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## **Boundary Breaking: An Emergent Model for Leadership Development**

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### **Abstract**

We summarize the results of a cross-cultural on-line project for graduate students in educational leadership at the University of Calgary in Canada and the University of Waikato in New Zealand. A conceptual framework for the collaborative Internet project is presented in conjunction with a summary of relevant literature and participant views of the project. Finally, the authors propose a model for on-line graduate learning in educational leadership with the following components: construction of meaning, provision of a forum for discussion, validation of personal knowledge, generative learning, formal and informal leadership, sense of community, and international perspectives.

### **Introduction**

A key component of professional development that results in sustainable change in educators' practice is ongoing support (Joyce & Showers, 1982; McLaughlin & Yee, 1988). For classroom teachers, ongoing support can be as basic as school timetables that provide teachers with shared planning time, administrator participation in professional development activities, or participation in action research projects. For school administrators, ongoing support can take the form of mentoring programs (Goddard,

1998) or professional partnerships (Barnett, 1987; Robertson, 1995) or study groups (Bailey, 1987).

In recent years, electronic networks have emerged as a structure to link educators involved in professional growth activities in diverse settings. For example, Writers in Electronic Residence is a successful network of several years' standing that links classroom teachers and their students across Canada with well known authors via electronic mail (Note 2). School Net is a Canadian program designed to provide members of educational organizations with access to people, resources, and information that will help to promote excellence in learning (Note 3). In New Zealand, an electronic mail discussion group called Leaders-Net was established in 1997 as a way to connect principals in schools located in both rural and urban settings throughout that country (Note 4).

In the context of providing ongoing support for professional growth, this article describes a university-based initiative designed to provide individuals enrolled in similar educational leadership development courses in Canada and New Zealand with on-line opportunities to engage in substantive academic dialogue about shared interests. A conceptual framework for the university partnership is presented, followed by a description of the participants and the processes in which they were engaged. Then, the findings of a survey of participants are presented and discussed.

## **Conceptual Framework for the University Partnership**

The cross-cultural linkage of graduate students and professors described in this paper was based on three key beliefs. First, leadership development programs at universities should contain an international component. Second, substantive learning best occurs within the context of active participation, preferably within a professional network. Finally, electronic communication has the potential to complement face-to-face interactions in university leadership development programs.

## **International Focus**

The current practice of educational leaders occurs in a political and social milieu that transcends international borders. School administrators in the Western world share common concerns such as school reform that emphasizes concurrent and sometimes dichotomous centralization of decision making about curriculum and funding in the hands of governments, and devolution of other decisions such as staffing to school councils (Dimmock, 1993). Educators as far apart geographically as England and Tasmania are struggling to reframe accountability using "stewardship" (Radnor, Ball, & Vincent, 1998) and "neo-pluralism" (Macpherson, 1997) as related touchstones for practice. The rise in popularity of a market model of education in Canada (Fleming, 1997), the United States (Murphy, 1995; 1996), Australia (Dimmock, 1993), and New Zealand (Codd & Gordon, 1991) and even the call for "hospitality" or the creation of a safe space for children and adults to learn (Rud, 1995), share a common base in the perceived inflexibility of schools in response to students' diverse needs.

The foregoing international trends in education have led policy makers and educators alike to look beyond their own borders for information. Webber and Townsend (1998) analyzed the similarities and differences in how Canadian and Australian teachers in Alberta and New South Wales responded to government mandates to increase educator accountability through, for example, expanded student and teacher evaluation programs. They found a shared confusion among educators in both countries

about the definition of educational quality, a concerted effort by governments in Alberta and New South Wales to avoid educator involvement in decision making, and a negative impact on the morale, professional growth, and career ambitions of teachers. Perhaps as a result of shared concerns about recent educational reforms, teachers around the world have looked for guidance in the work of researchers of international repute, for example, Canadians Michael Fullan (1995; 1997) and Andy Hargreaves (1997), Americans Karen Seashore Louis and Matthew Miles (1990) and Thomas Sergiovanni (1992), and British researcher David Reynolds (1997). Even politicians, in venues such as Alberta, Canada, have based their educational policy reforms on those introduced by politicians in other countries, for example, New Zealand's Sir Roger Douglas (1993).

