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Academic Restructuring at Ryerson University: White Paper

Ryerson University. Provost's Academic Structures Commission

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**Academic Restructuring at
Ryerson University: White Paper**

**Provost's Academic Structures Commission
January 29, 2010**

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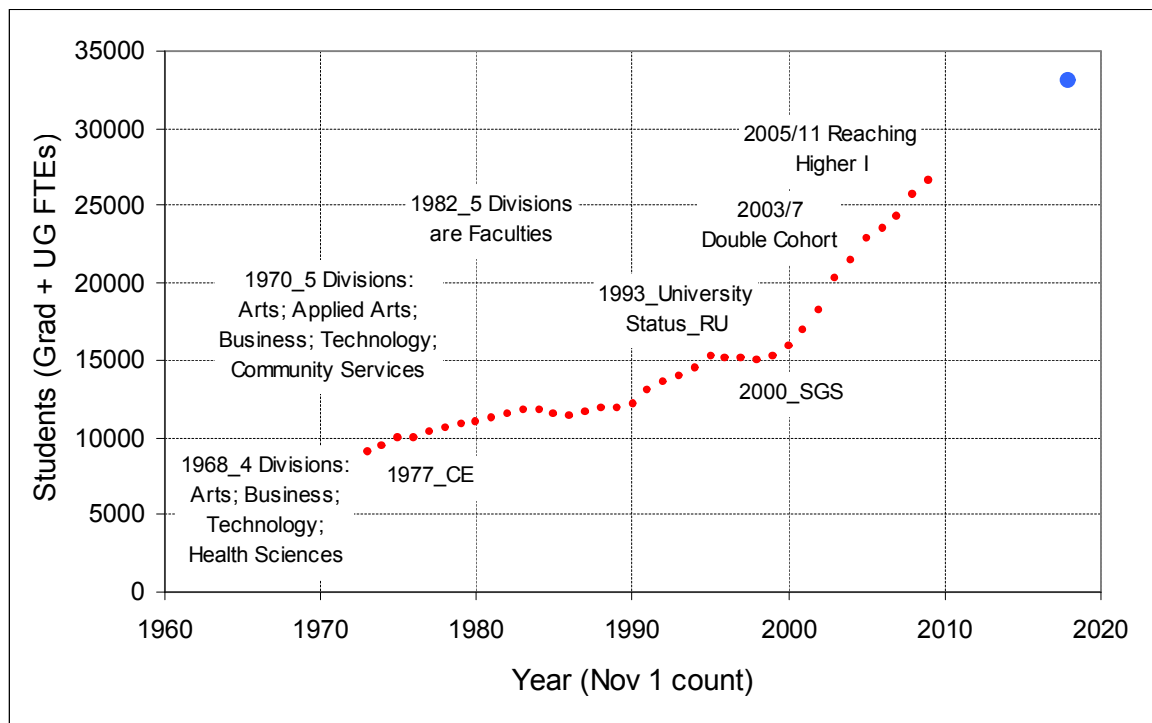
⁵ Withdrew due to pressure from other commitments.

PREFACE

On May 6, 2009 the Provost announced the establishment of an Academic Structures Commission to prepare a Report for him on possible reorganization of some parts of the University. The Commission arises from Recommendation 16 in *Shaping Our Future: Academic Plan for 2008/13*, which was approved by Senate (May, 2008). In the consultations which guided the formation of the plan, it was argued that the academic structure be revisited to ensure the University responds effectively to internal and external pressures arising from recent and expected growth and change.

The mandate of the Provost's Academic Structures Commission (PASC) is to prepare a Report on possible reorganizations within the context of current and anticipated teaching and research developments, following an extensive consultation process⁶. The Commission is to explore a range of possibilities with respect to restructuring existing Faculties and establishing new ones. Since becoming a university in 1993, Ryerson has grown in undergraduate student numbers and programs, established a graduate school, and placed greater emphasis on scholarly, research and creative activity. This has occurred within the framework of a long established five-Faculty structure (Figure 1)⁷.

Figure 1 Growth in student population (FTEs) 1973 to 2009 (Source: UPO)



⁶ A critique of the rationale and process for this exercise is in: N. Thomlinson, "Restructuring if Necessary; Not Necessarily Restructuring", Jan 5, 2010, 19pp.

⁷ The Commission is indebted to Don Kinder and his colleagues in the Archives of the RU Library for the Ryerson Timeline summarized in Appendix A of the *Discussion Paper*.

Consultative Schedule

Given the Report is to be submitted to the Provost by the end of January, 2010, the Commission established a tight schedule of meetings (17 two hour meetings), written reports, and university-wide consultations:

1. Create a generic e-mail address (pwg@ryerson.ca) by end of May, 2009.
2. By the end of June, 2009, hold two Town Halls to explain the process, respond to questions and concerns, and receive suggestions. These were held May 29 (91 in attendance) and June 26 (41 in attendance).
3. Prepare a *Discussion Paper* to be transmitted to the university community by the end of September (transmitted electronically via 'infoline' and Campus News, Sept 22, 23 and 29). <http://www.ryerson.ca/provost/planning/documents/>
4. Convene a Town Hall at which Commission members welcomed input on the *Discussion Paper* and the topic in general (held on Oct 2, 45 in attendance).
5. By the end of November prepare a *Green Paper* containing the Commission's preliminary restructuring scenarios, and transmit to the university community. <http://www.ryerson.ca/provost/planning/documents/>
6. Hold a Town Hall to present and discuss the *Green Paper* (held December 18; 102 in attendance).
7. Prepare a Final Report by the end of January, 2010.
8. Present to Provost, Senate, and Board for discussion.

Interleaved within this schedule have been meetings with other groups in response to invitations from them. For example: Arts Chairs Cttee.(Oct. 14); Psychology (Nov. 17); FCS Chairs Cttee.(Nov. 24); RFA Reps. Council (Dec. 8); Chairs/Directors/Deans (Dec. 10; 70 in attendance); RFA Council of Chairs, (Dec 14); and, Arts (Jan. 14; 42 in attendance). Also, more than 50 written submissions have been received, most with respect to the *Green Paper*. At the request of the RFA, the deadline for written submissions was extended to Jan. 14, 2010.

In the Town Halls, and other local group discussions, it has been clarified that the last step in the Commission's advisory process, following the contextual *Discussion Paper* and 'scenarios' *Green Paper*, involves this *White Paper* which provides a summary of the Commission's deliberations⁸, and suggests to the Provost some possible alternatives. It is the Provost, following normal consultative University procedures, who will decide the timing and format of any changes that may occur. Such changes will require Senate and Board approval.

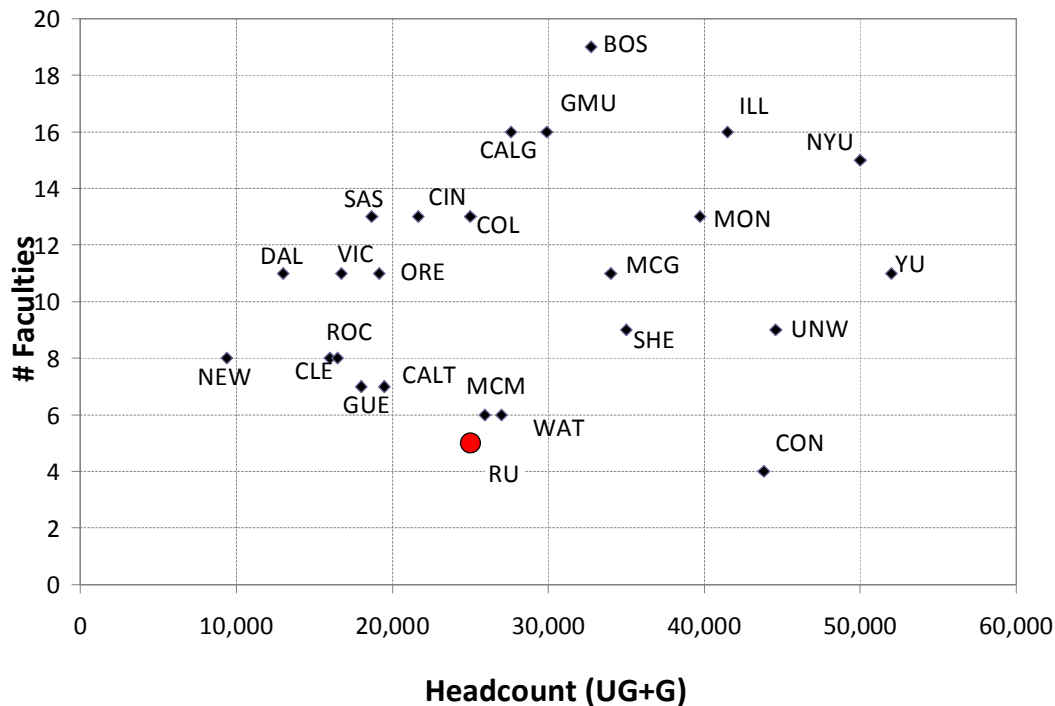
The Commission takes the existing Department structure as the building blocks of Faculties. It is, therefore, assumed that Departments as they are currently constructed will still exist (unless sub-groups within Departments suggest change, which would need to be addressed within a Faculty), and departmentally based programs, whether they be single discipline or locally multi-discipline, remain the norm.

