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From: Dr. Michael D. Owen
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To: Commission on Post-Secondary Education in New Brunswick

I write as a Professor Emeritus (Biology) and former senior administrator (Associate Dean Academic) from the University of Western Ontario, now a resident of New Brunswick with some interaction with the University of New Brunswick (Fredericton and St John) and extensive tertiary level teaching experience (through the Huntsman Marine Science Centre) in the province of New Brunswick.

The limitations in my response are that my experience allows me to comment on only the anglophone and university elements of the system. I have offered answers to only those questions in the discussion paper that fall within my experience. I have included some commentary on the limitations of the discussion paper itself.

Emphasis of the Discussion Paper

The paper fails to recognize that the NB university system operates as an integrated part of an environment of Canadian universities. Many of the problems faced by the NB system are not local but national and solutions to these problems can only be approached through a recognition of national problems and in an integration of effort with what is happening in the rest of the country. A parochial approach can only lead to isolation of the NB university system and failure. As an example, the paper mentions out-migration as a problem but gives no consideration to what might be done in recruitment to balance that migration.

A serious limitation of the discussion paper is its narrow focus on only one aspect of the role of a university. A typical faculty member is expected to spend 40% of his/her time on teaching activities, 40% on research and 20% on administrative duties and community service. The 40% time commitment to research recognizes the role of the university in the generation of new knowledge and that this is as important as the communication of that knowledge through teaching. Research that is vital to the future of Canada (and NB) is a vital part of the activities of all areas of a university and is not limited to areas of science and technology that appear to be of commercial importance (the lip service given to research in the discussion paper does recognize these areas).

Research, in all areas, is a fundamental part of what makes a university a university. Failure to recognize this in any future planning of a university system that is to have any national presence dooms that planning to failure.

Faculty Recruitment

A huge majority of university faculty members in NB are either themselves from, or have close family in, the province. This remains true if only recent recruitments are considered. What leads to this insularity at a time when ease of travel and communication has created a much more random pattern in the distribution of faculty recruitments across the rest of Anglophone Canada? The sad truth is that the NB universities cannot offer either the salary or initial career support that an outstanding prospective faculty member could command at competing institutions. Hiring the brightest and the best, irrespective of origin, and providing them with the same space and facilities that they could expect elsewhere is fundamental to the success of a university. NB's inability to compete for the brightest and the best condemns the NB system to mediocrity for the thirty-year career expectancy of the recently hired faculty cohorts. This failing may well be linked to New Brunswick's position in provincial rankings of research funding. A further element may lie in the failure of at least the major NB University to recognize merit (see below).

Faculty Incentive

My knowledge here is limited to UNBF but I suspect that its faculty contract is similar to that at other institutions in NB.

In 1878 R. Williams, a Colonel in the US army, wrote: *“Our army presents the only known example of a business or profession, either public or private, in which incompetency and want of zeal bring the same substantial rewards as energy, capacity and active attention to duty.”*

The absence of a merit component in the salary of a professor distinguishes UNBF from most other institutions across Canada. Even a small merit component, adjudicated annually by a committee of peers, is a powerful incentive towards improved performance.

A typical merit component considers teaching ratings, research output and administrative and community service in the same ratio as that dictated in a faculty member's workload; thus even an absolutely outstanding researcher must also be a superior teacher and hard working citizen to achieve a maximum merit score. Such an incentive is badly needed in the low energy environment of UNBF.

Should every professor be expected to be actively engaged in research?

There is an expectation that a PhD is the base point qualification for a junior faculty appointment (in some areas this must be extended to a PhD plus a period of postdoctoral research). When this qualification is the institutional expectation for a faculty position there is a reciprocal expectation that having been trained as a researcher (and university teacher – there are few PhD graduates who reach their graduation without extensive experience as teaching assistants) that a new faculty member will have the opportunity to develop their research career. An attempt to recruit a junior faculty member to a teaching position with no research opportunity would attract only PhD graduates who had failed to find a position that used their training.

Basic to the concept of a university is that research and teaching are tightly linked activities and that students should be taught by those actively involved in the development of the knowledge that they are transmitting. It is a general truth that the best teachers in a university are, in general, also the most successful researchers.

There are a significant number of older members of any university faculty whose research programs have stagnated or died. An argument can be made that these experienced teachers should have a modified workload that expects them to spend more time teaching. Where the individual is indeed a good teacher this is frequently a positive move. How to best use the time of non-productive researchers who are also poor teachers is a problem faced by all academic administrators.

