

Report on the 2001 Pan-Canadian Education Research Agenda Symposium Teacher Education/Educator Training:
Current Trends and Future Directions

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Opening the Conversation on Teacher Education/Educator Training

At the invitation of the Canadian Education Statistics Council (CESC), members of the education community engaged in a critical conversation on teacher education. Many researchers, policy makers, practitioners, and politicians engaged in the critical conversation, developing new and enriched understandings of teacher education at all levels of the educational system. In the resulting dialogue, dichotomies blurred and were redefined. This dialogue is important to decision makers across Canada, in light of strategic, demographic, and technological transformations which impact on the currently rapid evolution of learning and teaching (Cappon, 2001). This report contributes to the conversation by identifying common themes that link most if not all the fifteen commissioned papers and accompanying comments, by exploring these, and by indicating where further research is needed.

Eight themes serve as foci for the critical reflection in this paper: a common set of *questions* (1), set in *context* (2), a pervading sense of *crisis* (3), a major issue of *control* (4), questions of *coherence* (5) and of *quality* (6), as well as the declaration and

recognition of *professional identities* (7) and consideration of how *knowledge* of teacher education is constructed (8). These themes merit our attention in terms of future directions for research on teacher education. Addressing the themes sequentially, each section of this report ends with a reflection on what has been learned, with the exception of the first two themes, which frame the critical report. From the discussion, including the reflections, is derived a list of recommendations for further research on teacher education.

References are made to the authors and commentators throughout this report, woven in here and there, as fits best, without discussing or summarizing any one source thoroughly or sequentially. Like an authentic conversation, thematic elements are recurrent—raised throughout and never entirely dispensed with. The purpose is to engage in a critical conversation around transversal themes that organize the reflection: questions; context; crisis; control; coherence; quality; identity and knowledge-making.

Questions

Several questions underlie the symposium and may be summarized as follows:

- What constitutes good teaching, today, in a changing society and with emerging new roles, new technologies, and new mandates? And what is the range of possibilities, the variability in good teaching?
- How can institutional and structural responses improve teaching?

- What are the social and philosophical conditions affecting teaching, learning, and administration?
- Will there be a strong supply with wellqualified teachers for the new schools for tomorrow?
- ♦ What are the purposes of education?

From as far back as the 1970s, much is already known and has been known about these issues and yet the same questions continue to be raised and

Questions continued

the same answers continue to be circled. Perhaps neither questions nor responses have been fully understood and engaged critically by the educational community at large. It is more likely, however, that the questions need to be reconsidered in a changing context. Canadian society is moving into an era of globalization that necessitates preparation for a knowledge-based

economy. The rapidity, complexity, and intensity of this change call for a transformation of schools as public institutions. Like many other pluralist societies, Canada needs to prepare future citizens and productive members of society who will serve as change agents within a transformative process of the renewal of Canadian society, in order to counterbalance extreme market forces.

Context

Within this era of globalization which involves social, economic, cultural, political, and religious dimensions (cf., Turner, 2001; Tomlinson, 1999), the policy issues within Canadian society that relate to education are numerous. A labour market shifting toward knowledge-based industries results in concomitant pressure for increased educational attainment. An anticipated demographic decline in the young population is opposed by growth in the aging population that includes the aging of the teaching force and of the professoriat.

A gradual shift of values linked to secularization, urbanization, and post-industrialization accompanies changing population patterns, as does a worldwide migration pattern and increased concentration in urban centres which contributes to greater social differentiation. These social and philosophical issues, which influence teaching, learning, and administration, are qualified and analysed in several papers (cf., Dea; Dibbon; Fenwick; Grimmett and Echols; Keough and Tobin; all 2001).

Crisis

Within the symposium dialogue, there has been a shared sense of crisis and of urgency. Resting on the tension between competing conceptions of education, this sense infuses teacher education and professional development and flows from socioeconomic changes (Egan, 1996, 1997). This sense of crisis revolves around several issues: competing views of education and of society; the nature of reforms of teacher education programs in faculties of education; concerns about curricular conceptions and contents; and the difficulties inherent in the induction process into the profession.

Competing Views of Education and of Society

The current sense of crisis around the purpose and means of education is lodged within competing views of society. Two main currents flow through the public debate on education. In one current, neo-liberal and macro-conservative views coalesce in the form of a new conservative ideology which marries a value on individualism with strong centralized control so as to maintain political stability, as Grimmett & Echols, and Fenwick point out in their symposium papers. In the other current, there lies a conception of education for

Crisis continued

equity, social justice and democracy, in a school context that is itself equitable, just, and democratic (cf., Freire, 1998; Portelli et al, 2001; Pagé, Ouellet and Cortesão, 2001). The first technicist and technocratic conception of education may be incompatible with the second democratic conception (Cochran-Smith, 2001). If so, then educational policy issues arise about the ultimate purposes of education and the best means to attain these.

