Abstract

Significant changes are occurring in faculties of education across Canada as institutions restructure to address financial constraints and the changing needs of the teaching profession. To understand the restructuring process, a cross-Canada study was implemented using a modified delphi. Findings indicate that education faculties and departments will be smaller with fewer staff and limited course offerings. Some universities are implementing specialized programs in an attempt to develop a niche for themselves, and others are focusing on certain areas of research to more effectively utilize their expertise and increase their capability to obtain grants. Overall, there are likely to be significantly fewer faculties and departments of education as institutions rationalize their programs. Organizations are also becoming more decentralized and professors are assuming more responsibilities while obtaining more control over program content. At the same time, institutions are granting more authority to external stakeholders in an attempt to develop programs more responsive and appropriate to local needs.

Background

Educational institutions across Canada, in response to societal and cultural pressures, are attempting to restructure and reorganize to meet the needs of a modern society (Small, 1994). Traditionally, these organizations are hierarchical: most of the power and authority is vested in those individuals at the senior levels of the structure. Such systems are characterized by memoranda and directives “from above,” and textbooks selected by those in authority. Rules of conduct for teachers and students with established procedures for all aspects of school life are mandated including attendance, class scheduling, and the promotion of students. This top-down model represents the very antithesis of a new paradigm that emphasizes decentralization, employee empowerment, and a focus on client needs. This paradigm reflects society’s attempt to cope effectively with constant change, a highly competitive economy, and a pluralistic population (Andrews, 1993; Duttweiler and Mutchler, 1989; Lawton, 1992; Small, 1994).

Today’s workplace needs professionals who are adaptable to new ideas, who can respond quickly to new conditions, and who can learn new skills to respond to new challenges. The hierarchical school systems of the past simply cannot provide such individuals. Similarly, faculties of education cannot continue to produce graduates based on traditional assumptions about teaching and learning, the function of schools, and the role of the teacher in the classroom. Faculties of education must redefine the image of a teacher-education graduate and revise their programs, staffing and resources to support this image (Watson & Allison, 1992; Wise, 1992).

The Roots of Restructuring

Nature of Restructuring

Restructuring represents a significant initiative by an organization to rethink the paradigm within which it operates. It involves “a reorganization that replaces central planning, control and supervision within a deregulated, decentralized system in which the “bottom line counts most” (Lawton, 1992). Restructuring has been quite effective in some former members of the Soviet Union, such as Latvia, Estonia and the
Ukraine, as a means to reestablish their autonomy and control their own destinies. These countries have attempted to restructure their economies and institutions within the broad parameters of decentralization, empowerment and client service and, with varying degrees of success, they are slowly integrating their communities into the global village. In education, the term "restructuring" is used with the connotation that decisions must be decentralized to the level at which the problems themselves actually occur, educators at all levels must be empowered to diagnose problems and propose solutions, and the welfare of clients must be placed ahead of the institution. Restructuring has been enacted at the national level in the United Kingdom and New Zealand, at the state level in Kentucky (USA) and Victoria (Australia), and at the district level in Edmonton (Alberta) and Dade County (Florida) (Lawton, 1992). Although there is tremendous variety among the new structures adopted, they all reflect a significant re-organization of the administrative, curricular and personnel dimensions of the institutions.

In Canada, recommendations for reform in teacher education appeared in every provincial report on educational restructuring during the late 1980's and early 1990's (Thiessen, 1993). In a country where teacher certification is a provincial rather than federal responsibility, such consensus merely underscores the urgency for change. Each province (and three territories) organizes and regulates its own education system through an education act. Each respective provincial ministry oversees educational policy and financing, establishes curriculum guidelines, defines roles of teachers and school administrators, and licenses members of the teaching profession. The universities provide programs, usually in the form of a bachelor of education, which entitles the graduate to a teacher's certificate upon successful completion of the degree.