Clearly, it is insufficient for leadership development programs to focus solely on local or national conditions which, although critical to leadership acceptance and success, may be misunderstood without a parallel exploration of international influences on policies and practices in education.

## **Active Participation in Professional Networks**

Emergent models for professional development include a constructivist approach (Sparks, 1995; Sparks & Hirsh, 1997) in which participants individually and collectively build knowledge structures rather than simply receive information from experts. Indeed, expanding understandings of the professional growth necessary for successful school reform have led Lieberman and Grolnick (1997, p. 193) to call for professional development opportunities characterized by "a wide array of learning opportunities, engagement and commitment to inquiry, access to real problems to solve, learning that connects to ... prior experiences, [and] opportunities to work with others..." They suggest that networking can provide one such professional development opportunity. According to Lieberman and Grolnick (1997), professional networks have several important characteristics. First, networks have the potential to provide participants with venues to articulate their tacit knowledge of educational practices, thus validating what Connelly and Clandinin (1988) called personal practical knowledge and supporting the assumption of Loucks-Horsley, Harding, Arbuckle, Murray, Dubea and Williams (1987, p. 111) that "a networking approach builds the capacity of its members to identify and solve their own problems." Also, networks have a generative nature that allow learning needs to emerge prior to the development of structures; thus, the focus and structure of seminars, mentoring initiatives, and other vehicles for learning can be refined prior to their implementation. Further, professional networks provide a plethora of opportunities for individuals to emerge as formal and informal leaders with a corresponding increase in motivation to participate. Also, the very survival of professional networks depends upon collaboration among members which, in turn, may facilitate a strong sense of community that Bell (1997) stated is necessary for successful teamwork. Importantly, networks that cross organizational boundaries may foster stakeholder relationships that are mutually beneficial, egalitarian, and safe.

One description of professional networks (Loucks- Horsley et al, 1987) outlined several conditions for success. First, networks must retain a focus to maintain members' interest and involvement. Second, network members must communicate regularly or the network loses its momentum. Further, successful networks tend to be small (Significantly, this recommendation preceded the introduction of electronic networks that are large and successful; Note 5). Importantly, networks should be simple and cheap so as to retain a low cost of active participation. Finally, network members should be able to rely upon one another for information and support. This description of the

conditions under which networks tend to be successful is complemented by Smith and Wigginton's (1991) description of successful networks as characterized by voluntary participation and spontaneity but "with a strong overlay of permanence and professionalism..." (p. 199) and "opportunities for teachers to develop leadership" (p. 204). The end result, according to Smith and Wigginton (1991), can be a sense among participants of being a significant part of a larger movement.

## **Supporting Professional Networks With Technology**

Successful learning manifests itself in alterations to beliefs and practices. However, before substantive change can occur, individuals need to clarify what change will mean for them (Fullan, 1997; Hopkins, 1987). Significantly, clarification implies meaningful communication, a construct that has been central to numerous professional growth models, including clinical supervision (Acheson & Gall, 1987; Cogan, 1983; Goldhammer, Anderson, & Krajewski, 1980), peer coaching (Joyce & Showers, 1982), differentiated supervision (Glatthorn, 1984), developmental supervision (Glickman, 1981), and cognitive coaching (Costa & Garmston, 1989). Each of these models has included a description of the skills and knowledge that are required of growth facilitators.

More recently, some of the challenges posed by professional development models have emerged as significant factors in on-line professional development networks. For instance, facilitators of on-line networks need to be aware of the importance of promoting sufficient trust among participants that they will feel comfortable discussing substantive issues within the group (Farley, 1992). That is, facilitators of on-line networks need to be aware of how perceptions of them as overly controlling leaders, perhaps even censors, can prevent network members from becoming actively involved in network dialogue; this caution is of even more importance when there is a "status hierarchy" such as that which exists between university instructors and their students (Thomas, Clift & Augimoto, 1996, p. 165).