The Nature of Teacher Education Reform A sense of crisis permeated faculties of education in the nineties and most responded by reforming initial teacher education and sometimes also graduate work in the field. These reforms have affected workloads, career orientations and in some cases, professional identities (Tardif et al; Lowry and Froese; 2001). The reforms have been plagued by their ambitious nature, the paucity of resources allocated, the tenacity of traditional "real" educa-

tion, as well as a compressed conceptual and implementation time frame; the effect has been to make teacher education programs longer, more intense, and more complex (Tardif et al; Russell and McPherson; 2001; Bascia, 2001). For the most part, these reforms were introduced hastily without examining (a) the extent to which actors accept new tasks without modification to other duties. functions, and missions; (b) the commitment among teachers to student teachers and student teaching as a form of apprenticeship into the profession; and (c) the adoption among teachers and teacher educators of new orientations which may or may not be compatible with their own assumptions, beliefs, and practices.

Concerns about Curricular Conceptions and Contents

In initial teacher education, the question of what and how to teach raises concerns about curricular conceptions and contents. According to Tardif et al (2001), meeting these challenges would necessitate teacher educators and school-based teachers working in collaborative relationships to help students to theorize based on practicum experiences while retaining academic and school disciplines in a significant way. Beginning and experienced teachers as well as teacher educators could bring to bear their subjective knowledge so as to construct valid educational theories, practices, and policies as an interactive trio of relationships. Doing so would require taking into consideration social transformations affecting Canadian society, especially the possibilities of techno-pedagogies, diversities, and education of national and polyethnic groups in minority contexts.

Difficulties of Induction into the Profession Induction into the profession is often difficult and tends to lead to discouragement and career leaving (Oberg: Tardif et al; Bousquet and Martel; Russell and McPherson, 2001). Teachers may face unattractive working conditions and increased pressures and demands, due in part to the continued movement toward a knowledge-based economy (Dea, 2001). While various measures (internships, peer-collaboration, mentorships, resource people, online professors) have been suggested (Tardif et al, 2001; Oberg, 2001), these need further study and understanding before being widely adopted by school districts, as was made clear in the question period. Thus, problems must be clearly identified, as well as their sources and motivations, before moving carefully and cautiously into reform movements.

Crisis continued

What Have We Learned?

What clearly emerges from the current review of teacher education reforms in Canadian teacher education institutions is the sorry results of the overwhelming rapidity of the changes. This resulted from the frustrating insufficiency of the negotiation and piloting of the reforms; an inexact understanding of the impact of the transformations especially upon partnerships between faculties of education and school districts; and the seldom studied contribution of teacher educators, their beliefs, representations, practices and commitment to reform. What emerges as crucial to any future reform is the necessity of working out the details of new programs and piloting them well, before implementing them in their entirety (Tardif et al, 2001).

The Tardif et al. paper is based both on the research literature as seen in the extensive bibliography AND on systematic analyses of recent reforms in teacher preparation institutions across provincial and territorial jurisdictions in Canada. However, given its restricted format, it is clear that its conclusions require validation by more in-depth studies.

Research Directions

While critical perspectives prevail in the literature on teacher education (cf., Cochran-Smith, 2001; Labaree, 1997, 1995), their influence at the PCERA symposium has been limited and further research, set explicitly within critical theory, is needed on the ideologies that fuel teacher education and curricular content of teacher education programs across Canada. Other ethical and equity issues germane to teacher education have not been addressed. Pressures mount, for example, (i) around issues of equality, quality, and inclusion (Mujawamariya, 2001, Maynes, 2001; Lupart, 1998; Smith and Lusthaus, 1995), (ii) around measurement and accountability (Murphy, 2001; Zirkel, 1999), and (iii) on the dark side of learner-centered pedagogy which shapes and limits discourses by refusing the relational nature of social differences (Norquay, 1999). Meeting these issues would occasion leadership and research opportunities for research and for faculties of education.

Control

In this section, several issues are addressed and reflected upon in identifying what has been learned about the nature and perspectives of control, networked classrooms and control issues, forms of data for knowledge-making, emerging images and improvements, inter-jurisdictional collaboration, and leadership.

The Nature of Control

Policy making, as a function of government, attempts to control and shape society and yet it is not clear in a rapidly changing world whether such control within provincial, territorial, and national boundaries is still entirely possible. The strategy of control received considerable attention in this two-day symposium, dominated by conversation about the technocratic outcomes approach to education. Participants searched for and spoke of strategies of control at the federal level for the management of social and cultural diversity, and at the provincial level for the management of teachers and professors via curricular reform and the labour market. Discursive attempts were made to explain the

unexplainable, to quantify the unquantifiable, and to create rational realities, tending to discount the affective, the spiritual, the moral, and the experiential.

Networked Classrooms as Forms of Control Taking up the possibilities of networked classrooms as working places and as knowledge-building communities, a new socio-technical infrastructure for teaching and learning was proposed within a constructivist approach to teaching and learning. Rethinking the delivery of teacher education in this light would necessitate design experiments in Canadian universities and schools (Laferrière et al., 2001). Situated in a distributed comprehensive framework, the networked classroom may be connected from the outside world to the classroom, from within the classroom to the outside world, or both. A networked classroom may be interactive or pre-organized; on-line, collaborative, discursive, face-to-face and virtual. Moving away from traditional classrooms with teacher-organized student learning activity, teachers' and learners' roles may involve student engagement, authentic learning, the release of agency, and collaborative knowledge building for effective use of technologies.