Historically, there have been three types of teacher education programs in Canada: a one-year bachelor of education (B.Ed.) program which one undertakes after completing a university degree (consecutive model); a B.A./B.Ed. combination which requires enrollment in education and arts courses throughout the undergraduate program (concurrent model); or a designated B.Ed. degree requiring three years for elementary or four years for secondary certification (undergraduate model) (Wideen & Holborn, 1986). All types of programs require periods of practice teaching under the supervision of an experienced practitioner. At the graduate level, the most common degree is the M.Ed. which usually consists of several professional development courses. In some institutions, a thesis, research paper or major project may be undertaken, usually with fewer courses. At the doctoral level, the Ed.D. is the preferred vehicle for practitioners as it provides the opportunity to undertake a systematic program of applied research. The Ph.D. is viewed as a research degree, most appropriate for those pursuing careers in academic institutions.

Towards a New Paradigm

In education, it is anticipated that the "restructuring paradigm" will create organizations at all levels that will enable individuals to think and solve problems creatively, and utilize new technologies and information. Schools and teacher education institutions will need to focus on teaching attitudes and abilities that enable students to learn both traditional skills, such as symbolic learning and higher-order thinking, and new skills, such as the capacity for self-direction, knowing how to learn, and the ability to work in teams (Duttweiller & Mutchler,1989). Teacher-candidates will need to develop the ability to apply problem-solving and inquiry skills to new and unfamiliar situations, work collaboratively with other staff and teach their students to do likewise with their peers, communicate not only the 'what' of learning but also the 'why,' demonstrate the ability to diagnose learning problems, identify appropriate teaching approaches, and deliver instruction in new and creative ways (Davidson & Bertram, 1994; Wise, 1992). To achieve these goals, a trend has emerged for teacher training institutions to include representatives of their clientele and their feeder systems in the process of change. Faculties of education, both in Canada and the United States, have invited members of the outside educational community to assist in the design of programs (Staudt & Mahbubani, 1993; Watson & Allison, 1992); they have developed links with their institution's undergraduate programs to strengthen course offerings (Andrews, 1997; Ellerman, 1990); and they have engaged expert practitioners to deliver inservice programs (Andrews, 1995, 1999; Wheeler, 1986).

Research has demonstrated that with partnerships, it is the feeling of ownership by the partners in a common enterprise that builds commitment to change (MacPhail-Wilson & Guth, 1983; Roueche & Baker, 1986). For this reason, the partners must be valued participants in the change process, and they must influence decision making sufficiently to develop a feeling of ownership in the programs (Gurney & Andrews, 1998). In practice, however, settings are seldom ideal, and this notion of involvement of external partners is not always understood or welcomed by current administrators. The "letting go" is difficult to achieve even when all parties want to share in the decision making; it is easier to maintain the status quo rather than change oneself and one's surroundings (Shippy & Colden, 1991). Other studies reveal problems with the implementation of new nontraditional approaches to teacher education: academic "turf wars" by professors unwilling to relinquish control, and the concomitant view of teachers that they are not equal partners in decision making appear to be the major problems (Burd, 1980; Beyer, 1989; Jones, 1992). Overall, resistance to restructuring can be a significant problem for traditional institutions (Lawton, 1992) and for...
Restructuring in English-language Faculties of Education

Purpose of the Study & Methodology

The purpose of the study is to describe the nature of restructuring in English-language faculties of education across Canada using the delphi methodology. This method allows for the anonymous exploration of a complex topic by a group over an extended period of time (Barrington, 1986). Respondents are expected to participate in several rounds in which information is synthesized and participants provide ongoing feedback. This level of involvement enables researchers to accommodate both similar views through consensus building and dissimilar views through minority reports (Scheibe, Skutsch, & Schofer, 1975). Potentially high quality thoughtful ideas are produced as respondents become aware of views from others in the field and are allowed time for reflection and reconsideration of their own ideas (Somers, Baker, & Isbell, 1984). Eventually, there is a blending of diverse opinions or judgements to formulate new directions for decision-making (Anderson, Ball, Murphy, & Associates, 1975).