University Size

There is general acceptance that the optimal size of a comprehensive university in Canada is between 15,000 and 20,000 FTE students. I note that the total enrollment in NB universities is only barely above this bracket. Only UNBF approaches the size at which a comprehensive university can be expected to operate in a way that combines educational diversity and excellence with financial efficiency.

The Province of New Brunswick does little to its national credibility in its recognition of Independent Degree Granting Institutions – an institution with a specialized mission and only 26 (ABU) or 8 (St. Stephens) members of faculty meets no one's definition of a university. NB would do well to follow the norm, expressed in Wikipedia, "...to call an institution made up of several schools and/or colleges and granting a range of post-graduate degrees a *university*, while a smaller institution only granting bachelor's or associates degrees is called a *college*".

High Drop Out Rate

An important question here would be, "Who drops out and why?" NB has a higher than average participation rate by students entering first year programs. Are those leaving the system after one year doing so for reasons of either academic failure or a decision that a university education is not for them? If so this might be viewed as positive feature in that those students have had the opportunity to properly evaluate the university system and make an informed, albeit, negative decision.

There should be a careful examination of the geographic origins of students who fail to meet academic standards in their first university year. While I do not have data for NB I am well aware of the problems in the Ontario system that arise from dramatically different standards in smaller rural schools when compared to students from large urban schools. Examination of Year-1 grade changes, compared to admission averages, shows only small drops for students from strong urban schools while drops of 20-30% are, unfortunately, the norm for students from small rural centres.

Secondary School Preparation for University

I can comment on only a small number of students at the top end of the academic spectrum. At the University of Western Ontario I was very involved in the recruitment of science students to our Nation Scholarship Program (25 major scholarships for students with exceptional academic ability combined with outstanding performance in non-academic areas). Since Science attracted some exceptional applicants I typically dealt with a cohort of 8-13 National Scholars, from across Canada, each year. Very few NB secondary students were competitive for these scholarships. Of the few NB students who did come to UWO (I think five in my seven years in office) only one was able to maintain the expected standard.

Rural Accessibility

Students from rural areas deserve the same access to tertiary education as those from urban centres. However, this access should not be provided by development of sub-campus or regional centres. In a province that already has too many post-secondary institutions such a direction would compound the problem by increasing costs (small centres are not cost effective) and limiting the programs available to rural students. A part of a student's university experience is that of becoming part of a community. UNBF is closing residences for lack of students. Surely the solution for rural students is to provide incentives for them to come to the larger centres, become part of a university community and have a full range of programs available to them.

Why do so many university students enroll in arts programs, while the need grows for graduates in the sciences, pure and applied mathematics, computer science and engineering?

This question is posed with the same bias as the limitation of the discussion paper. Arts (and social science) programs are a fundamental part of the education of a society. It is from programs in History, Philosophy and English (not to mention Economics) that the innovators in the business world are drawn. It is from arts programs that students with communication skills graduate (a sad, and almost universal failing in science programs across Canada).

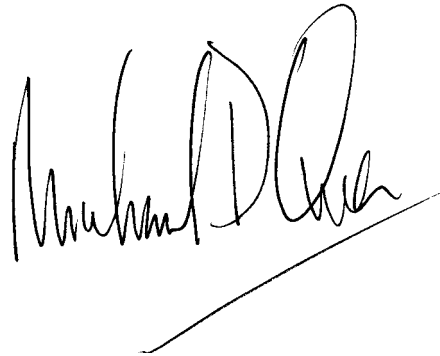
The inclusion of computer science as a perceived need is curious - I have some familiarity with the job market for computer science graduates where the Canadian universities are producing a supply that greatly exceeds demand (this is why Computer Science enrollments are falling across Canada).

What is the most effective and fairest way of paying for post-secondary education?

My assumption is that this question is directed to student costs, rather than to institutional funding. This is a national, rather than NB question. My feeling is that top students (say top 5% of admissions) should receive total funding – fees plus a living allowance, renewed from year to year as long as they maintain an academic standing in the top 10% at their institution. Next 30% might receive significant scholarship support – again performance linked for renewal as well as interest free loan access (with loan amounts related to family income) with a portion of the loan forgiven on successful graduation. Lower level students should be supported through access to similar interest free loan funds.

How do New Brunswick's Universities compare with others?

My judgment of the ranking of the NB universities is probably apparent in a number of my other comments. The answer is **poorly**. NB has too many institutions of too small a size and cannot afford to support them in a way that compares to good quality universities in the rest of Canada. The NB system needs to be both smaller and better supported to have a chance of attaining reasonable quality.

A handwritten signature in black ink, appearing to read "Michael D. Owen". The signature is written in a cursive style with a long, sweeping underline that extends to the right.

Michael D. Owen