Brent (1995, p. 3) described the reactions of individuals whose words have been controlled in some way by the network facilitator or editor:

Five hundred years of print have accustomed us to treat our words as extensions of our own identity, not to be messed with by others without our express consent nor to be inserted into others' works without acknowledgment.

Just as planners of professional development initiatives need to guard against the tendency of those involved most closely with programs to describe the results of their work in glowing terms, designers of on-line professional development programs need to beware of the hyperbole that too often characterizes reports of on-line networks (Rogers, Andres, Jacks, & Clauset, 1990). Similar cautions apply to the unrealistic expectations, held by some network participants, of immediate and substantive dialogue with colleagues from around the globe, and to the tendency to minimize the technical challenges presented by the need to integrate software, computers, modems, and server access.

On-line facilitators also must grapple with the degree to which they should structure electronic dialogue. Waugh, Levin, and Smith (1994) described how the structure of on-line networks can range from the anarchistic approach, characterized by the free flow of ideas, to highly structured models, which are easier to organize but may restrict the breadth and depth of participant dialogue. Whatever the degree of structure

decided upon by facilitators and participants, Waugh, Levin, and Smith (1994) suggested that network activities have a life cycle that include observable stages: start, implementation, refinement, and closure. Further, they advised project facilitators to balance "high tech" with a "high touch" approach that acknowledges the benefits of respecting participants' needs for brevity and careful editing of electronic exchanges. Further, they described the potential for participants to establish an electronic presence that will affect their professional reputations locally and in much broader contexts, plus the importance of clear time lines for participant exchanges and the salience of promoting shared ownership of the project. To this end, Waugh, Levin, and Smith (1994) urged facilitators to strive to promote dialogue by validating the ideas of participants, posting "cheerleader" messages, and submitting dialogue summaries that lead to spin-off conversations. Further, Thomas, Clift, and Augimoto (1996) urged on-line network facilitators to respond in person and on-line to the issues and concerns that students articulated. Clearly, successful facilitation has the potential to result in what Fulk, Steinfield, Schmitz and Power (1987) described as a "social presence," or the degree to which the medium promotes personalization, warmth, sensitivity and sociability among the people involved.

## **Summary of the Conceptual Framework**

Based on the foregoing information, the cross- cultural linkage described in this report attempted to achieve an environment characterized by the following attributes:

- Opportunities to construct personal meaning individually and collectively.
- Provision of a forum to discuss substantive leadership issues encountered in theory and practice.
- Validation of personal practical knowledge.
- A generative approach to issue identification that encouraged participants to articulate their immediate concerns and interests.
- Emergence of formal and informal leadership.
- Creation of a strong sense of community.
- Opportunities to gain international perspectives on policies and practices.
- Flexible structure
- Proactive intervention by network facilitators

These characteristics formed the basis for the cross- cultural network that is described in the next section.

## **Project Structure**

This cross-cultural university partnership began with the authors deciding to facilitate an on-line exchange between graduate students concurrently taking educational leadership courses in Alberta, Canada, and New Zealand; the courses focused on school culture and educational review and development. This decision necessitated the development of complementary course outlines that included a common text (Hargreaves, 1997) and a common assignment that allowed students to create an electronic portfolio consisting of postings to an international electronic mail discussion group called the Change Agency Listserver (Note 6). The six New Zealand students were required by their professor to complete the electronic portfolios while the class of twenty-one Canadian graduate students were able to choose between completing an

electronic portfolio and a set of article reviews; eight Canadian students elected to complete electronic portfolios, while another six students chose to read the Change Agency postings and discuss them in class and seven students decided not to participate in the on-line dialogue either by posting or reading messages.

The eight Canadian students who completed electronic portfolios consisted of one elementary school principal, three elementary school junior administrators, two secondary school junior administrators, one elementary school teacher, and one secondary school teacher. The six Canadian students who chose to read but not post messages consisted of one elementary teacher, two secondary school teachers, one secondary school junior administrator, and two instructors in postsecondary institutions. The seven nonparticipants included four elementary school teachers and three secondary school teachers. The New Zealand graduate students included two principals, one deputy principal, and three international students. The international students were a primary teacher, a College of Education president and a Ministry administrator from Zimbabwe, Solomon Islands and Indonesia.