Several variations of the method have been developed, including fewer or more rounds, an additional round with open-ended questions, ranking objects and ideas, and utilizing computers for tabulation (Boberg & Morris-Khoo, 1993). In this study, the researchers modified the delphi by inviting all administrators of faculties of education to provide input into each round, rather than including only those who participated in the initial round. This approach enriched the process considerably, especially as deans retired and were replaced, and entire programs were reduced or eliminated during the study.

The delphi method was utilized to ascertain if a stability of response exists among faculties of education with respect to changes of organizational structures, the content and delivery of programs, and the roles of faculty members. Three rounds were selected to establish a stability of response, which is a common practice in policy development and program evaluations (Linstone & Turoff, 1975). In round one, administrators of faculties of education across Canada were solicited via questionnaire to determine the characteristics of restructuring in their respective institutions. The responses were clustered to form a profile of restructuring. In the third round, the respondents validated the findings of the previous two rounds, both refining and strengthening the results of the study. Unanimity, a key feature of delphi, was essential due to the sensitive issues surrounding restructuring, especially in the Maritimes.

Participation in the Study

The intent of the initial questionnaire in round 1 (see Appendix 1) was to obtain feedback on how English-language faculties of education across Canada are renewing their programs and restructuring their organizations. Of 33 surveys, 22 were returned, thereby providing a 66.7% return rate. In addition, of the faculties which were threatened with closure in Nova Scotia, one responded and indicated concern that the provincial restructuring exercise would adversely affect teacher education throughout the province. Consequently, 22 out of 29 remaining English-language faculties, that is 75.9%, responded to the questionnaire. The second round questionnaire (see Appendix 2) asked participants to rank the relative importance of the responses to the first survey, and to respond to additional questions that had arisen. In this round, there were 20 responses returned from the 29 surveys sent which represents 70% of remaining English-language faculties. In the final round, participants validated the findings of the previous two rounds and provided summary comments.

The majority (80%) of the faculties that responded to the first questionnaire were indeed either undergoing or planning to undergo structural modifications of some kind, while a further 10% of the respondents recently had completed such changes. Only 10% of the faculties of education in Canada who responded to the questionnaire were not planning for or experiencing significant change. The restructuring described by faculties across the country ranged from minor adjustments in program offerings to major re-organizations of the faculty structures, with the majority of the faculties envisioning substantive changes of some kind. The findings by category are summarized in Table I.
Table 1
Findings by Category

<table>
<thead>
<tr>
<th>Restructuring Organizational Structures</th>
<th>Restructuring Programs</th>
<th>Restructuring Human Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer faculties</td>
<td>Participation of the field on advisory committees</td>
<td>Increased professor responsibility/workload</td>
</tr>
<tr>
<td>Elimination, or reduced size and/or number of departments</td>
<td>New program initiatives</td>
<td>Reduced number of tenure-track positions</td>
</tr>
<tr>
<td>Reduced budgets</td>
<td>Fewer options</td>
<td>More part-time staff</td>
</tr>
<tr>
<td>Reduction of full-time administrative positions</td>
<td>Larger class sizes</td>
<td>Reduced administrative support</td>
</tr>
<tr>
<td></td>
<td>Extended practica</td>
<td></td>
</tr>
</tbody>
</table>

Restructuring Organizational Structures

Many faculties (65%) are facing a reduction in the size or the number of departments, together with an increase in workloads, as evidenced by larger classes and a reduction in administrative support. In some cases, departments within faculties of education have been eliminated, and in Nova Scotia, four teacher education institutions have been dissolved. The surviving faculties are reflecting a climate of fiscal restraint being played out in provincial legislatures, particularly in Alberta and Ontario. Indeed, fiscal restraint was specifically mentioned by eleven respondents from five provinces as a major reason for restructuring, and it was ranked among the top three reasons for restructuring by thirteen of twenty respondents in the second round. The other two principal reasons for restructuring were to update programs and to change focus. Other factors, such as provincial government initiatives, were important to the respondents. However, the majority took the opportunity, it appears, to take advantage of the push caused by fiscal restraint to refine their organizational structures and modernize their programs.