⁸ And hence includes material from the *Discussion Paper* and 'scenarios' *Green Paper*.

BACKGROUND

Although every university undertakes an academic restructuring exercise at one time or another, "... few recent studies address the formal structure of academic organizations"⁹. There are, therefore, few blue-prints to follow, and none that can be found which really analyze outcomes. It is important to note that most universities appear to undertake such an exercise incrementally, through partial restructuring, and more frequently than Ryerson¹⁰. It is also important to recognize that, while there is no general relationship between size of institution and number of Faculties, Ryerson does have few Faculties compared with other universities (Figure 2).

Figure 2. Selected Comparator Universities: Number of Faculties and Headcount (as of early June, 2009). Source: *Discussion Paper*, p.15.



The PASC restructuring exercise is focusing on the number, and departmental composition, of Faculties at the university¹¹. Ideally, academic Departments¹² (or 'costing units') are the organizational places in which disciplines (and faculty members devoted to them) and programs are located. Faculties are agglomerations of congruent departments

⁹ Gumport, P.J. and Snyderman (2002) "The Formal Organization of Knowledge: An Analysis of Academic Structure" *The Journal of Higher Education*, 73, 3, p. 375.

¹⁰ Snowdon, K. (2009) "Academic Organization: Considerations" (unpublished paper prepared for PASC); and presentation to the Commission, Sept. 3, 2009. The *Discussion Paper* includes some sample vignettes.

¹¹ Gumport, P.J. (2000) "Academic Restructuring: Organizational Change and Institutional Imperatives" *Higher Education: The International Journal of Higher Education and Educational Planning*, 39, 67-71.

¹² At Ryerson, half are Departments, and half are Schools. For the sake of simplicity all are 'Departments' in this paper.

designed to pursue and advance the interests of the group within the context of university objectives as a whole.

Why Change?

Gumport and Snyderman¹³ argue that universities may undertake Faculty restructuring for two main reasons:

- "... structural dimensions of academic organizations shape what counts as knowledge" (p376). This 'legitimation of knowledge' argument is important because the plethora of funding, accreditation, public and private sector employment situations, foundations, and so forth, often define their purview and interest in the context of accepted knowledge entities, and the relative importance that universities and society appear to attach to them.
- "... modifying the academic structure enables universities to reconcile competing imperatives for stability and change" (p377). Imperatives for change invariably relate to the external environment, as reflected in the desire to have a structure which demonstrates that a university relates to the needs of the 'real world'. On the other hand, stability is invariably an internal imperative (crystallized in the observation 'if it ain't broke, don't fix it'). Universities have always attempted to reconcile "... accumulated heritage versus modern imperatives"¹⁴. In this reconciliation, they have realized that change in academic structures is one way in which they are able to undertake, and flag, their actual or intended responses to internal/external expectations.

Types of Change

The general types of restructuring that may occur include:

- agglomeration – as with the University of Calgary (2009), a large university with more than 22,000 students, where its "...Board of Governors voted to unify the Faculties of Communication and Culture, Fine Arts, Humanities, and Social Sciences into a single Faculty. Concentrating efforts on one administrative structure will facilitate an improved and seamless university experience for arts and social sciences students. This includes ... simplifying processes for transferability between undergraduate programs ... promoting multi-disciplinary and interdisciplinary research ... at the graduate and undergraduate levels ... [and] strengthening the financial foundation and flexibility for arts and social sciences education. ... The new

¹³ Gumport, P.J. and Snyderman (2002), *op. cit.*, pp. 376 - 377.

¹⁴ Kerr, C. (1987) "A Critical Age in the University World: Accumulated Heritage Versus Modern Imperatives", *European Journal of Education*, 22 (2), 183-193.

structure will bring the U of C in line with other G13 universities, the majority of which have two or fewer arts and social science-type faculties”¹⁵.

- bifurcation – as with Mount Allison University (1992), a small university with less than 4,000 students¹⁶. In this example Mt. A. split its Faculty of Arts and Science into three smaller Faculties of Science, Social Science, and Arts. The purpose of the division was to create smaller units which could work more effectively to generate cross-department curricular integration and enhance quality in times of fiscal exigencies.
- spawn – in which a Department in a Faculty is of sufficient scale, and is essentially independent in terms of curriculum and its required administrative structure. For example, a program in law may commence life within an existing Faculty, but given the profession’s particular curricular, funding base, and administrative needs it may soon warrant spawning as a separate Faculty¹⁷.
- umbrella – where a Faculty is created to facilitate curriculum development, research, and emphasize the university’s role in an important area of concern that ‘slips between the cracks’ in its current Faculty structure. For example: “...SFUs newest faculty, the **Faculty of Environment** ...encompasses the School of Resource and Environmental Management, the Department of Geography, the Environmental Science program, the Centre for Sustainable Community Development and the Graduate Certificate in Development Studies...The university has a tremendous pool of talented people who deal with environmental issues, who have traditionally been scattered across diverse faculties, but now campus members will be collaborating under the umbrella of this new Faculty...”.¹⁸ The Faculty offers undergraduate and graduate programs.

Restructuring Considerations at Ryerson

With this information in mind, the Commission developed a number of considerations that it, and the university community at large, may think about when reviewing the various options. In the Town Halls, and other venues, the following were generally regarded as useful matters to consider in such deliberations:

Congruency or “Fit”: A Faculty should include departments that are as congruent as possible. This does not imply sameness. Rather, it requires some shared assumptions and/or practices among Departments regarding things such as: prerequisites and important student skills; pedagogic structures and methods; current and possible future teaching and research; and necessary facilities. There may or may not be any particular one (or set) of these shared by all departments in a Faculty; overlapping threads of such assumptions and practices generally suffice.

¹⁵ Please note that this University of Calgary News Release ‘*Four in One*’, June 25, 2009, has been heavily edited in this Paper.

¹⁶ A statement from the then President of Mt. Allison included in an appendix to: Wilfrid Laurier University: Report of the Advisory Committee on Academic Restructuring (1993).

¹⁷ Levin, A. “Comments on the Academic Structures Commission Green Paper”, 2pp. Dec. 22/09. Avner critically assesses the issue of needed Faculty size.

¹⁸ Simon Fraser University, Media Release, March 31, 2009.

While such “fit” is not always clearly in favor of locating a department uniquely in a particular Faculty, it is also often the case that ‘fit’ with respect to the organization of teaching and ‘fit’ with respect to research synergies may well pull in different directions. Which of these counts more in organizing Faculties may be an open question, the answer to which will be complex, but may involve such considerations as which possible organization is more inherently flexible in adapting to future changes.

Legitimacy: Following from the congruency principle, a Faculty should adequately represent through its leadership and designation its current and possible future foci of teaching and inquiry. Does the Faculty name and structure adequately reflect the congruent departments therein? Clarity is required.

Quality of Programs: Given Ryerson’s unique concentration in professional and quasi-professional areas, this consideration addresses the quality issue particularly in context of general Provincial standards (through OCGS and UPRAC), but also various professional bodies (particularly those with regulatory obligations covered by Provincial or Federal statute). The ‘tests’ are whether the Faculty would be able to focus properly on maintaining and enhancing quality among its constituent parts.

Strategic Opportunities: Given increasing Governmental ‘shaping’ (primarily through fiscal means) of post-secondary education and research, it is becoming increasingly important that what a university does be highly visible to the external (and internal) community. The ‘test’ question in this case is whether a Department is in a Faculty which reveals adequately the true import of what it is doing, thereby increasing the possibility of emphasizing its immediate relevance to new opportunities as they arise.