Current Canadian work on networked communities of learning is situated primarily at the University of British Columbia, the Ontario Institute for Studies in Education of the University of Toronto, McGill University, and Laval University. While experiments with networked communities of learning in Canada do not yet compare with the new technology standards for credentialing candidates adopted in California or the national teacher education standards in the UK, the findings from these experiments, described briefly in Laferrière et al, support a three-layer

model, distributed between campus-based teacher preparation, school-based professional development, and online communities of practice, pushing the boundaries of institutional roles and norms along the continuum of academic/formal — experiential/informal learning.

What Counts as Data for Policy-Making

Conversations around teacher supply-and-demand issues considered two types of data: quantitative data, from the Centre for Education Statistics of Statistics Canada, the Labour Force Survey of Human Resources and Development Canada, and several other sources; and qualitative interview data. Each one provides a different picture and model, thus enriching and yet confusing the conversation. With 'supply' defined as the 'stock of current teachers + graduates - retirements + net migration' and demand as 'school-aged population x participation rate / pupil-educator rate' (Gervais, Thony and Maydan, 2001), one would think the matter would be a clear mathematical relationship. But that is not to be. Various hypotheses and assumptions need to be made, for example, about which relationships (attrition rates, international migration, rates of entry into the profession) remain constant, how recent graduates are employed, what counts as a surplus or shortage given non-recurrent external events, and what can and cannot be described.

Emerging Images

Assuming that 75% of graduates teach, an overall picture emerges in several provinces in Canada of a shortage of teachers from 1998 to 2004 and a growing surplus of teachers from 2005–2010 (Gervais et al., 2001), with similar analyses needed for each of the provinces (Bellan, 2001). Even if the 75% assumption is maintained, Nova Scotia, Ontario and British Columbia would experience

variably severe shortages, somewhat less serious if 100% of graduates teach, clearly an untenable assumption. In Quebec, considering the increasing aging, feminization, and mobility of the teaching force, especially in terms of retirement, a 15% decrease in teaching staff is expected to occur between 2000-2001 and 2011-2012, according to eight time periods and to nine fields of teaching (basins d'affectation) (see Table 4 in Ouellette, 2001). The demographic trends are not straightforward, however, for they are punctuated by non-quantifiable external events such as retirement incentives, the move from part-time to full-time kindergarten for five-year olds; the introduction of linguistic boards; the changing pupil-teacher ratio in kindergarten and cycle one of the elementary level; and the new basic school regulations. Viewed in this light, the likely impact of demographics on the control of the teaching profession may be questioned (Owen, 2001).

Emerging Improvements

Teacher education reform in Quebec has generally improved access to the profession for education graduates; however, there is a mismatch between what new teachers are hired to teach and the subjects they have specialized in (Bousquet et Martel, 2001). For example, newly qualified teachers as subject specialists are hired to teach in the area of school adaptation and consequently tend not to stay very long. Other entry routes into the profession, such as substitute teaching, which are not seen as "real" teaching jobs, can also be discouraging for new teachers, thus necessitating reconsideration of the management of such forms of employment. This helps to fill in the picture of Oberg's concern for the retention of young teachers, as does Russell and McPherson's discussion of the ovewhelming nature of beginning teachers' experiences. School boards need to assume the major responsibility to provide support, for example, in the form of mentoring with partner teachers, and to employ newly graduated teachers appropriately and honourably in the profession.

Inter-Jurisdictional Collaboration and Planning for Chronic Shortages

According to a qualitative study with a purposive sampling technique in British Columbia, the posited crisis in teacher education may not be as great as first thought (Grimmett and Echols, 2001). While the teacher and administrator shortages are important, evidence of shortages varies by region, level and subject, as noted in other supply-anddemand papers, and other factors seem to be at play. Significantly, according to interviews conducted through site visits at three agencies (the British Columbia Ministry of Education, College of Teachers and Teachers' Federation) and twelve school districts (metropolitan, urban and rural in British Columbia), the major players in teacher education tend to react to a shortage after it has occurred, instead of being proactive and planning beforehand.

Policy strategies need to distinguish between acute and chronic shortages so as to meet an expected shortage in British Columbia, which will be most acute between 2005 and 2010. Careful planning and a robust policy about issues of supply and demand are required, to address chronic shortages in specialty subject areas. Policy development also needs to take into account the employment of teachers and of administrators of a diversity of backgrounds who may need more attractive, high status, fast-track programming to achieve a reasonable response in gender and social/cultural equity (Grimmett & Echols, 2001; Beynon et al, 2000).

Importance of Leadership

The demographic shortage of educational administrators is real, as school districts experience difficulties recruiting experienced teachers of high quality among mid- and late-career candidates. In British Columbia, teachers have lived through a decade of curriculum change and experienced teachers question why they should be involved in administration. As part of the changing nature of in-school administrators, additional responsibilities emphasize managerial tasks and the management of collective agreements, distancing them from the classroom (Macmillan, Meyer and Sherman, 2001). As a result, teachers tend not only to disengage but to disinvest (Grimmett and Echols, 2001). Trying to control situations and people is a far cry from the idealism of current administrators' energetic youth.