The most important factor in the process of restructuring organizational structures appears to be the involvement of the professorate: 13 respondents (or 65%) listed this factor as most significant. Participants indicated that faculty retreats were an integral aspect of effective staff involvement: 10 institutions mentioned them as being of primary importance; and 3 others listed them as having some importance. Apart from professor involvement, different factors were important to the responding institutions. For example, half of the institutions (4 of 8) in central Canada felt that stakeholder involvement was of primary importance, while only 30% of the western institutions (3 of 10) held this view.

Restructuring Programs

Several faculties are changing the focus of the teacher education program. Teacher certification as an entity is being examined with a view to modernization, including the notion of courses, entrance requirements, time spent in schools, and the participation of the field in teacher education. Some of the faculties have a more limited response focused in one or two areas, such as the practica or course delivery. With others, the focus is changing to an "Early Years, Middle Years, Senior Years" emphasis, or to an "Early Years, Formative Years, Transition Years, Specialization Years" emphasis. In still other faculties, there is a new emphasis on integration, assessment and active learning. Faculties are also developing new programs in response to government initiatives, such as the new Ontario Curriculum (Ontario Ministry of Education and Training, 1998, 1999), or the Common Essential Learnings of Saskatchewan (Saskatchewan Department of Education, 1992). For example, two-year after-degree programs have emerged, either a two-year B.Ed. or a combined B.Ed./M.Ed. These programs attempt to address some of criticisms of previous models by increasing practica time, and ensuring that candidates have sufficient opportunity to effectively integrate theory and practice and reflect on their learning.

Graduate programs in education are also being affected by change, although not all faculties have programs at the M.Ed., M.A., Ed.D. or Ph.D. levels. It is not always clear in the responses whether a particular faculty includes graduate programs with preservice education in the comments, since the questionnaire was targeted at the pre-service area. Sufficient detail exists in the responses of seven respondents to provide a brief summary of the changes occurring in the graduate programs. Six of the seven faculties are reducing administrative services, reducing professorial and support staff, and increasing workloads or class sizes at the graduate level. As stated openly by five respondents, fiscal restraint lies behind at least a part of the restructuring that is occurring in these graduate programs.
The changes are not seen by all faculties as being completely negative. The flattened administrative structure, for example, is thought to have the potential for increased communication in the program. Furthermore, the opportunity has been taken in some areas to streamline course offerings and to experiment with new delivery methods, such as the electronic blackboard used in delivery of courses to individuals or groups via long distance.

Restructuring Human Resources

The organizational mechanisms adopted by the faculties of education to facilitate change differ considerably in the amount of input permitted by professors and by outside stakeholders in education. Some faculties, for example, still operate in a hierarchical mode, where the dean or a ministry dictates changes. Other faculties, adopting a heterarchical approach, discuss changes at the staff level. At the same time, experimental program delivery methods are being attempted by a few faculties as a relatively painless method of examining alternatives. It can be anticipated that those pilot projects which are highly successful may become a part of the next mainstream program.

Those aspects of teacher education considered to be crucial to the program by professors vary across the country: some consider field experiences to be of highest importance; others consider the theory, the curriculum, or the small class size to be more important. These crucial elements are being affected by the restructuring in predominantly negative ways. For example, course options have been reduced or eliminated in some faculties because retiring professors cannot be replaced during hiring freezes. In many cases, class sizes are increasing dramatically, thereby limiting class discussion and the simulation of elementary and secondary instructional settings. In others, technical advances are simply unaffordable and cannot be implemented, even though provincial policy may require all teachers to be familiar with such technology.

Almost 70% of the responding faculties have involved some external stakeholders in the restructuring process. Of these, all but two had advisory committees that provided an avenue for the field in decision-making, whereas these two consulted the field on an informal basis. The stakeholders involved in the process usually included members of the teachers’ federations, and also included school board administrators, principals, students, and/or professors from other faculties.