Administrative and Operational Efficiency: This is in many ways linked to congruence and size of Faculty. It is easier for Chairs and Deans to do their jobs if Faculties are of reasonable size, and Departments are intellectually congruent. Huge Faculties (such as traditional Faculties of Arts & Science) are invariably subdivided for administrative purposes into congruent groups, with many Associate and Assistant Deans. The ‘tests’, therefore, are whether a Faculty is too big (perhaps 8 Departments, ± 4 , would be about right), or too disparate; or, on the other hand, include sufficient RFA+CUPE instruction resources to warrant necessary Faculty-based support services.

Financial Viability: The important issue is that all Faculties implement modes of operation, particularly on the instructional side, that encourage financial efficiency and flexibility. The ‘test’ question in this case, therefore, becomes whether a new or restructured Faculty would be more likely to add to financial efficiency and academic flexibility, and not impoverish those existing. At Ryerson, a good part of increased financial efficiency can be achieved by re-organizing academic programs through some form of common first and (perhaps) second year courses.

Growth Opportunities: While the potential for another phase of growth in student numbers at both the undergraduate and graduate levels is on the horizon, any Faculty restructuring that may be proposed is not predicated upon it. Furthermore, opportunities

of various kinds occur that are not associated with significant growth. Faculties and Departments organized to take advantage of such situations in a financially viable manner will be in a favorable position. The general ‘test’ question would be whether any Faculty restructuring leaves Ryerson as a whole better positioned to take advantage of a variety of opportunities that may arise.

Interdisciplinary/Multi-Disciplinary Activities: Ryerson is not the only university in which faculty members and students appear to want more interdisciplinary programs. Equally, all universities find them difficult to design, implement, and manage in a Department based environment. There are few real interdisciplinary programs at the undergraduate level at Ryerson. The three highly successful interdisciplinary programs at the graduate level provide clear *economic incentives* for cooperation. Would Faculties consisting of more congruent disciplines foster greater within-Faculty interdisciplinary work? Should a Faculty of Interdisciplinary Studies be established to develop cross-Faculty interdisciplinary work at the undergraduate level?

Single-Discipline Professional Faculties: One of the reasons some ‘traditional’ universities have many Faculties is that single-discipline professional areas (such as Social Work), particularly those subject to Provincial regulations (such as Education or Nursing), are often designated as Faculties. Questions related to separate Faculty status include: is a single-discipline area too ‘large’ to be included with other much smaller Departments in a Faculty; and, does such a Department’s professional obligations require sufficiently different administrative and/or pedagogic structures?

Acceptability: Previous decisions at Ryerson concerning Faculty restructuring have not involved as much community involvement as the current exercise. Any suggested changes will need to have a level of acceptance to those involved. Unfortunately, as has been emphasized, whatever restructuring happens there will be knock-on effects. One or more Departments may be asked to make a Faculty location decision that it might prefer not to contemplate.

An underlying current through many of the Town Halls has been unease among individuals about change that affects their Faculty. This is to be expected. After all, Ryerson’s five-Faculty structure has been in existence for four decades (Figure 1), having been established during the mid-point of its ‘polytechnic era’ (1948-1993), and has been a corner-stone of the institution’s tradition of innovative, accountable, and responsible administration. With such a long and resilient **legacy**, it is clear that change in the Faculty structure of the University should occur only when clearly warranted.

Ryerson Exceptionalism and the Tripartite Model

Although comparisons with other universities have to be made, it must be kept in mind that Ryerson has emerged from a trade school/polytechnic not a traditional ‘university’ format, and its current Faculty and curriculum structure reflects this. Ryerson is different from other universities in that it based on professional (as with engineering or nursing) and quasi-professional (as with disability studies or retail management) education. A familiar description is that it is an ‘inside-out university’.

The conceptual model for the traditional university is a set of core disciplines¹⁹, which may be located in one or more Faculties (humanities, science, social science), around which professionally-oriented Faculties, such as business, medicine, law, engineering, and so forth may be arrayed. These professional activities, supposedly, relate to various elements of basic education (and research) provided by the core disciplines. While most students are admitted to pursue a particular undergraduate degree, general program requirements rooted in part in the core disciplines provide some flexibility with respect to program transfer.

Ryerson, on the other hand, has a group of professional and quasi-professional disciplines or activities at its core. Students enter the university with the intention of pursuing a particular professional degree program, and there is little opportunity for change in program. The elements of the core disciplines necessary for each program are either provided within the professional program itself or through the contracting of courses from elsewhere in the University. The fundamental point is that once a student commences an intentional program, the student either completes or withdraws²⁰.

To ensure some breadth in knowledge, which is required by all professional programs, a curricular device known as the ‘tripartite model’ was implemented in 1977²¹. This requires that students in professional programs include in their curriculum not only courses vital to practice, but also a certain number of professionally related (defined by the program, usually five) and liberal studies courses (six, but five in Engineering). The liberal studies courses are traditionally provided from the social science or humanities Departments in the Faculty of Arts (there are as many as 250 on the books), though other Faculties may contribute to this suite of courses. None of these liberal studies courses provide access to other programs. During the current decade, the

¹⁹ Such as: history, chemistry, political studies, physics, economics, language and literature (the major languages), biology, geography, mathematics, philosophy, sociology, and so forth.

²⁰ Few actually withdraw.

²¹ Currie, R.F., B. Cameron, and M. Zeytinoglu (2005) *Curriculum Review Report: Ryerson University*, May 24, 2005, p.5. The outcome of the Currie *et al.* report with respect to radical change in the tripartite model was, in general, that “... the community is not yet there” (Aspevig, E. (2007) “Tripartite Curriculum Review”, p.1).

Faculty of Arts has instituted a number of its own undergraduate degree programs, and has more in the internal approval process²².

This curricular legacy underlies an important concern raised during the first three Town Halls, and in comments received by the Commission. A vigorous debate occurred around a claim that the tripartite structure is an impediment to curricular and administrative change. Though it is not within the mandate of the Commission to address the tripartite issue *per se*, it does suggest that the **tripartite structure** be re-examined internally²³ in the light of: (i) the evident rapid change in the role of Departments in the Faculty of Arts from being ‘service providers’ to the rest of the University to having their own disciplinary and multi-disciplinary undergraduate and graduate programs; (ii) the desire in some undergraduate programs for inclusion of a larger number of elective possibilities, which may be utilized by some students for the creation of ‘minors’; and, (iii) program innovations being planned or in process that should result in greater choice and flexibility, and the possibility of more electives open to a wider clientele²⁴.

²² Such as the ‘common platform’ in Arts and Contemporary Studies, which leads to English, French, History, Philosophy and Psychology options. The first departmentally-based program in the Faculty was in Applied Geography in 1973. An LoI for a departmentally based program in English has been circulated.

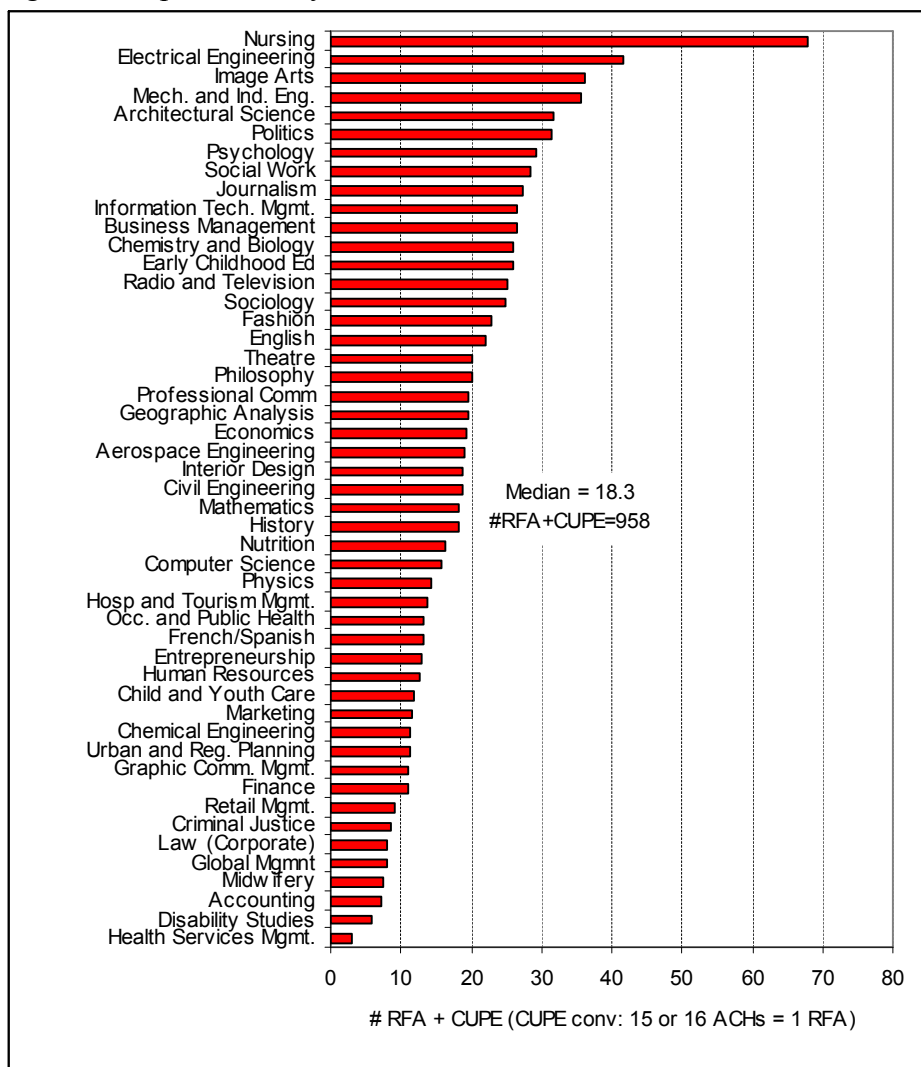
²³ The Currie *et al.* (2005) review was basically an external review.