What Have We Learned?

With many supporting detailed images and analyses, a reasonable consensus emerged that

- there will be a teacher shortage in the near future, varying according to level of education, discipline and province/territory; and that
- tomorrow's classrooms will most likely be networked, thus differing markedly from the classrooms of today.

The issue of control that permeates the complexities of teacher supply-demand is heightened by the very nature of the quantitative paradigm that informs most of the symposium papers on the topic. One exception (Grimmett and Echols, 2001) provides nuanced data and calls into question the images painted by the statistical forecasts. Ouellette (2001) also recognizes the strengths and shortcomings of the paradigmatic framework, when refining an analysis in light of non-quantifiable external events and educational reforms.

Looking at teacher supply/demand issues from a provincial/territorial perspective may well be an instance of navel gazing. Teaching is a profession that has been reasonably mobile historically and contemporarily. If we raise our sights and consider the benefits of teacher migration, then one province's surplus may be welcomed elsewhere, as Echols commented in his presentation. Teacher migration could contribute to social cohesion, especially when French teachers from Quebec migrate, for example, to Western Canada and Newfoundland (Dibbon, 2001). Migratory teachers serve as linguistic and cultural ambassadors, creating a greater sense of understanding one another. In other words, dwelling only on the production of human, social, and cultural capital in one province without looking at the interaction among provinces/regions/territories and between sectors is limiting. Pan-Canadian collaboration is required for prediction, planning, and preparation.

While the possibilities and pitfalls of networked classrooms remain largely uncharted, issues of sustainability, scalability, control, inclusion/ exclusion, and privacy become critical. Information control, social control, and self-control present new challenges in networked classrooms as compared to non-networked classrooms. According to McCall (2001), most computers in schools are not in classrooms and, if they are, cannot be used for group instruction as the equipment is not usually networked. As noted in Noël (2001), the openendedness of the Internet and intranet questions the wisdom and feasability of ministerial-approved lists of curriculum resources for learning; highlights the need for students to become discerning, critical thinkers and users; and underscores the lack of time and resources to assure teachers' pedagogical development.

Research Directions

Although the appropriateness of the quantitative paradigm was hardly questioned, nor any evidence brought to bear on the effectiveness of socioeducational policies on teacher supply and demand, further research is needed on the effectiveness of forecasting and of the impact of resulting policies on teacher preparation as a form of human capital. As for the possibilities of networked classrooms for the future, future research is needed on the many issues raised in the previous paragraph as these pertain to teacher education and professional development. Additional research is needed to see

- if students in networked classrooms are practising greater high-level cognitive and meta-cognitive skills than students in traditional classrooms;
- what specifically contributes to students' construction of knowledge in networked classrooms;

- whether the posited characteristics of networked classrooms as non-traditional are necessarily so;
- what might be the end results of the networked classrooms in terms of pedagogical relationships and of intellectual and social development; and
- what might be the impact and equity issues for classrooms which cannot afford the technology.

And finally, in searching for what counts as learning and how to enhance broader learning, additional research is needed to examine the intersection between grade inflation as an well-documented educational phenomenon and technological literacy (cf., Zirkel, 1999).

Coherence

Who looks after the overall fit of all aspects of a reform? Of a curriculum? Of schools? Attempts to control have been actualized in educational systems by means of reforms which are implemented by centralizing finances, by setting guidelines and organizing curriculum, by decentralizing responsibilities and accountability, and by focussing on managerial styles of leadership and on an individualized "freedom of choice." In this section on coherence in reaction to the need for control, three consequences of these attempts, i.e., the realities of fragmentation; calls for coherence and quality; and the need to move beyond boundaries and across levels, are discussed.

Fragmentation

Most of the literature on teacher education reveals its fragmented incoherent nature, the lack of consensus within programs, and our inability to establish clear indicators of success (Tardif et al. 2001; Russell and McPherson, 2001). Yet, according to Hayes (2001), quality education involves the three C's: collaboration, cooperation, and coherence. Constructivist suggestions for induction practices to overcome some of this fragmentation include the pairing of beginning teachers with mentor teachers, internships, team approaches, long term interventions, the theorisation of practicuum experiences, and the quality of the supporting pedagogical relationship between the teacher candidate, teacher educators and cooperating teachers.

Coherence continued

Calls for Coherence and Quality

In reaction to attempts to control can be heard a call for pedagogical, curricular and structural coherence, for there is a tendency toward chaos. This call for coherence may also be understood as an attempt to make sense of a rapidly evolving world. An example comes from the studies of administrators carried out by Grimmett and Echols (2001), as well as by Macmillan, Meyer and Sherman (2001). The role of in-school administrators has shifted since 1980 when the effective schools movement saw the principal as "instructional leader." Today, administrators have additional responsibilities and expectations placed on them (Macmillan et al. 2001), which leads one to wonder what it is that educational leaders influence and to what end they are leading. To attract qualified experienced teachers to administration, it would be necessary to reconfigure leadership roles and responsibilities as broad and shared; to shape feasible workloads and schedules; to provide ongoing school-based professional development; to nurture leadership capacity; and to actively mentor a cadre of future administrators.

