibility. Professors enjoying a profile as public intellectual invariably say that most of their colleagues are wary (they say that it takes you away from real research, or that addressing the public requires too much dumbing-down); other colleagues are hostile (you have given up the pursuit of truth for the pursuit of celebrity); and some are simply envious (you are successful and I wish could be like you).

The systems of evaluation in academic life are not equipped to evaluate the contributions of public intellectuals to public dialogue; promotion and tenure committees seldom give these contributions much attention. This needs to change.

There are great concerns about our democracy at the beginning of the twenty-first century. A growing disillusionment with electoral politics is evident in declining voter turnout, and declining participation in all aspects of organized party politics. At best a bemused disinterest, at worst a hardened cynicism, is a common stance, especially among the young. The civility and public-spiritedness which should mark the liberal citizen seem to be disappearing. The quality of public discussion declines. When public discussion does occur, it is fractious and polarized. All our political parties share these concerns and are offering reforms to address the ‘democratic deficit.’

These criticisms and worries have sparked a renewal of interest in liberal democratic theory among philosophers and political scientists, reflecting a deep concern about the legitimacy of liberal democracies. The recent literature has developed the idea of deliberative democracy.

One line of thought centers on how democracy can retain legitimacy given the inevitability of disagreement in our pluralist complex societies. To political philosophy’s usual emphasis on equality, liberty, power, and representation, has been added a focus on disagreement. In politics today, whether on economic policy, foreign policy, or social policies dealing with abortion, drugs or gay rights, disagreement is fundamental. In the late twentieth century, in the phrase of John S. Dryzek, the theory of democracy has taken “a strong deliberative turn.” Prior to that turn, democratic legitimacy was seen mainly in terms of aggregation of preferences or interests into collective decisions, through devices such as voting or representation. After the deliberative turn, “democratic legitimacy came to be seen in terms of the ability or opportunity to participate in effective deliberation on the part of those subject to collective decisions.” “The

essence of democracy itself is now widely taken to be deliberation, rather than voting, interest aggregation, constitutional rights, or even self-government.”¹¹ The deliberative democracy literature emphasizes that deliberation should occur not just in the explicit political process, but in many dispersed forums of civil society.

The deliberation of democracy will surely draw upon existing knowledge and call for new knowledge; it will require the adjudication of competing knowledge claims. It will require the involvement of public intellectuals and engaged, informed citizens. All these are the stuff and substance of the university. The deliberation of democracy is not just in the political process, it must be throughout society, and wherever it occurs, the deliberation must be public. The university is an ideal forum—in the classroom and through its graduates and its professors as public intellectuals—for such public deliberation in civil society. The university’s values are consonant with those required by deliberative democracy. It is a sanctuary of nonrepression where men and women who hold contrary ideas are full members of the community. The university is an institution necessary for achieving a deliberative democracy.

This paper argues that mission of the university should include a democratic mission. There are many initiatives needed to achieve this goal. The first step would be to recognize explicitly this mission in the University Mission Statement: the university recognizes its responsibilities to democratic life and accepts the roles of critic, conscience, and public intellectual. When we choose Presidents or senior administrators or Board members, we should look not just for leaders, skilled administrators and adept fundraisers, but also for people who appreciate and would defend this democratic role. These new responsibilities as critic, conscience and public intellectual could be articulated as part the service responsibilities of professors. We need to develop means to evaluate public contributions—it will be difficult but no more difficult than evaluating teaching. Then contributions can

be given weight in hiring, tenure, promotions and merit decisions. The time spent as a public intellectual is time spent on the mission of the university in a democratic society. Not every professor must engage in these activities—the current responsibilities for teaching, research and service are already arduous—but collectively, the professoriate must accept the role. Course releases could be made available for special projects related to the democratic mission. Granting councils could give more weight to activities as public intellectuals as part of research dissemination. Connections between academic departments and specialized journalists could be enhanced. When we evaluate departments—conducting an undergraduate program review or a graduate program review—we should evaluate its contribution not just in teaching and research, but also to democratic life.

Thus, universities have a new mission, a mission because they are institutions of democracy. Great universities should be judged not just by the quality of their research, the learning of their students, and the contributions and accomplishments of their graduates, but also by their service to democratic society as critic, conscience and public intellectual.