²⁴ For example: Levine, I. *Proposed School of Creative Industries*, Oct 14, 2009, pp7; and, Ball, A. *Proposal Summary: Experiential Media Institute (XMi)*, Nov 12, 2009, pp5.

THE EXISTING FACULTY STRUCTURE

Although Departments are construed as the building blocks of Faculties, they are not immutable. For example, the TRSM is currently undergoing departmentalization, and some of the indicators of size (such as FTEs) are not currently available for all Departments within the Faculty. The easiest and most comprehensive indicator to use as a measure of size is RFA+CUPE²⁵ instructors by Department because this reflects both undergraduate and graduate teaching and supervision, and includes the first phase in the departmentalization of TRSM (Figure 3). As the discussion proceeds, undergraduate

Figure 3. Departments by RFA+CUPE Size



²⁵ It will be recalled from the *Discussion Paper* (pp 18-24) that the RFA+CUPE measure is derived from: UPO (2008) *Decision Support Indicators and Data* (Ryerson University: University Planning Office, December, 2008), Table of "RFA and CUPE Counts" p. 2.11. The following formula is used by UPO with respect to CUPE resources: 1FTE = 15 ACH over two semesters for sessional CUPE instructors; and 16 ACHs over two semesters for PT.

FFTEs and graduate headcounts (domestic + visa) are also included for illustrative purposes²⁶.

With the departmentalization of TRSM the existing structure now exhibits Faculties with similar numbers of Departments, though the aggregate number of instructors in each Faculty is quite varied (Table 1). Within each of these Faculties

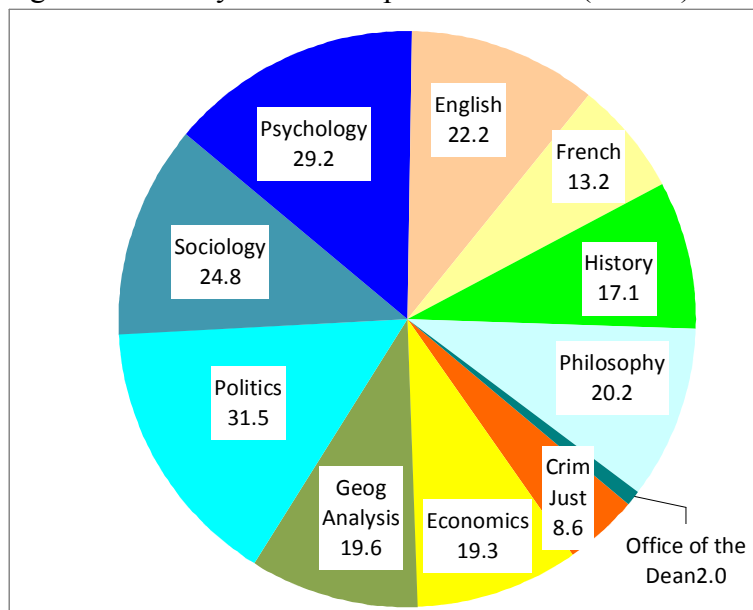
Table 1. The Existing Faculty Structure, 2008/9

	FEAS	FCS	TRSM	Arts	FCAD	Total
Departments	10	10	10	10	8	48
RFA+CUPE	232.3	191.4	147.7	205.7	181.3	958.4
FFTEs by Program	3925.0	3628.1	5253.2	1977.7	3366.3	18150.3
FFTEs by Department	3589.7	2868.2	4415.2	4360.1	2917.1	18150.3
Graduate Headcount	1012	316	191	328	241	2088

are clusters of Departments which generally have more in common with each other in terms of congruency than those in other clusters. For example:

- The Faculty of Arts involves Departments in the social sciences and humanities (Figure 4), which in some universities are separate Faculties.

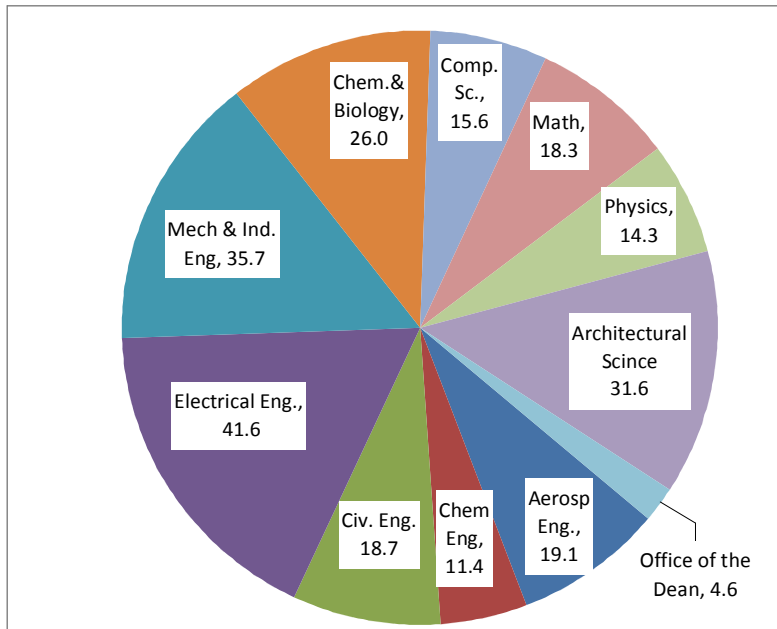
Figure 4. Faculty of Arts: Department Sizes (2007/8)



- FEAS includes Departments in engineering and science – clusters that are often in separate Faculties in other institutions. Architectural Science, includes foci in building science and project planning (construction) as well as architecture.

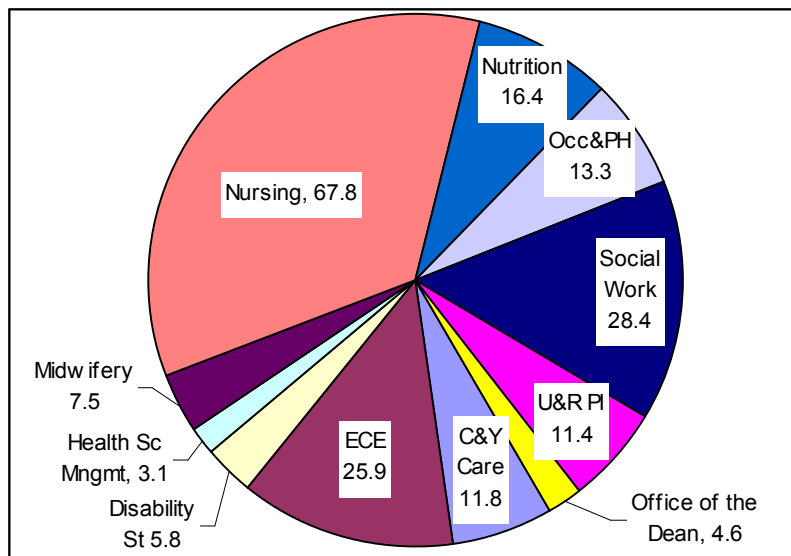
²⁶ FFTE (Fiscal Full-Time Equivalent) undergraduate data from UPO, 2008/9, SAS files, three terms, totals (ie. domestic+visa). Graduate headcount, also domestic+visa, is for Nov 1 2009. ComCult, EnSciMan, and I&SS headcounts distributed *pro rata* among contributing departments based on courses taught.