The call is particularly loud in a plea to proceed with caution rather than take less qualified candidates into administration (Grimmett and Echols, 2001). Addressed to policy makers, this call for coherence entreats them to become proactive in addressing the organizational conditions and culture in which educational administrators work and to actively recruit and mentor future administrators whose commitment to fundamental educational values is beyond question (Barnes, 2001; Weiner, 2001). The challenge is to retain an unwavering commitment to reflection, to champion an awareness that administrative autonomy is fundamentally imaginative, and to acknowledge that privilege

is a product of respect earned from nurturing positive and beneficial relationships (Keough and Tobin, 2001).

Moving Beyond Boundaries and Across Levels

Another analysis of supply and demand seeks to make sense of the situation; to make explicit links between the elementary/secondary and postsecondary levels; and to develop a profile of teaching occupations by looking at key economic drivers and their implications for labour market conditions of the teaching profession at all levels, including the postsecondary level (Dea, 2001). Set within a summary of current and labour market issues, the identification of key drivers of teaching market conditions on demand issues includes a slower population growth that puts downward pressure on elementary/secondary schools but upward pressure on postsecondary institutions. Several other drivers also put pressure on the postsecondary level: the continued movement toward a knowledge-based economy; the ageing workforce; as well as specific provincial pressures regarding fields of study, such as Ontario's double cohort or the shortage of computer science professors. Key drivers on supply issues include school leavers who exert downward pressures on elementary/secondary levels but upward pressures on the postsecondary level; as well as immigration, which also puts upward pressure on the postsecondary level. Other relevant issues include the difficulties in attracting and retaining workers, working conditions, and the move toward technology. As a result, new job openings can result from two sources: a demand for expansion and replacement; and new job seekers from among recent immigrants, recent school leavers from the formal educational system, and occupational re-entrants.

Coherence continued

What Have We Learned?

The need to look across institutional boundaries and levels, to consider alternative sources of teachers and of modes of learning, to safeguard the quality of public education and even its very existence, are all calls for coherence. No one institution or set of stakeholders and players may act alone without considering the complexity of change and of its impact on individuals, career profiles, and education systems. Moving beyond fragmentation requires respect and care for professionals as well as sympathetic and deliberative collaboration among the triad of policy makers-researchers-practitioners as well as governments and the public, all set within a critical and public conversation that must be nourished in an informative, deliberative and mutual manner.

Research Directions

According to the COPS model utilized by Dea (2001), a serious under-supply of teachers at the postsecondary level is likely to occur in 2000–2008 generally in Canada and variably according to province and field of study. More detailed analysis for the Prairie Provinces and for each discipline is required before postsecondary institutions can begin to act upon these predictions.

In the past thirty to forty years, educational improvement focused on school attendance and accessibility of educational services. Given the high levels of achievement, attention has turned to performance in the past fifteen years; and today attention is focused upon the curriculum (Dussault, 2001; OECD, 1994; Goodlad and Su, 1992). In doing so, educational reform moves beyond policy making that is insufficient for bringing about desired improvement in the quality of education (Bascia, 2001; Levin, 2001). Comparative research is required on curriculum coherence within teacher education programs and reforms, in order to better understand why fragmentation occurs and what can be done to develop consensus and to establish clear indicators of success. Further study is needed of the influences and educational ends of administration, situated within a range of leadership models, the organizational conditions and culture in which administrators and teachers work, as well as the relationships between leadership and pedagogy. Finally, more comprehensive models are needed for statistical predictions of the teaching market as are studies of the impact of these upon teacher education.

Quality

The call for coherence is itself part of a quest for quality and for autonomy. Such a quest requires collaboration among professionals and all stakeholders, for all are members of learning communities, which must be mutually fair and respectful of one and all. In this section, various dimensions of quality are explored: quality of teacher preparation and professional development, of the teaching force, of evaluation and as professional autonomy, without omitting the possibility that coherence itself might be quality.

The section concludes with a reflection upon what has been learned about socio-educational quality and its links to moral action and justice.

Quality of Initial Teacher Preparation

The quest for quality led to mounting an explicit and required diploma program for new instructors in one Maritime institution. The innovative program was shown to be very effective in helping new faculty members successfully make the transition to a new career and a learning

Quality continued

organization, in learning how to teach, and making lasting connections with colleagues (Lowry and Froese, 2001). Situated in the context of the restructuring of vocational and technical education in Nova Scotia and of the need to assure quality teaching, especially in institutions that focus on teaching, the findings raised a fundamental question: *How does one become a teacher?* Three important aspects became a new model for faculty and informed the program:

- the ability to customize learning;
- the ability to provide collaborative learning experiences; and
- the diffusion of learning (Dickson, 1999, as cited in Lowry and Froese).