Emerging Trends

Overall, the study demonstrates that most faculties are involved in restructuring that is significantly affecting organizational structures, the content and delivery of programs, and the professorate. Where changes are imposed from outside, the response to them appears negative. However, when the affected persons are involved in the decision-making, the changes are seen in a more positive light. Further, the involvement of external stakeholders in the restructuring process has engendered more support and cooperation from the teaching profession. This finding is consistent with the writers’ experiences collaborating with partners within their own institutions (Andrews, 1995, 1999; Gurney & Andrews, 1998).

In an attempt to describe the restructuring phenomenon, Steven Lawton (1992) developed seven explanations drawn from a variety of perspectives. They include the notion of a legitimacy crisis, which is reflected in the public’s expressed concern about the effectiveness of educational institutions, the equity of outcomes, and the ability of current administrative structures to respond to the needs of a technological society. There is the concern for the effectiveness of educational institutions in developing human capital for the benefit of both individuals and of society, and to do so in the most efficient way possible. Furthermore, the managerial revolution has altered the way organizations do business: there is an emphasis on individual autonomy, productivity and creativity; and a "tight-loose" control exists, where organizations are tight on objectives but loose on procedures. An influential populist movement of baby boomers has evolved, and has expressed a reaction to the homogenizing effects of traditional organizations by demanding greater control over the education of their children, and greater influence in the decisions that affect them in their careers. Further, a crisis in capitalism has developed as the aging baby boomers demand an increasing level of government services, without the existence of a population base in the upcoming generation to support these requests.

Restructuring is a practical way of transferring authority to those at the operational level and engendering a greater allocative efficiency by allowing local communities to choose what services are most valued. Provider capture expresses the perception by the public that large institutions serve themselves in two ways: first, that vast sums allocated to education, health and social services pay well-educated, middle-class individuals who provide the services; and second, that these same individuals operate the system in such a way that it provides special benefits to their own kind. Overall, restructuring offers the potential of altering the locus of control from the apex of the hierarchy to the local community. *With political and administrative decentralization, communities and collectivities*
can affect, though voice or choice, the values promulgated, services delivered, and staff employed by a government agency” (Lawton, 1992).

Several of the explanations outlined by Lawton (1992) also appear to account for the restructuring of the faculties of education across Canada. The primary thrust for restructuring appears to be the crisis in capital that is a significant problem for Western democracies. Several years of accumulating deficits have severely restricted the ability of the federal government to assist provincial ministries in delivering the range of services that were made available in the 1970’s and 1980’s. Initially the reduction in federal transfer payments to the provinces was manifested by the elimination of capital-intensive projects and discretionary funds. As deficits also increased at the provincial level, temporary freezes, such as the social contract in Ontario, were initiated in an attempt to delay significant structural change until the economy improved. Unfortunately, the economy changed dynamically but did not necessarily engender higher tax revenues. Consequently, governments have been unable to sustain the level of funding for post-secondary institutions that they sustained in the past. As a result, education ministries are closing faculties, eliminating departments and restricting program offerings; and faculties are reducing administrative services and the number of full-time staff, and increasing workloads, class size and the number of part-time staff.