Figure 5. Faculty of Engineering, Architecture, and Science: Department Sizes (2007/8)



- FCS includes Nursing and health related Departments; and, four that appear little related (Social Work, ECE, Urban & Regional Planning, and Child and Youth Care)²⁷. Nursing is one-third of FCS in teaching resources and enrolment.

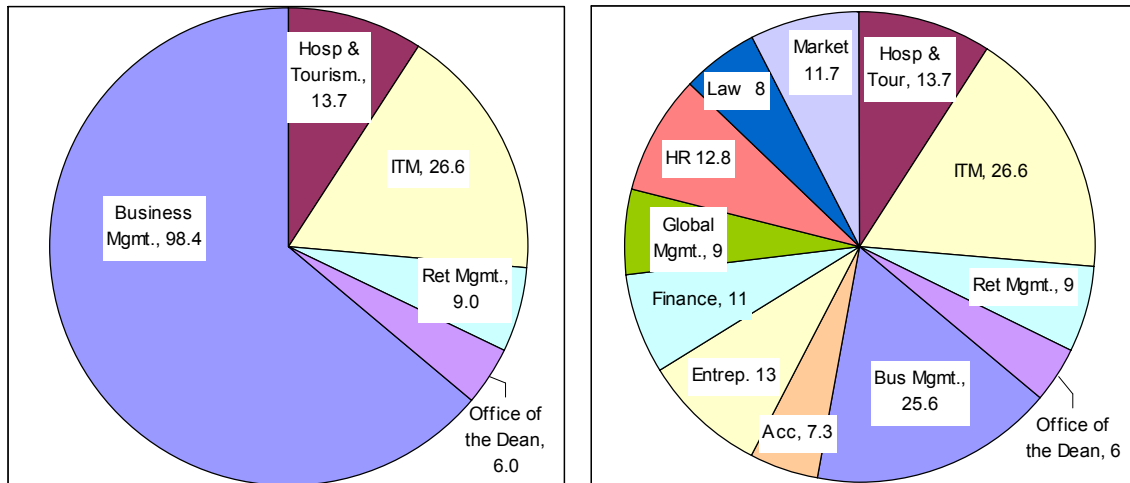
Figure 6. Faculty of Community Services: Department Sizes (2007/8)



²⁷ George, U. *Memo to PASC* (Dec 12, 2009, 3pp) argues that each Department in FCS is characterized by strong community connections. She proposes a Faculty of Health & Community Studies.

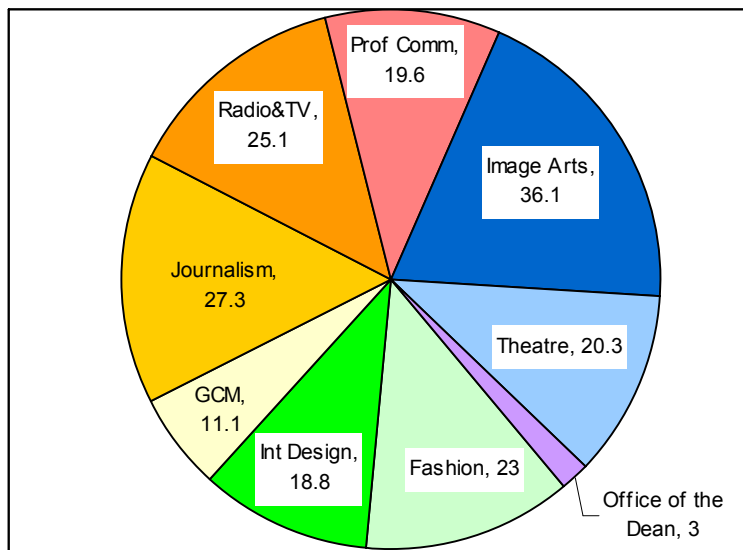
- In TRSM the clustering is around Business Management (including retail, and hospitality and tourism management), and Information Technology Management. As may be seen in Figure 7, the Departmentalization process is occurring with respect to Business Management. In this context, it is argued that “... considerations should be given to the facilitation of on-going internal restructuring that strengthens an existing Faculty, thereby allowing it to better achieve its goals and full teaching, program, and research potential”²⁸.

Figure 7. TRSM Departmentalization (as of September, 2008)



- FC&D includes three “... distinct and interrelated...” areas within the Faculty: “communication, design, and visual and performing arts”²⁹. These areas have been clustered according to this paradigm in Figure 8.

Figure 8. Faculty of Communication and Design: Department Sizes (2007/8).



²⁸ K. Jones, addendum to Nov 25, 2009 letter to the Commission.

²⁹ Doz, D. (2009) “FCAD: Repositioning Paper” draft, 2pp, October 14, 2009.

SUGGESTED MODIFICATIONS/ADDITIONS

A cursory listing of the number of Faculties compared with university headcount suggests that Ryerson has relatively few compared with other institutions (Figure 2, p6). Indeed, it is suggested eight Faculties is not unusual for a University of our current size, and even more if Ryerson were to be at 33,000 student headcount. There are, quite naturally, concerns about increasing administrative costs³⁰. It is envisaged that the aggregate Faculty administrative cost share of total University income will not increase even if the number of Faculties increases.

The Considerations and Existing and Hypothetical Faculties

The Commission has used the information provided in its papers, the Town Halls, and written submissions to crystallize its aggregate opinion on the match of the considerations with each of the existing and array of hypothetical Faculties in the *Green Paper* (listed in Table 2). It should be emphasized that, as with the University at large, there is a wide array of opinions on the Commission concerning the strength of the matches.

Table 2. List of Existing, and Hypothetical, Faculties in the *Green Paper* (details in Appendix A).

Existing

Engineering, Architecture & Science
Arts
Community Services
Ted Rogers School of Management
Communication & Design

Hypothetical

Arts & Science
Engineering & Architecture
Science
Engineering
Built & Physical Environment
Health & Behavioral Science
Nursing
Design
Media & Communication
Professional Social Sciences
Humanities
Interdisciplinary Studies

³⁰ Letter dated Jan 13, 2010, from A. Saloojee, a/President RFA, Jan 13, 2010.

On the basis of this extensive array of information, the Commission suggests a Faculty structure which:

- includes a Faculty of Science, involving Chemistry & Biology, Physics, Computer Science, and Mathematics³¹;
- involves a Faculty which includes Health. A Faculty of Health and Behavioral Science was suggested in the *Green Paper*. Subsequent discussions and written comments indicate little appetite for the specific disciplinary complement proposed. The Commission is, therefore suggesting, a Faculty of Health & Community Studies³²;
- forms a Faculty of Engineering & Architectural Science until such time as a distinct Faculty of Engineering can be established;
- maintains the current Faculty of Arts, which fits well the considerations outlined above³³;
- recognizes, through the establishment of a Faculty of Nursing, that its size overwhelms any Faculty in which it may be housed, and all nursing programs of nearly similar size in other universities have single discipline Faculties³⁴;
- maintains the current FC&D. However, Commission members do see a possible Faculty of Media & Communication (but are not, in general, persuaded by the suggested complement of a Faculty of Design in the *Green Paper*);
- could embrace a Faculty of the Built and Physical Environment, but not necessarily as outlined in the *Green Paper*; and,
- maintains the current TRSM, but transfers to it Health Services Management³⁵ from FCS to support new management program developments in that area.

It must be repeated that any new suggested Faculties are just that – suggested – and even if followed would, in some cases, take a few years to implement.

The Commission is of the view that: FEAS be restructured as suggested; and distinct Faculties of Arts and Science, Professional Social Sciences, Humanities, and Interdisciplinary Studies³⁶, not be pursued.

There is much concern about what to do with interdisciplinary studies programs, which can be well organized within Faculties, but less well managed if more than one Faculty is involved. The Commission is not suggesting establishment of a distinct Faculty at this time, but recommends that strenuous efforts continue to be made to mitigate the

³¹ As argued in: Evans, C; S. Ferrando, N. George, P. Goldman, D. Heyd and A. Sadeghian (2008) “A Faculty of Science at Ryerson University”.