Trends such as the call for public accountability by developing performance indicators and reporting instruments; the changing role of faculty members, the changing technological environment, the diversity of students' academic preparation and socio-economic background, may affect many postsecondary institutions. These trends create demands for a concerted institutional response making effective teaching a priority and hence, emphasizing the ongoing development of faculty.

Quality of Professional Development

Analyzing implementation practices of mandated teacher professional growth plans (TPGPs) in several Alberta school districts, Fenwick (2001) distinguishes those practices set in the democratic conception of education from those set in the market approach to education. In those school districts which devoted temporal and financial resources to administrator and teacher training, and in those schools wherein principals saw the plans as another way of bringing teachers together to exchange ideas and work together in community, the TPGPs were considered an

opportunity of growing collaboratively and professionally. In schools and districts without this kind of support and vision, the TPGPs were just another mandated/obligatory report overshadowed by accountability measures. This suggests that quality and autonomy come from within, emanate from democratic principles, grow in ways of working, thinking, and interacting. Commentators noted, however, that bringing together competing conceptions of education may be difficult in practice (Seaward-Gagnon, 2001; McCall, 2001). Policy procedures are often rigid, to wit, Alberta teachers must set exactly three goals and go through a year-end review, which are manifestations of the accountability values of a marketeconomy approach to education. Asking whether this is an effort to quantify the unquantifiable (a comment which could possibly be extended to most control efforts) and focussing on process as the essence, Seaward-Gagnon responded to Fenwick's plea for flexibility, coherence and quality with her own plea for gentle guidance in a selfanalysis process to know where you are now before journeying toward wisdom.

Quality of the Teaching Force

Assuming that current demographic trends and the production of teachers in provincial faculties of education remain constant, no acute teacher shortages are foreseen in Newfoundland. But according to Dibbon and Smith (both 2001), that is no reason to sit around and be complacent, for the supply is uneven. An over abundance of primary/elementary, social studies, and English teachers plagues the province. Few apply to become teachers in the areas of mathematics, chemistry, physics, and French; and most applicants are accepted. But it is not enough to have a teaching body in front of a class. A teaching force of quality must be ensured and areas of specialization must

Quality continued

match teaching responsibilities. Rural districts and communities face challenges in recruiting and retaining qualified personnel. Radical solutions may be required, possibly expensive and unpopular, perhaps even working out how learning can occur in the absence of traditional teaching.

Quality of Evaluation

Others search for quality in teacher education in terms of indicators of quality, competence, and success as constituting the most significant evaluation of the professionalization of teachers' knowledge and work (cf., Tardif et al; Yackulic and Noonan; McEwen; Russell and McPherson; all 2001). Establishing minimum attainable levels of competencies may provide society with some degree of reassurance of quality, but raises social and ethical issues. What would be the knowledge basis for such competencies? What validity might the indicators of competency hold? Is their presence in a beginning teacher's repertoire sufficient or would mastery of an inventory of pedagogical approaches assume a direct effect upon students' learning? Being value-based, would such competencies be linked to the objectives and components of teacher education programs? Are these in direct causal relationship? How could findings of competency testing be interpreted and generalized? If indicators need to be programspecific, as the findings of Yackulic and Noonan's web-based questionnaire vis à vis Canadian and Australian deans of education suggest, and as McEwan argues, of what generalizability and utility is competency testing of teacher candidates and of teachers? What programs of research would sustain and nourish the establishment of systems of standards for teacher education and for accreditation? What does accountability mean? Of what benefit might accountability be and for whom? And finally, requiring action research and

case studies, the recurrent question, 'what counts as educational success?' may continue to drive the quest for quality and the critical conversation (Weiner, 2001).

Coherence as Quality

Coherence across instructional elements of programs and between instruction and personal classroom experiences is the most obvious indicator of quality (Russell and McPherson, 2001). Establishing standards of practice and competency testing, then investing these with highstakes, imposes external requirements on programs instead of transforming them from within, for an epistemology of technical rationality largely ignores learning from experience (Schön, 1983, 1995, as cited in Russell and McPherson). Rather than being taught as course content, the knowledge base for teaching is to be constructed from practical experiences. Student achievement levels are positively linked to teachers who are satisfied, motivated, experienced, and knowledgeable; and who remain to become part of the school and community culture (Berliner, 2000; Darling-Hammond, 2000; Hatton et al, 1991; King and Newman, 2000; Tell, 2001; Wasley, 1999; as cited by Russell and McPherson). In other words, student learning is enhanced by well-prepared teachers working within their areas of specialization and delivering a high quality, nurturing, and wellrounded education. This relationship demands that market approaches to education recognize the significance of care and respect of educators as experts and as professionals, to achieve the goal of constructing a knowledge-based society for the future.

What Have We Learned?

The quest for coherence has been understood as a quest for meaning and for fundamental values, as well as a concern for quality of education, life, and

Quality continued

care. All aspects are grounded in a desire for respect of self and of others, which is contextualized in collective action and social critique, as educators search for justifiable moral purpose, spiritual understanding, ethical practice, and civic courage (cf., Freire, 1998). Teachers have an acute need for professional stability and to know that their lives and their work having meaning.