Students in both settings who completed electronic portfolios could participate in the on-line dialogue in any of the following ways:

- Respond to e-mail messages posted by others on the Change Agency.
- Post messages to the Change Agency that did not respond to someone but started the general discussion in another direction.
- Send an e-mail message to the professor(s) and reflect on how the general discussion related to the course readings and class discussions.
- Send an e-mail message to the professor and make suggestions about how to improve the Change Agency.
- Post brief reviews of books and/or articles that related to the topic of school culture.

The messages from each student to the Change Agency or the professor were collected in an electronic file or "portfolio" and evaluated according to these criteria: breadth, depth, clarity, evidence of critical scholarship, and technical quality.

Both the Canadian and the New Zealand professors told their students that the varying levels of experience with both e-mail and teaching that students brought to the course would be recognized in the evaluation of the electronic portfolios. It was expected that students who were familiar with e-mail would contribute a larger number of postings to the Change Agency than those who had not used e-mail before the class. Further, it was anticipated that junior and senior educators would introduce different content to the electronic discussions. Finally, students were told they should expect that they would have diverse backgrounds as teachers, consultants, and administrators in a variety of educational contexts and that their diversity likely would be reflected in the electronic portfolios.

The cross-cultural graduate student exchange was limited by the fact that, due to different university schedules, the university terms overlapped by only six weeks. Therefore, the on-line exchange occurred over a six-week period, the first two weeks of which were used to get students in both settings fitted with e-mail accounts and, in some instances, to familiarize students with e-mail software and computer hardware.

An open-ended survey instrument was developed by the two researchers to determine the utility and impact of the collaborative project. It was piloted with four Canadian students who had completed electronic portfolios in previous courses with the

Canadian professor, revised based on student feedback, and then administered to all students in the two courses.

The data were analyzed through a series of detailed readings to discern patterns and categories that emerged from the data rather than from a predetermined framework. The resulting categories of information are described in the following section.

## **Findings**

This description of the results of the graduate student survey is presented as a series of categories that summarize the substance of responses to the survey items. This format was considered by the authors to be more reflective of the patterns of information provided by respondents than a summary that followed the sequence of items in the instrument would be.

### ***Enhanced opportunities for gaining critical perspectives nationally and internationally***

The opportunity to explore international influences and perspectives on policies and practices in education was one of the major themes that came through the students' responses in the survey on the collaborative study. They articulated the importance of seeing the bigger picture of issues in education internationally. As one student so aptly put it, "I think it was most powerful for me in its reminder that there's a world out there!" The listserv gave students the access to a far wider community of scholars than their usual graduate classrooms. Students from New Zealand, Zimbabwe, the Solomon Islands, Canada, and Indonesia took part in discussion and debate. One student said he would tell others about this learning experience in this way: He said he would "...strongly advise them to take part as it will help them feel connected to educators worldwide." Another said "Issues presented by our New Zealand counterparts brought forth a variety of perspectives which would otherwise have not been considered, i.e. the Zimbabwe colleague whose discussion of 'postmodernism' reminded us to look beyond our own situations to a 'global' view." One student said "I have been able to develop international perspectives through the responses of members. It gave me the opportunity to broaden my understanding of how things happen or are done in different parts of the world." The fact that there were similar issues being confronted by educators across the Commonwealth was also noted as a positive outcome of the project as it gave the students opportunities for collective construction of meaning. The outcomes from this creation of counter cultures within the learning framework were ideas and possibilities, affirmation and challenge. One student described it like this: "Good to know others are having similar experiences and what they are doing about it." This led to a feeling of global community among members of the educational leadership courses.

### ***Developing a sense of community***

The students felt they were given a unique opportunity to 'meet' with people in other parts of the world. This was something they would normally have not had the opportunity to do in their graduate studies. One thought there might be chances for study visits or sabbaticals in the future. Her concluding statement was, "In my culture there is a saying that 'those who have met, will sometimes meet again.'" This summarized the connections she had experienced with these newfound friends on the other side of the

Commonwealth.