³² George, U. *Memo to PASC* (Dec 12, 2009, 3pp) proposes a Faculty of Health & Community Studies.

³³ Cassidy, C. “Note to the Commission on Academic Restructuring”, 2pp, December 24, 2009; Gillin, C.T. memorandum in response to the Green Paper, 2pp, December 27, 2009; and, Kraay, K.J. memorandum in response to the Green Paper, 3pp, December 28, 2009, with respect to the ACS program.

³⁴ *Daphne Cockwell School of Nursing Submission to PASC*, November, 2009, 5pp.

³⁵ Isaac, W. and J. Pringle *Health Services Management: Recommendations for Academic Restructuring*, Oct 15, 2009. 3pp. HSM currently involves 3 RFA+CUPE (see Fig. 3).

³⁶ P. Albanese, in ‘memorandum in response to the Green Paper’, 2pp, December 31, 2009, argues, for example, that cross-Faculty collaboration in the current Faculty context can be quite successful.

difficulties arising with respect to interdisciplinary programs described in the *Discussion Paper, Green Paper, Town Halls*, and in written submissions to the Commission³⁷. Similar efforts should be made with respect to *Interprofessional* programs³⁸.

University Research Centres/Institutes, may be a good way of addressing many elements of the goals of interdisciplinary endeavor without Faculty restructuring (particularly in an incubator role). The Commission suggests that more consideration be given to the creation of such structures in interdisciplinary, and targeted research areas.

It should also be noted that some social science oriented Departments located elsewhere in the University have expressed an interest in joining the suite of social science Departments in the Faculty of Arts³⁹. A procedure for addressing such issues should be developed at the Provostial level.

The Near Future

There are, therefore, some possible changes to the existing Faculty structure that could occur in the near future.

I. The argument for a **Faculty of Science** is based on the congruency of the Departments and programs involved; the efficiencies to be realized in the administration of similar units; and, the enhanced legitimacy gained from the clarity of the Faculty name. However, the separation of these Departments from FEAS raises issues concerning: whether its current and potential future size is sufficient to warrant Faculty status; and, assuring the quality of science teaching in Engineering education.

Table 3. Including a Science Faculty.

	Science	Eng+Arch	FCS	TRSM	Arts	FCAD
Departments	4	6	10	10	10	8
RFA+CUPE	74.2	158.1	191.4	147.7	205.7	181.3
FFTEs by Program	1138.2	2786.8	3628.1	5253.2	1977.7	3366.3
FFTEs by Department	1929.6	1660.1	2868.2	4415.2	4360.1	2917.1
Grad Headcount	146	866	316	191	328	241

With respect to these issues, it may be observed that: many universities have Faculties with four or less Departments; it is a research and graduate ‘growth area’⁴⁰; and, there should be every incentive for science to maintain and enhance the quality of its contributions to education in Engineering for that is its major ‘market’.

³⁷ For example: memorandum in response to the Green Paper with respect to ENSCIMAN from M. Bardecki and R. Pushchak, Jan 13, 2010, 2pp.; “Response to Green Paper by the Executive Committee of the MA Program in Immigration and Settlement Studies, Ryerson University”, Jan. 13, 2010, 4pp.

³⁸ C. Hart: memo from the RU *Interprofessional* Steering Committee, Jan 13, 2010.

³⁹ M. Panitch, memorandum concerning Disability Studies, Dec. 18, 2009; C. Stuart, memorandum concerning C&YC, Jan. 12, 2010; J. Sandys, memorandum concerning Social Work, Jan. 13, 2010; and, R. Langford, memorandum concerning ECE, Jan. 13, 2010.

⁴⁰ Conference Board of Canada (2009) *How Canada Performs* (www.conferenceboard.ca/HCP/). Argues that Canada “... needs to produce more Ph.D.s and graduates in disciplines that support innovation”.

Thus, the Commission endorses the request for the establishment of a Faculty of Science at Ryerson University.

II. Single-discipline Faculties are common in all large universities, though none exist as yet at Ryerson. The reasons in this particular case for a single-discipline Faculty of Nursing have to do with its size and extensive administrative structure, and adherence to the norms in other universities. The Department is large relative to other Departments in FCS so that separating it from FCS could well prove to be a positive action from the perspective of providing ‘space’ for all Departments to grow and pursue new opportunities. Administrative structures are already in place in Nursing to ensure a smooth transition to a Faculty.

Most, if not all, large Universities across Canada have single-discipline Faculties of Nursing. While there are many places in which nursing is located in Health Sciences or Health Faculties, these are smaller colleges and universities. Certainly the practice in large universities is to have a stand-alone Faculty of Nursing⁴¹. A Faculty would consolidate Ryerson’s leading presence in Canada in nursing, enhance its profile, and be a significant marketing feature.

If a Faculty of Nursing were established it would have an instructional complement similar to that of a Faculty of Science, though its undergraduate FTEs by program are somewhat less (Table 4). However, it is highly likely that Ryerson will be pressed to expand its undergraduate and graduate nursing enrolment. Graduate enrolment in Nursing is currently similar to that of the proposed Faculty of Science.

Table 4. Possible Faculty Structure Including a Faculty of Nursing.

	Science	Eng+Arch	FCS	TRSM	Arts	FCAD	Nurs.
Departments	4	6	9	10	10	8	1
RFA+CUPE	74.2	158.1	123.6	147.7	205.7	181.3	67.8
FFTEs by Program	1138.2	2786.8	2787.9	5253.2	1977.7	3366.3	840.2
FFTEs by Department	1929.6	1660.1	2162.1	4415.2	4360.1	2917.1	706.1
Graduate Headcount	146	866	167	191	328	241	149

There has been much debate in the Commission, Town Halls, and other meetings concerning whether a Faculty of Nursing would preclude the development of a Faculty that would include other aspects of ‘health’. The Commission has concluded that it would not, as there are other aspects of ‘health’ currently in place and gestation.

In consequence, it is suggested that a Faculty of Nursing be established.

III. With about 10.1% of the nation’s GDP associated with health care⁴², many universities which do not have Faculties of Medicine wish to identify the programs they do have in ‘health’. Health is defined in the Ottawa Charter for Health Promotion as “...

⁴¹ All nursing schools in Canada are listed at: <http://www.casn.ca/en>

⁴² *Health Care in Canada, 2009: A Decade in Review* (Canadian Institute for Health Information), p. 47.

a resource for every day life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities”⁴³. The paradigm of ‘health’ is therefore broad, embracing multiple communities.

The University is far stronger today in health activities at both the undergraduate and graduate levels, and in research, than it was forty years ago. A Faculty of Health & Community Studies could include existing Departments – Midwifery, Nutrition, Occupational and Public Health, Disability Studies, Social Work, Child & Youth Care, Early Childhood Education, and Urban & Regional Planning (Table 5). It is the Commission’s view that ‘health and community studies’ holds great promise for the development of new programs and Departmental expansion⁴⁴. Apart from this programmatic focus, there is also the University’s responsibility to help meet society’s health employment and research needs.

Table 5. Possible Faculty Structure Including Health & Community Studies

	Science	Eng+Arch	H&CS	TRSM	Arts	FCAD	Nurs.
Departments	4	6	8	11	10	8	1
RFA+CUPE	74.2	158.1	120.5	150.8	205.7	181.3	67.8
FFTEs by Program	1138.2	2786.8	2787.9	5253.2	1977.7	3366.3	840.2
FFTEs by Department	1929.6	1660.1	2162.1	4415.2	4360.1	2917.1	706.1
Graduate Headcount	146	866	167	191	328	241	149

It is, therefore, suggested that FCS be renamed as a Faculty of Health and Community Studies⁴⁵.

Observations on the Built Environment; and Law.

I. Architectural Science has indicated that **it** would like to be a Faculty, and also invites “... other related disciplines ... to join us in this endeavor”⁴⁶. Urban & Regional Planning appears to be favorably disposed to relocation under certain circumstances relating in particular to Faculty governance⁴⁷. Other possible constituents suggested in Scenario 4 of the *Green Paper* (Appendix A) prefer to remain where they are⁴⁸.