Research Directions

What has been omitted from much of the discussion are several other dimensions of quality, notably, quality as social justice, of curriculum, of practice. Although poverty is a major policy issue, there is virtually no research that examines this dimension of teacher education. Preparing teachers for a quest for socially just educational programming for children living in poverty would include access and exposure to technological literacy as part of efforts to overcome the variability of early childhood education across jurisdictions and in faculties of education—providing the technology contributes to the attainment of learning goals and provides for better teaching and broader learning (Maynes, 2001; Peters, 1999; Larose et al, 2001; Karsenti, 2001; Wotherspoon, 1998). Blending democratic and technological conceptions of education, collaboration between

school-university-home-community for quality education as social justice necessitates specific preparation of teacher candidates.

In-depth studies are needed of situated practice in teacher education and in schools, flowing from a market-driven conception of education and from a democratic, socially just conception, in order to bring greater understanding of the impact of policies and ideologies that shape educational practice today. Further investigation is required into the moral dimensions of teaching and democratic principles of pedagogy. Of particular interest are studies of the influences of new economic models and strategic transformations on the teaching force, on the pedagogical relationships, and on administrative roles and responsibilities. Research is needed on the role of autonomy in determining satisfaction with teaching and in terms of organizing the work which faculty perform. Studies are critically needed of what would constitute realistic preparation for dealing with ethical and moral dimensions of teaching, such as the formation of a pedagogical conscience, as suggested by Manley-Casimir (2001) who draws from Thomas Green (1985) to provide an anchor for teacher education as lifelong learning and a sense of equilibrium for professional and private lives.

Professional Identity

Woven throughout the symposium on teacher education is the professional and policy issue of what it means to be an educator, and especially a teacher educator. The overwhelming majority of speakers at the PCERA symposium explicitly identified themselves by making explicit the experiential and credential basis for participation

as essential to professional identity. Pausing to find reasons for this search for recognition and its significance, this section explores some possibilities for professional identities, including the influence of institutional policies in defining identities and a search for appropriate categories of professional existence.

Professional Identity continued

Professional Identities Defined by Institutional Policies

During the symposium dialogue, the importance of the development of an identity as instructor/ teacher and teacher educator was noted in several papers (cf., Lowry and Froese). In a postmodern context, almost everything has been deconstructed, leaving only the body as site for the debate occurring literally upon its skin. Presenters and commentators alike tended to identify themselves and, in so doing, establish their credentials and voice of authority. Individual self-definition is linked to self-definition in accordance with the group image and purpose articulated through the mission and vision statements of organizational structures (Keough and Tobin, 2001; Manley-Casimir, 2001), echoing calls for the recognition of collective rights heard in many pluralist countries (cf., Marshall, 1963; Taylor, 1995; Lapeyronnie, 1999).

For professionals to situate themselves publicly constitutes actions lodged in postmodernism, characterized by the deconstruction of most major icons, leaving only the self as the site of symbolism and meaning making, and in the global market economy, characterized in part by a market of identities (Klein, 2000; Rosenau, 1992). Who we are as members of the profession is in profound crisis and must be explored. Finding an answer, even several answers, which allow for multiple identities, is important. Without clarity about our natures, roles and categories of professional identities, we as educators cannot hope to provide leadership in this field of fundamental importance to creating a knowledge-based society and to assure the education of student citizens as future generations.

What Have We Learned?

Whether we wish to acknowledge it explicitly or not, we appear to be living in a postmodernist

age, in which the 'self' is questioned, negotiated, experienced, and explored, in a never-ending process of construction and reconstruction, always in the making. This process pervades teacher education programs and education more generally. Never ending, education is now life-long learning. Always adaptable, all educational programs, including teacher education, are open for questioning, deconstruction, and negotiation. Socio-educational policy must take into consideration the importance of identities for learning and teaching, building upon questioning, deconstruction and negotiation as integral part of learning and teaching. Recognizing the shift of societal orientation and its myriad pressures raises serious concerns about preparing teachers and students alike to make decisions and to live by the consequences, based upon well-developed and wellunderstood moral and democratic values.

Research Directions

While postmodernism in its various understandings may be the "flavour of the era," it behooves us as well educated individuals and as educators, as part of our intellectual culture, to master the philosophies of the day, as policies, programs and pegagogies are situated within them. Given the negotiability of teacher education programs and professional identities, research is needed to delve into what it means to be a teacher and teacher educator today. It is necessary to figure out how individuals construct themselves as professionals in response to policies, how they manage to be front and center in their own lives and yet decentered with respect to others, how they compose with a range of different discourses with a diversity of others and of cultures, to make sense of the world. It is crucial to find out how each teacher develops a meaningful life and broadcasts his/her meanings, values and principles, via their teaching, to serve as role models for young people.

Knowledge-making

The dialogue at the PCERA symposium was expressed mostly in the language of education and of policies. Yet insights may be brought to bear on teacher education issues from different theoretical and ideological perspectives, such as postmodernism, constructivism, critical theory, political economy, feminism, functionalism and empiricism, to name but a few. These have been insufficiently explored in the national debates on education. Postmodernism, for example, may be of particular interest, as suggested in the previous section on identities, in trying to understand social, political, economic and cultural changes which now condition teacher education in Canada and other pluralist countries (Grimmett and Echols, 2001; Keough and Tobin, 2001; Hébert, 2001 and in press). In this section, we explore what we have learned about the nature of postmodernism. shifting understandings and debates, the blurring between public and private spheres, and their impact on teacher education.