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- ¹ This working paper is based upon a longer essay, [The Mission of the University](#), which was submitted to the Rae Review on Postsecondary Education in Ontario. The longer essay is available on the COU website, www.cou.on.ca. I am grateful to the Academic Colleagues on COU for their thoughtful and helpful comments on this paper.
- ² See Bell, Daniel. 1999. *The Coming of Post-Industrial Society: A Venture in Social Forecasting*, Third edition, first published in 1973. New York: Basic Books.
- ³ Bell, Daniel. 1967. "Notes on the Post-Industrial Society (I)," *The Public Interest*, Number 6, Winter, pp. 24-35.
- ⁴ See for further discussion, Towson, Shelagh and Alan Sparkes. 2004. "Reflections on Defining Universities," COU Colleagues Working Paper Volume 2, Number 3 (February 2004). Available at www.cou.on.ca.
- ⁵ The term 'welfare state' was first used in the Second War, to contrast with the Nazi 'power state.' The ideals and commitments of the welfare state were developed to better articulate what was at stake in the war, more especially why the average soldier/citizen had a stake in the outcome.
- ⁶ See Marshall, T. H. 1963. "Citizenship and Social Class," in T. H. Marshall. 1963. *Sociology at the Crossroads and other essays*. London: Heinemann, p. 74.
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- ¹⁰ See Goldfarb, Jeffrey C. 1998. *Civility and Subversion: The Intellectual in Democratic Society*. Cambridge: Cambridge University Press, p. 1.
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The Problems Faced by Academics at Various Stages in Their Careers —The Need for Active Institutional Involvement

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The Working Papers Series consists of short papers on academic issues prepared by Academic Colleagues. The topics chosen by the caucus of Academic Colleagues are championed by one or two colleagues. Although drafts of each paper are discussed by the full caucus, the final version of the paper represents the opinions of the authors and not a consensus reached by the Colleagues. The authors present their paper to the full Council as a matter of interest and to stimulate discussion. The papers as finalized do not represent COU policy. They are simply a mechanism for investigating and opening discussion on matters of interest to the Colleagues and the Council—and their readership at large.

ABSTRACT

Universities usually accept the fact that new faculty members need help in establishing their careers. Universities have, however, traditionally paid little attention to the problems encountered by academics in the later stages of their careers despite the fact that these problems are often just as severe and just as difficult to deal with as those encountered by new faculty members. In this discussion paper, an academic career is assumed to consist of three major phases—the early years, the mid-career years and the late stage years. Some of the problems encountered by faculty members in each of these career stages are discussed and some possible methods of dealing with these problems are briefly outlined. The main purpose of this paper is to draw attention to the need for universities to implement procedures for helping faculty members at all stages of their careers to successfully deal with their problems and in this way to remain productive members of the academic community.

INTRODUCTION

Universities have traditionally accepted the fact that new faculty members require help and guidance in developing their research programs, in developing their teaching skills and in developing a role in the academic administration of the institution. However, many faculty members at other stages of their academic careers also require help and guidance in order to remain productive and enthusiastic members of the university which is necessary if they are to continue serving the institution to their full potential. Few universities provide such help and guidance and, as a result, the quality of the education they provide, the quality of their academic administrative systems and the quality of their research programs often suffer.

In considering the problems and needs of the faculty it is important to realize that these problems and needs are dependent upon academic discipline, upon gender, upon the personality of the faculty member and upon whether a faculty member chooses to follow a career path involving major administrative appointments. However, it appears that there are certain common requirements that emerge when the problems and needs of faculty members are considered and it is these common requirements that will be considered here. The problems and needs of faculty members are also, of course, dependent upon age and length of service and this effect must, it appears, be taken into account. A typical academic career has a length of thirty to forty years and in order to account for the effects of age and length of service upon faculty problems and needs, it is common to split an academic career into three phases, these being:

1. The Early Years—This phase is usually taken to cover the period between first appointment and the granting of tenure and the promotion from Assistant to Associate Professor. It includes the period during which a research program is being developed and a good research funding base is being established and when a teaching style and role is being developed. This stage typically covers approximately the first six to ten years of an academic career.

2. The Mid-Career Years—This phase is usually taken to cover the period that includes promotion to the rank of Full Professor, completion of the development of a mature and well recognized research program supported by significant research funding, the taking on of a significant teaching load and the assumption of an increased role in academic administration. This phase ends when retirement begins to be considered and typically covers the middle twenty to twenty-five years of an academic career.

3. The Late Years—This phase is usually taken to cover the period from the time retirement is first seriously considered to the time when retirement actually occurs. This phase typically covers the last five to ten years of an academic career and is often characterized by a decreasing involvement in research and in academic administration, this often not being at the choice of the academic.

Each of these three phases tends to involve different faculty needs and problems, those in the second two phases often being just as difficult as those in the first phase. The nature of the problems and difficulties that arise in each of the three phases will now be separately and briefly discussed. It must again be stressed that these problems and difficulties faced by academics at various stages in their careers do tend to vary with discipline and with the individual and that each particular case needs some degree of individual attention.