In many universities, architecture and planning are often in the same Faculty. For example: U of Manitoba, where the **Faculty of Architecture** includes departments of architecture, environmental design, city planning, interior design, and landscape arch.; U of NSW, where a **Faculty of Built Environment** includes architecture, planning,

⁴³ *Ottawa Charter for Health Promotion*, Nov. 21, 1986, WHO/HPR/HEP/95.1; p.1

⁴⁴ Although the Commission is not mandated to suggest new programs, it is of the view that an undergraduate concentration in Health Studies would be an important development for the University. Other suggestions are: Food Studies; and, Health Intervention and the Life Course. Graduate programs might be developed in Physical Therapy, Occupational Therapy, and Global Food Security.

⁴⁵ Given the need to emphasize teaching and research, the word ‘studies’ is preferred.

⁴⁶ Extract from a motion received from Architectural Science Departmental Council, dated Jan. 7, 2010.

⁴⁷ M. Kosny, Comments from SURP on Green Paper, Jan. 19, 2010; D. Amborski, memo re: SURP, Jan 13, 2010; R. Keeble, memo concerning Urban & Regional Planning, Jan 13, 2010; ; N-M Lister, memo concerning SURP, Jan 14, 2010

⁴⁸ S. Wang, *Report on Meeting of Council of Department of Geography*, Jan. 14, 2010.

sustainable development; U of Melbourne – **Faculty of Architecture & Planning**; UC-Berkeley, where a **Faculty of Environmental Design** includes architecture, city & regional planning, landscape architecture & environmental planning, and urban design.

It may, therefore, be possible to provide a ‘Faculty face’ for the University’s emphasis on its role as a ‘city builder’, and its well-known engagement with urban/environment issues, through a Faculty named as either ‘Built and Physical Environment’ or ‘Architecture & Planning’. These programs by their very nature are professionally oriented and interdisciplinary, and their placement in the same Faculty would undoubtedly be synergistic and lead to growth and enhanced research opportunities.

It is suggested that the possibility of a Faculty of the Built & Physical Environment, or Architecture & Planning be explored.

Table 6. The Sizes of Faculties with B&PE (or Architecture&Planning) Included

	Sc	Eng	H&CS	TRSM	Arts	FCAD	Nurs.	B&PE
Departments	4	5	7	11	10	8	1	2
RFA+CUPE	74.2	126.5	109.1	150.8	205.7	181.3	67.8	43
FFTEs by Program	1138.2	2255.6	2479.5	5253.2	1977.7	3366.3	840.2	839.6
FFTEs by Dept.	1929.6	1190.1	1946	4415.2	4360.1	2917.1	706.1	686.1
Grad. Headcount	146	784	116	191	328	241	149	133

II. If a significant program in law were developed, there would undoubtedly be a case for a Faculty of Law, given that stand-alone Faculties of Law are the norm North America wide. A plan for the eventual development of such a program is envisaged by The Law Working Group, a first step in that direction being the recently established Ryerson University Law Center⁴⁹.

Observations on SGS; and the G. Raymond Chang School of Continuing Education.

SGS and the Chang School are operations which have leadership at the decanal level, but do not have Faculty responsibilities, ie. they are not loci of faculty (RFA) appointments.

I. Since the year 2000 when SGS was implemented, it has facilitated Ryerson’s transformation from a primarily undergraduate university. SGS central coordination has provided mentorship to new and emerging graduate programs and the University is one among few to have surpassed its MTCU graduate enrolment targets. Currently, Ryerson offers 37 graduate programs including those awaiting approval by the Board of Governors. Of this total, 4 programs are interdisciplinary and 33 are departmentally-based.

⁴⁹ The eventual development of such a program is envisaged in: The Law Working Group (2009) *Law at Ryerson: Submission to the Provost’s Academic Structures Commission*, pp6; Ryerson University Law Center, established by Senate, Oct. 6, 2009; also, A. Levin, letter providing summary of comments made at Dec. 1 meeting of Senate, Dec. 22, 2009.

For academic units in the latter group, graduate program delivery and research activities carried out by their graduate students are integral to their day-to-day operations. Yet, SGS remains the academic home of these graduate programs and students as it has both administrative and operational responsibility in the delivery of graduate programs. Other universities have addressed these matters by assigning program delivery and financing thereof to Departments; and mainly administrative and coordinating responsibilities to SGS⁵⁰.

The university administration may want to revisit the role of SGS in the delivery of graduate programs, and investigate whether alternate administrative structures can bring further efficiencies and enhance the graduate student experience⁵¹.

II. The G. Raymond Chang School of Continuing Education is committed to serving adult and continuing education learners in conjunction with the five Faculties through a collaborative model for program development and delivery. The Chang School works with each Faculty to provide certificates, courses, workshops and seminars in flexible formats, including part-time, evening, spring / summer, off-site and online.

This collaborative model is highly effective at facilitating the development of quality programs that meet societal need and student demand. Last year, there were 67,788 enrollments in over 1,100 courses across a full range of academic programming. The School administers over 200 distance education courses, and 77 certificate programs.

The School also serves as a catalyst and incubator for the development of new programs, which have resulted in a number of degree programs that are now part of the Faculties. These include Midwifery (2002), Retail Management (1998), and Health Services Management (1994). Additionally, the Chang School has worked with the Faculties to establish a number of interdisciplinary certificates such as those in Non-Profit and Voluntary Sector Management, and Neuroscience.

However, the PASC process has made clear that while the collaborative model works well when program developments/innovations relate to distinct academic disciplines within a specific Faculty, for interdisciplinary (and inter-professional) and emerging academic areas the collaborative model does not work as well⁵². This is because the academic home for these initiatives may be unclear, and approval and implementation processes become challenging.

⁵⁰ Such responsibilities include but are not limited to: administration of oral examinations, doctoral thesis defenses; development and administration of policies and procedures related to graduate studies; administration of graduate admissions and general recruitment (particularly through the GAC); administration of University-based and external graduate scholarships; graduate faculty (SGS) membership; curriculum and calendar development; enhancing opportunities for professional skills development for graduate students; new program development and approval; management of quantitative and qualitative information pertaining to programs and students; degree audit and convocation; and maintaining central communication tools such as the SGS web-site.

⁵¹ SGS has a data survey of the functions of Graduate Schools of comparable size in Canada.

⁵² This particular matter, among other important observations, is raised in: N. Thomlinson, "Restructuring if Necessary; Not Necessarily Restructuring", Jan 5, 2010, 15-16.

Furthermore, students enrolled in certificate programs through the Chang School are increasingly asking - “where does this lead?” These students are often using the Chang School courses and certificates as a gateway to post-secondary education either to re-tool, or re-orient, their skill set to gain benefits in the job market or their engagement within society. There needs to be more part-time degree (e.g., evening, weekends and summer) programs, and a much clearer link between these and certificate programs. This implies a need for much greater cooperation between the Faculties and the Chang School.

It is suggested that a strengthening of the collaborative model between the Chang School and the Faculties is required to facilitate the maintenance and development of certificates that meet the university’s commitment to life-long learning, accessibility, and adult learners. Additionally, it is suggested that the collaborative model be strengthened to facilitate: (i) the further development of certificates in interdisciplinary (and inter-professional) studies; and, (ii) the linkage between certificate programs and part-time degree level education.

SUMMARY OF SUGGESTIONS

The Commission is aware the economic signs are discouraging, and that Faculty restructuring must be approached carefully. There are few ‘lubricants’ to facilitate the implementation of new ideas, particularly those with respect to administrative arrangements. It is for this reason that the predominant underlying view across the campus is one of caution with respect to restructuring, crystallized in the colloquialism “if it ain’t broke, don’t fix it’.

Nevertheless, and with financial feasibility and acceptability firmly in mind, the Commission:

endorses the request for the establishment of a Faculty of Science, including Chemistry & Biology, Physics, Computer Science, and Mathematics (p. 20);

supports the request from Nursing that it be established as a Faculty (p. 21);

recommends that FCS be renamed as Faculty of Health and Community Studies (p.22);

endorses transferring Health Services Management from FCS to TRSM to support a new health services management program (p.19);

envisages a Faculty of Engineering & Architectural Science until such time as a distinct Faculty of Engineering can be established (pp.20-21);

supports the possible development of a Faculty of the Built & Physical Environment (or Architecture & Planning) (pp. 22-23);

notes that if a significant program in law were developed, there would be a case for a Faculty of Law (p.23);

suggests the role of SGS in the delivery of programs be reviewed (pp.23-24); and,

encourages discussion of ways in which the collaborative model between the Chang School and the Faculties may be strengthened (pp. 24-25).