The reordering of the economy forced by participation in free trade agreements has transformed the Canadian economy in terms of both process (how we do business) and product (what we produce). Our resources and manufacturing plants will not necessarily restore our economic health without significant changes in how they operate. New ways of operating must be developed to energize organizations and assist them to refocus their energies to operate more effectively and efficiently in a global economy. This realization has impacted on the education system. Stakeholders in education - students, members of the teaching profession, the business community and the churches - have prompted a legitimization crisis. They are seriously questioning the effectiveness of the university system to produce effective practitioners for the school system. There is criticism of provider capture; that is, the system is designed by the middle class and supported by them, and there is a very limited role for minority groups and the physically challenged within institutions. As a response to these concerns, several faculties are seriously reviewing the nature of their programs and reconsidering entrance requirements, the field experiences and the type of coursework appropriate for beginning teachers who must cope with a wider range of expectations. Some faculties are also shifting the focus from traditional organizational structures based on certification (i.e., elementary/secondary certification), to broader and more inclusive categories, such as early transition and specialization years, or program categories based on learning theory, such as integration, assessment and active learning. The managerial revolution has had a significant impact on the approach that faculties are taking to restructure their organizations. Although some faculties are operating from a traditional hierarchy, most of the respondents to the survey indicated that they are attempting to facilitate change through the participation of the professors and the involvement of the external stakeholders. There appears to be a concerted effort to decentralize services to make them more responsive to local needs. Faculties are being encouraged by governments to develop teacher education and graduate programs that are more responsive to their regional needs. For example in the northern areas of Ontario and Manitoba, there is an emphasis on native teacher education; in eastern Ontario the education faculty has a mandate to address the minority francophone population; and in British Columbia, satellite colleges (with education programs) have been established to address the needs of communities in the interior.

An essential aspect of the effectiveness of decentralization is the notion of empowerment. Faculties are attempting to involve employees at all levels to take more responsibility and more initiative to make the organization operate effectively. Professors, administrators, students and support staff are participating in retreats, faculty assemblies and working committees, and they are producing papers, technical reports and studies designed to enhance both the effectiveness and efficiency of their organizations. Moreover, a strong populist movement particularly in Western Canada has arisen that demands control over the decisions that directly affect them. This is manifested in their insistence to have a voice in the operation of public institutions, especially those that effect their children’s education. Faculties have acceded to these requests by involving external stakeholders in the restructuring process. Stakeholders, such as school board, student and federation representatives, have been active on advisory committees and on program committees. These committees have examined mission statements, the image of the graduates, and program offerings, within the parameters of the university/field responsibilities. Their involvement has assisted faculties to effectively shift the focus of their programming towards a client service orientation; that is, one that is more responsive to the needs of the teaching profession and the aspirations of the students.

Towards the Future

The findings of this study suggest that faculties will not have the same appearance in the future as they have had in the past. They will be smaller, with fewer full-time faculty members, and a more limited number of course options. In addition, there will probably be fewer faculties, and these will focus in specialized areas. It is anticipated that faculty members will have larger class sizes to contend with, but will also have more control over decision-making; faculty
structures will be heterarchical rather than hierarchical in nature; and there will be a role for the field and for students in making decisions.

Overall, faculties of education across the county are in a similar situation; that is, that there is pressure to change their organizations to more effectively meet their teacher education mandate while fulfilling their obligations as institutions of higher learning. The financial issue is simply the immediate catalyst bringing about change: other pressures - those from the field, from within the faculties, and from clients - are of equal concern. In program development, one can foresee both increased involvement and ownership in teacher education programs by the field. Individuals and groups outside of the faculties are demanding more power in the decision-making process of the faculties, and through their involvement, are providing more support for initiatives that have been jointly developed. This reflects a positive reaction to the legitimization crisis facing education faculties. Similarly, in graduate programs, there is a demand for more field-based content in both research and coursework.

Decentralization is particularly difficult for teacher education institutions since there is a dual responsibility to both theory and practice. In our view, it is essential for the faculties to share power through joint decision-making with stakeholders to ensure the relevance of teacher education programs and to meet the professional development needs of client boards. However, a balance of theory and practice must be maintained in university accredited courses, despite the pressures from the field to ignore research issues in favour of more practical ones. Further, the additional resources required to meet client needs may be undermined by the fiscal situation in education faculties, so that the intention of accomplishing a client service orientation may be undermined by economic realities. Above-all, support for field-based activities (research and supervision) must be provided to faculty in greater measure than in the past. Faculty appraisal systems must take such time-consuming and essential activities as practicum supervision and applied research into consideration for tenure and promotion. Equally, the teaching profession must fulfill its obligation to the university community by entering into partnerships to ensure effective field experiences for teacher-candidates and by participating in research initiatives that focus on induction and teacher development.