THE EARLY YEARS

New academics face intense pressure to develop a good teaching record and to build a strong funding and publication record in the first three to five years of their academic careers. This can lead to high stress levels in these new academics and confusion as to exactly what is being required of them. They often respond by spending their time inappropriately and may end up feeling very frustrated. Studies of faculty members in their first 3-4 years of an academic career suggest that the problems encountered by new faculty members often result from the fact that they:

- Spent less time on the development of their research programs than was needed in order to produce a program capable of generating the results needed to meet the promotion and tenure criteria of their institutions.
- Admitted going to class over-prepared (with more material than they could reasonably cover in the allotted time) and rushing to complete everything, often at the expense of student understanding and participation.
- Taught defensively, doing whatever they could to avoid student complaints.
- Received student evaluations that fell well below their expectations but blamed these results on external factors (invalid rating systems, poor students, unfavorable class times and sizes).
- Experienced a sense of loneliness and lack of collegial acceptance, and had difficulty establishing productive contacts with colleagues who could provide guidance and support.

Of course, not all new faculty members showed these characteristics. Some of the new faculty successfully developed more than adequate research records for promotion and tenure and scored in the top quartile of student ratings of teaching. Compared to the majority of their colleagues, these successful new “quick starter” academics:

- Spent, on average, more time on their research.
- Did not spend major amounts of time on course preparation averaging about 1 to 1.5 hours of preparation per lecture hour after their first semester.
- Lectured at a pace that allowed for student understanding and participation.
- Regularly sought advice from colleagues on research and teaching.

The main differences between typical new faculty and these successful “quick starters” was the latter group’s abilities to balance conflicting demands on their time and to quickly establish productive networking with colleagues.

The above, and other observations, indicate that the problems encountered by academics in the early stages of their careers can largely be alleviated by:

1. Ensuring that new faculty members receive adequate and frequent feedback concerning their progress towards meeting institutional expectations. A useful practice is a meeting each semester between the chair and new faculty member, discussing what the new faculty member has accomplished, what is currently underway, and what is planned in research, teaching, and service. Feedback to new faculty members can also come from a committee made up of senior colleagues some of whom will eventually be involved in making tenure and promotion decisions. The committee and the new faculty member should meet at least once each semester in order to discuss past, current, and planned activities, and the committee should provide affirmation and guidance when each is appropriate.
2. Ensuring that an adequate and formal mentoring system is in place, one or two mentors for each new faculty member usually being required. Despite the criticism that has been leveled at it,

mentoring has a long history as a technique for teaching new practitioners their craft and, when done properly, can be of great benefit to a new faculty member. A mentor can help a new faculty member integrate into the academic community, offer guidance about getting started in research and teaching, and serve as an advocate in the tenure and promotion process.

3. Ensuring that a new faculty member is provided with adequate resources including financial support in order to allow them to develop their research and teaching programs.

THE MID-CAREER YEARS

Faculty members face many challenges during the mid-career years. Sometimes they realize that it is necessary for them to change the focus of their research but to do so often involves the risk of losing research funding and of not being able to make a significant contribution in the new research area. Sometimes mid-career academics begin to lose some of their enthusiasm for research and want to concentrate more on teaching and service to the university but find that for a variety of reasons, this is not allowed by the institution. Some mid-career academics who are competent but not highly successful researchers or teachers develop the feeling that they are unappreciated and marginalized and as a result, they grow resentful and withdraw to some extent from their colleagues. Events such as being passed over for a leadership opportunity or discovering that their accomplishments are ignored by their colleagues and/or chair tend to lead to the feelings of resentment that characterize some mid-career academics. Depression and stress are all too often features of the mid-career years.

Despite the fact that mid-career academics do the majority of the teaching in many universities and bring in relatively large amounts of research money to the

institution, their needs and problems are very often completely ignored by the institution. It appears, however, that encouraging mid-career professional development is as equally important as supporting early career faculty. Unfortunately, this need is often not well addressed. Although very few mid-career faculty development programs exist, there are steps that can be taken even at the departmental level to help. Most of the ideas for encouraging faculty mid-career development relate to sharing resources, giving these faculty members some extra attention and allowing them to modify the balance between research and teaching as long as the result is beneficial to both the university and the academic. Some of the ways in which mid-career academics can be assisted are:

1. **Encourage Creativity and Provide the Means to Change their Research Focus**—To encourage creativity, a department may need to make some small, but worthwhile investments in a faculty member's career. Providing some bridge money or seed money to encourage risk can give faculty the opportunity to transform their focus. Sometimes a small investment, such as seed money, can reap larger rewards later as the stalled faculty member now has some resources to invest. Stalled faculty may need to be taught how to be competitive with organizations other than their standard funding agencies. Department chairs could consider giving stalled faculty an internal sabbatical. Having more time may be all that is needed in order to boost their research efforts. Or, the faculty member may wish to focus temporarily on a new area such as education or leadership development. If they become energized in one area, they often can transfer that energy to their research interests. Success begets success.
2. **Mentoring**—Many mid-career faculty also need mentoring. A department chair might work with these faculty on the presentation of their ideas,

servicing as a sounding board or offering extra guidance on communicating ideas. Matching the stalled faculty with research-active faculty both within and outside the department creates another mentoring forum. People who may in the past have been stalled in their development but who are currently experiencing success may also be good mentors. For example, they may have failed several times to obtain funding from a granting agency before finding multiple successes at the very same agency. Talking with someone who has overcome a similar challenge can be inspiring. By finding ways to help create opportunities to achieve some level of success, chairs can help mid-career faculty to become productive (and satisfied) again.