The Commission also suggests that: (i) the tripartite model be re-examined internally (pp. 12-13); (ii) the establishment of Research Centres/Institutes to meet some of the goals of interdisciplinary endeavor be encouraged (p. 20); (iii) a procedure for addressing requests for the transfer of Departments from one Faculty to another be available at the Provostial level (p. 20); and, (iv) the importance of facilitating **internal** Faculty restructuring not be overlooked (p.17).

These are all matters that are quite ‘doable’, or can be addressed, within the next few years. Although the suggested restructurings are quite modest, they may be seen at some future date to have been a first step in what had become an ongoing process of well considered change.

Appendix A

Existing Faculty Structure
Arts

Criminal Justice
Economics
English
French/Spanish
Geography
History
Philosophy
Politics
Psychology
Sociology
FCS
Child and Youth Care
Disability Studies
Early Childhood Ed
Health Services Mgmt.
Midwifery
Nursing
Nutrition
Occ. and Public Health
Social Work
Urban and Reg. Planning
FEAS
Aerospace Engineering
Architectural Science
Chemical Engineering
Chemistry and Biology
Civil Engineering
Computer Science
Electrical Engineering
Mathematics
Mech. and Ind. Eng.
Physics
TRSM
Accounting
Entrepreneurship
Finance
Global Mgmnt
Hosp and Tourism Mgmt.
Human Resources
Information Tech. Mgmt.
Law (Business)
Marketing
Retail Mgmt.
FC&D
Fashion
Graphic Comm. Mgmt.
Image Arts
Interior Design
Journalism
Professional Comm
Radio and Television
Theatre

Scenario 2: Arts&Science
Arts & Science

Criminal Justice
Economics
English
French/Spanish
Geography
History
Philosophy
Politics
Psychology
Sociology
Chemistry and Biology
Computer Science
Mathematics
Physics
FCS
Child and Youth Care
Disability Studies
Early Childhood Ed
Health Services Mgmt.
Midwifery
Nursing
Nutrition
Occ. and Public Health
Social Work
Urban and Reg. Planning
Eng & Arch
Aerospace Engineering
Architectural Science
Chemical Engineering
Civil Engineering
Electrical Engineering
Mech. and Ind. Eng.
TRSM
Accounting
Entrepreneurship
Finance
Global Mgmnt
Hosp and Tourism Mgmt.
Human Resources
Information Tech. Mgmt.
Law (Business)
Marketing
Retail Mgmt.
FC&D
Fashion
Graphic Comm. Mgmt.
Image Arts
Interior Design
Journalism
Professional Comm
Radio and Television
Theatre

Scenario 3: Science
Science

Chemistry and Biology
Computer Science
Mathematics
Physics
Arts
Criminal Justice
Economics
English
French/Spanish
Geography
History
Philosophy
Politics
Psychology
Sociology
Eng & Arch
Aerospace Engineering
Architectural Science
Chemical Engineering
Civil Engineering
Electrical Engineering
Mech. and Ind. Eng.
FCS
Child and Youth Care
Disability Studies
Early Childhood Ed
Health Services Mgmt.
Midwifery
Nursing
Nutrition
Occ. and Public Health
Social Work
Urban and Reg. Planning
TRSM
Accounting
Entrepreneurship
Finance
Global Mgmnt
Hosp and Tourism Mgmt.
Human Resources
Information Tech. Mgmt.
Law (Business)
Marketing
Retail Mgmt.
FC&D
Fashion
Graphic Comm. Mgmt.
Image Arts
Interior Design
Journalism
Professional Comm
Radio and Television
Theatre

Scenario 4: City Builder
B&PE

Architectural Science
Geography
Urban and Reg. Planning
Interior Design
TRSM
Accounting
Entrepreneurship
Finance
Global Mgmnt
Hosp and Tourism Mgmt.
Human Resources
Information Tech. Mgmt.
Law (Business)
Marketing
Retail Mgmt.
Science
Chemistry and Biology
Computer Science
Mathematics
Physics
C&D
Fashion
Graphic Comm. Mgmt.
Image Arts
Journalism
Professional Comm
Radio and Television
Theatre
SS&H
Criminal Justice
Economics
English
French/Spanish
History
Philosophy
Politics
Psychology
Sociology
CS
Child and Youth Care
Disability Studies
Early Childhood Ed
Health Services Mgmt.
Midwifery
Nursing
Nutrition
Occ. and Public Health
Social Work
Engineering
Aerospace Engineering
Chemical Engineering
Electrical Engineering
Mech. and Ind. Eng.
Civil Engineering

Scenario 5: Health&Behav
Health & Behavioral Sc

Psychology
Health Services Mgmt.
Midwifery
Nursing
Nutrition
Occ. and Public Health
B&PE
Architectural Science
Urban and Reg. Planning
Interior Design
Geography
C&D
Fashion
Graphic Comm. Mgmt.
Image Arts
Journalism
Professional Comm
Radio and Television
Theatre
SS&H
Criminal Justice
Economics
English
French/Spanish
History
Philosophy
Politics
Sociology
CS
Child and Youth Care
Disability Studies
Early Childhood Ed
Social Work
Engineering
Aerospace Engineering
Chemical Engineering
Electrical Engineering
Mech. and Ind. Eng.
Civil Engineering
TRSM
Accounting
Entrepreneurship
Finance
Global Mgmnt
Hosp and Tourism Mgmt.
Human Resources
Information Tech. Mgmt.
Law (Business)
Marketing
Retail Mgmt.
Science
Chemistry and Biology
Computer Science
Mathematics
Physics

Scenario 6: Single Disc.
Nursing

Nursing
Science
Chemistry and Biology
Computer Science
Mathematics
Physics
Arts
Criminal Justice
Economics
English
French/Spanish
Geography
History
Philosophy
Politics
Psychology
Sociology
Eng & Arch
Aerospace Engineering
Architectural Science
Chemical Engineering
Civil Engineering
Electrical Engineering
Mech. and Ind. Eng.
FCS
Child and Youth Care
Disability Studies
Early Childhood Ed
Health Services Mgmt.
Midwifery
Nutrition
Occ. and Public Health
Social Work
Urban and Reg. Planning
TRSM
Accounting
Entrepreneurship
Finance
Global Mgmnt
Hosp and Tourism Mgmt.
Human Resources
Information Tech. Mgmt.
Law (Business)
Marketing
Retail Mgmt.
FC&D
Fashion
Graphic Comm. Mgmt.
Image Arts
Interior Design
Journalism
Professional Comm
Radio and Television
Theatre

Scenario 7: Design/M&C
Design

Architectural Science
Urban and Reg. Planning
Interior Design
Fashion
Graphic Comm. Mgmt.
Media & Communication
Image Arts
Journalism
Professional Comm
Radio and Television
Theatre
SS&H
Graphic Arts
Journalism
Criminal Justice
Economics
English
French/Spanish
History
Philosophy
Politics
Sociology
CS
Child and Youth Care
Disability Studies
Early Childhood Ed
Social Work
Engineering
Aerospace Engineering
Chemical Engineering
Electrical Engineering
Mech. and Ind. Eng.
Civil Engineering
TRSM
Accounting
Entrepreneurship
Finance
Global Mgmnt
Hosp and Tourism Mgmt.
Human Resources
Information Tech. Mgmt.
Law (Business)
Marketing
Retail Mgmt.
Science
Chemistry and Biology
Computer Science
Mathematics
Physics
Health & Behavioral Sc
Psychology
Health Services Mgmt.
Midwifery
Nursing
Nutrition
Occ. and Public Health

Scenario 8: Prof Soc Sc
Prof Soc Sc

Child and Youth Care
Criminal Justice
Disability Studies
Early Childhood Ed
Economics
Geography
Politics
Social Work
Sociology
Humanities
English
French/Spanish
History
Philosophy
Media & Communication
Image Arts
Journalism
Professional Comm
Radio and Television
Theatre
Design
Architectural Science
Urban and Reg. Planning
Interior Design
Fashion
Graphic Comm. Mgmt.
Health & Behavioral Sc
Health Services Mgmt.
Midwifery
Nursing
Nutrition
Occ. and Public Health
Psychology
Science
Chemistry and Biology
Computer Science
Mathematics
Physics
Engineering
Aerospace Engineering
Chemical Engineering
Civil Engineering
Electrical Engineering
Mech. and Ind. Eng.
TRSM
Accounting
Entrepreneurship
Finance
Global Mgmnt
Hosp and Tourism Mgmt.
Human Resources
Information Tech. Mgmt.
Law (Business)
Marketing
Retail Mgmt.