What Is Postmodernism?

Postmodernism is concerned primarily with space, time and relation. The keynotes of postmodernism include: authority, power, victim status, language, relativism, accelerated time, introspection, spontaneity, and hybridization, all concepts that blur distinctions and challenge orthodoxy (Keough and Tobin, 2001; Elkind, 1997; Appadurai, 1996; Rosenau, 1992). Postmodern organizations develop and sustain their own personality usually in terms of their brand or logo, sell coolness, and pass on the cost to shareholders and/or clients (Schultz, 1996; Klein, 2000).

Characterized as dis-unified, without universality, and without basis for a commonly held truth, the postmodern movement outlines a shift in understanding of society (cf., Appadurai, 1996; Elkind, 1996; Rosenau, 1992). It deconstructs the concept of schooling in the modern hierar-

chical industrialized era in which kindergarten was modelled on school, just as secondary schools were modelled on the university (Larose et al, 2001). Although there is increased support for democracy and for teachers (Norris, 1999), education today, including teacher education, is deeply contested for public debates of hot issues characterize contemporary society.

Impact on Educational Life

As schools reflect, reproduce and transform society, boundaries between public and private spheres, conceptions of the good, educational roles and responsibilities blur and gradually become porous. Teaching, learning and working become intertwined. Parents and educators work collaboratively as resources to students, and business is increasingly involved in education (Taylor, 2001). As commodities, teachers and professors are to do more with fewer resources and market competition redefines the purposes, culture, and functions of schools (Hargreaves, 1997). The goals of education shift from the public good to the private good as conceptions of education move from collaborative, cooperative, democratic education toward competitive, individualistic, market-driven education (Labaree, 1997, 1995; Earley, 2000).

What Have We Learned?

Much of the dialogue at the PCERA symposium was set in the quantitative paradigm which leaves little room for questioning how knowledge of teacher education is constructed and on the changing nature of society and of education. The transversal themes themselves emanate from a questioning that is inherent to postmodernism, as does the reflective, philosophical treatment that permeates the critical report, as well as its metaphors of fluidity and weaving. More could be learned if teacher education as a process and as construction, were

Knowledge-making continued

examined from this perspective and many others, including constructivism, critical theory, political economy, feminism, functionalism, and empiricism. Research results derived from different paradigms and theoretical perspectives are equally valuable and must be examined closely, compared, commented on, and complemented.

Research Directions

In light of our search for meaning, the tension between competing conceptions of education and of society is valuable, for it raises some essential questions. Whose property is education? Education does not only belong to pupils and teachers; it belongs to the public and a public discourse must demystify what education is all about. How does the public debate inform educational policy? If education is a public good, why has there been a shift toward education as a private good, i.e., toward competitive, individualistic, market-driven education? Under what conditions would there be a return to public good? (Weiner, 2001) There has been enough 'drive-by' public policy. Good research which challenges common sense, based on good questions, good data and good analysis, is needed to make good decisions (McCall, 2001).

Summary of Recommendations for Further Research

Several dimensions of teacher education have been identified in this critical report as potentially significant and worthy of further research and dialogue in the national debates on education. These are listed below:

- Studies of the influence of philosophical, economic, and societal contexts on educational goals, policies, and teacher education;
- Studies of ethical and equity issues in education especially as these pertain to teacher education;
- Studies of the processes of conceptualizing, curriculum development, detailing, piloting, and implementing new teacher education programs;
- Comparative studies of cognitive and meta-cognitive development, social development, and self-control in networked and non-networked classrooms;

- Comparative studies of pedagogy, sustainability, scalability, inclusion/ exclusion, control and privacy in networked classrooms as these pertain to teacher education:
- Studies of what counts as knowledge in teacher education and its development among teacher candidates and its realization within programs;
- Studies of evaluation of teacher candidates and of their preparation for assuming the role of evaluator;
- Action research and case studies of what counts as educational success;
- Studies in each province of the impact of demographics on teacher supply issues, followed by comparative national and international studies:
- Longitudinal studies of the effectiveness and comprehensiveness of forecasting teacher supply/demand, of resulting socioeducational policies, and of modelbuilding;

Summary of Recommendations for Further Research continued

- Studies of the influences of new economic models and strategic transformations on the teaching force, on pedagogical relationships, and on administrative roles and responsibilities;
- Comparative research on curriculum coherence within teacher education programs and reforms;
- Studies of the development and ongoing negotiation of professional identities and of induction into the profession;

- Studies of moral dimensions of teaching and professional autonomy, as well as democratic principles fundamental to pedagogy; and
- Studies of the relevance and influence of different theoretical and ideological perspectives informing policies, programs, pedagogies; and as forms of knowledgemaking among teacher candidates, teacher educators, and practising teachers.

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