3. **Nominating Mid-Career Academics for Awards**—Faculty at all levels appreciate being recognized for their contributions. Department chairs should be encouraged to actively nominate their mid-career faculty for awards and recognition. National and university awards are excellent professional development opportunities. Department chairs should work closely with all of their faculty to identify potential opportunities and to create strong nomination packets.
4. **Faculty Development Programs**—Universities should institute development programs for faculty at all levels. It is important that such programs aimed at mid-career academics not be condescending or trivial.
5. **Allowing an Adjustment in the Balance between Teaching and Research**—Although it is not easy to do in many institutions, attempts should be made to accommodate the changes that occur during mid-career by allowing academics in this stage to take on heavier teaching loads to compensate for reduced research productivity. This assumes that the faculty member has a good teaching record.

THE LATE YEARS

The problems and challenges faced by faculty members in the last period of their academic career tend to be even more dependent upon the individual than those encountered in the earlier periods and it is, as a result, difficult to categorize these difficulties of the later years. However, the problems and challenges faced by academics in this later year period tend to include the following:

1. They have relatively little interaction with their younger colleagues and are excluded from the informal discussions that so often are the foundation upon which academic decisions are made.
2. They are not considered when the formation of new research groups is being considered.
3. Although they are often willing to increase their contributions in the service area, they are overlooked by nominating committees who often assume that they have long since retired or assume that they will resist change and should not therefore be considered.
4. They are not given any clear indication of whether or not they will be allocated the space to continue their research after retirement and consequently are not sure whether to seek new research funding or develop new research areas.
5. Even when they know that the decision as to when to retire is a personal one, many academics in this stage of their career dread retirement fearing that they will no longer be able to in any way undertake the research, teaching and service work that they really enjoy.
6. Academics at this career stage often suffer from bouts of depression and feelings of resentment for reasons that are frequently not clearly understood.

This list is meant to illustrate the difficulties faced by this academic group and is not meant to be comprehensive.

Some of the ways that can be considered to assist academics in the late-year period are:

1. Chairs should actively try to ensure that late-year academics are kept involved in the operation of the department and the faculty.
2. Some form of mentoring for these academics should be considered if this seems appropriate and if a suitable person to undertake the mentoring is available.
3. An attempt should be made well in advance of retirement to give the academic a clear indication of what support and facilities they can expect for their research after they have retired.
4. The possibilities for teaching on a very limited scale as an adjunct after retirement should be openly discussed.
5. Phased retirement schemes should be put in place. In such schemes, if an academic so chooses, retirement is allowed to be phased in over a period of say three years, the teaching and service workload decreasing in steps over this period with the salary decreasing in steps and the pension benefits increasing in steps over this period.

KARPIAK'S RECOMMENDATIONS

In "Ghosts in a Wilderness: Problems and Priorities of Faculty at Mid-Career and Mid-Life," Karpiak (1996) presents a study of mid-career and some late year problems. Among the recommendations made as a result of this study were:

- a) Humanize the institution through more realistic expectations of faculty, and recognition and support of the different efforts and contributions that they bring.
- b) Provide academic support and resources for research, including space to carry out research, and time, through lower teaching loads, reduced administrative duties, and mini-sabbaticals.
- c) Promote among faculty a sense that they are involved in a joint enterprise, and that they are members of a team.
- d) Foster an environment in which colleagues stimulate each other's intellectual interests and help each other to develop and grow as intellectuals.
- e) Develop support networks so that faculty know they are not alone.
- f) Acknowledge the particular circumstances of women faculty, e.g., child bearing and be flexible about the personal demands that women have.
- g) Help faculty fulfill their potential for the last 10 or 15 years of their academic lives by providing resources, such as career counseling, for people in mid-career.

These recommendations will be seen to be, for the most part, similar to those presented above.

CONCLUSIONS

Problems and difficulties arise at all stages of an academic career, the nature of these problems and difficulties varying however with the career stage. Universities would benefit by acknowledging that such problems exist and by trying to adopt measures that will assist academics to deal with these problems at all stages of their careers. More attention should be given to the adoption of procedures that allow more flexibility in what is deemed to be a successful academic career.

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The following is a list of some of the many papers that are concerned with the problems discussed above and with methods of dealing with these problems.

Early Career

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