References


APPENDIX 1

PROGRAM EVALUATION QUESTIONNAIRE

Round 1

1. Is your faculty undergoing significant structural change? If so, what are the factors (internal and external) that are promoting these changes? If not, what is there about your organization that has prevented significant upheaval?
2. What aspects of your organization are being affected by restructuring? In what way?
3. What is the organizational mechanism you have adopted to facilitate change?
4. What are the crucial elements of your program?
5. Have you involved external partners, such as school boards or teachers' federations, in the process of change within your organization? Describe the extent of their involvement. Is this a departure from previous practice?
6. Do you anticipate changes in the delivery of the teacher education program at your institution as a result of restructuring?
7. In Ontario, the Ministry of Education has re-shaped the school curriculum and designated new core areas, such as the Arts (dance, drama, music and visual arts). Do you anticipate significant changes to the curriculum of your teacher education program as a consequence of restructuring? Please comment on those changes in the following areas:
   i) foundations:
   ii) methodS
   iii) curricular subjects (e.g., mathematics, music, etc.)

APPENDIX 2

Program Evaluation: Round 2

Rank the elements of each of the following areas from most to least important. You may add elements if you wish to, and utilize NA (not applicable) if required.

Please identify your Faculty using the following descriptors:

Region (circle one):
- Eastern Canada
- Central Canada
- Western Canada

Size of Faculty (circle one):
- Small (under 100 students)
- Mid-size (101 - 500 students)
Large (more than 500 students)

A: Explanations for restructuring.

- fiscal restraint
- ministry initiatives
- pressure from the field
- dissatisfaction with administrative structure
- to update programs
- opportunity to change focus
- perceived lack of effectiveness of graduates
- accommodation of visible minorities and physically challenged
- other

B: Process of Restructuring

- pilo projects
- stakeholder involvement
- participation of the professors
- position papers
- input from support staff
- student involvement
- consultant reports
- ministry representation
- faculty retreats
- federation representation
- advisory committees
- other

C: Results of Restructuring - Human Resources

- larger classes
- reduction in administrative support
- increased professor work load
- less credit for thesis supervision
- reduction in professorial staff
- increased number of part-time lecturers
- reduction in support staff
- re-deployment of the human resources of faculties
- new faculty are not being hired to replace retired personnel
- other

D: Results of Restructuring - Administrative Structures

- increased responsibilities for professors
- extended field placements
- increased research opportunities
- decentralization of services
- more authority to external partners
- smaller departments
- fewer departments
- increased links with the field
- elimination of capital-intensive projects
- increased specialization in areas of research
- reduced discretionary spending
Initially, 4 departments, 2 schools, 1 college, and 26 faculties of education (English-language) were contacted. During the time period of the study, 2 departments, 1 school and 1 college were dissolved. In the paper, the authors use the term "faculties of education" inclusive of the remaining 2 departments, 1 school and 26 faculties of education.

In Nova Scotia the teacher education programs at Dalhousie University, Mount Allison University, Nova Scotia Teacher's College and St. Mary's were eliminated. The department of education at St. Francis Xavier University, which was originally slated to close, was retained through the political efforts of the staff and administration.

### Author Notes

**Penelope J. Gurney**  
pgurney@uottawa.ca

Penelope J. Gurney is a member of the Faculty of Education at the University of Ottawa where she teaches pre-service and graduate courses in mathematics, statistics and computer technology. Her research interests are focused on computer methods of authorship attribution and the use of computers in teaching and learning.

**Bernard W. Andrews**  
andrews@uottawa.ca

Bernard W. Andrews is a member of the Faculty of Education at the University of Ottawa where he teaches pre-service and graduate courses in music, arts education and curriculum. His research interests include investigating the generative processes of musical composition, assessing the effectiveness of interactive teaching strategies in the arts, and refining a research methodology, entitled integrated inquiry, which combines qualitative and quantitative data sources.