There were many interesting comments from the students about how well they felt they knew their colleagues on the other side of the world through their discussions on the listserver. The students who were in the same class on campus felt they gained new insights about their face-to-face classmates through their discussion on the listserver, but found that it was more difficult to get to know those students who were in a different classroom on the other side of the Commonwealth. Early in the project students in New Zealand asked for profiles of their Canadian counterparts as they felt they were writing to an unknown audience and initially found this difficult. They felt they needed a greater knowledge about their counterparts' interests, educational positions and professional issues. These were provided. A Canadian student, in his final evaluation, also suggested that receipt of a profile of each participant before posting began would "add interest and context to the discussion." Along the same lines, another student suggested that we "begin class with having to e-mail a classmate or you [the two professors] [a] letter of introduction."

On the other hand, others found that writing to an unknown audience made things easier. One student said, "Sometimes it is easier to say what I want to say without looking at a face." Students also found the "think time" before making a response a valuable part of taking part in the asynchronous nature of electronic discussions. One student said that the listserver discussion "allows time to hear 'their voice' and decide to agree or disagree." However, the students were also really surprised and pleased at the rapidity of responses to their contributions. One of the students commented that "whilst this was not a face-to-face communication I, however, felt as if I was talking directly to someone. Above anything else, electronic group discussions make learning fun and exciting." Another student voiced her enjoyment of the new form of communication by stating "I know how to communicate in a new way and do so daily."

Another outcome of the involvement in the collaborative study was the positive impact that it made on the complementary in-class sessions that were being held on each campus. Students were motivated and excited about responses they received on the Change Agency prior to their class sessions. One student summarized this by saying, "There was great anticipation by participants regarding how others would respond to their postings," and indeed disappointment when there was no response. Students felt they generally had thought in far more depth about the articles and the discussion carried out on-line, and this depth of critique carried over to their continuing class discussions. One student who saw the two types of interaction as complementary, giving him a greater understanding of his colleagues., said "This was like reading other people's papers. It allows perhaps a deeper look at your colleagues" (rather than face-to-face). Canadian students wondered whether those students in the class who didn't take part in the collaborative project felt "left a bit out of the Change Agency 'loop'."

However, some students found they enjoyed the class discussions more than the on-line discussion. One student said "I enjoyed the in-class discussions more because they involved more people than [those who] responded to a given posting." Another said, "I prefer in-class sessions because I feel a bond is easier to develop. The non-face-to-face bonds develop as well but take time." This 'bond' was also referred to by another of the students who could see good potential if time were given. She said "I believe that a bond could easily develop [among] individuals, schools and countries after the initial interaction on the Change Agency. You very quickly see someone who sums up education as you see it, who you can really relate to. I believe this is a good form of professional development." Therefore the students identified their graduate study as their professional development and saw that with the Change Agency, this could continue



after the last course assignment was due.

### ***Continuing professional development***

The students involved in this collaborative study saw the electronic portfolio assessment option as more than an assignment for a course of study. The findings indicated that they could see that it could make a valuable contribution to their continuing professional development well after the assignment or course of study was over. One student summarized it this way: "I would suggest that the use of electronic portfolios is an effective way to develop one's knowledge base while gaining a very current perspective in a specific educational area. As well, this fosters critical writing and reading which will benefit the student at the conclusion of the program." This pervasive theme in the findings was also summed up by another participant who commented that "I will be able to keep current through the Change Agency after my courses are done." These students involved in graduate study talked in class about the positive effects of tertiary study on their practice and their ability to keep up with the ever developing knowledge base. They therefore valued the opportunity to establish a presence in a forum which could continue well after the graduate classes had finished. Nearly all of the students involved in the collaborative project did not unsubscribe from the listserver in the six months after the project had finished.

Continued access to research and literature, especially when studying at quite a distance from a university campus, was appreciated by some students and summed up by one student who said she found that "reading quotes from literature in others' contributions gives me a wider knowledge base than [that which] is readily available when studying at a distance."

Students used ideas from the postings with their professional colleagues outside of their university course work. One woman set up a file of contributions for other school members to view. Others made statements like "[it] has also led to interesting conversations with colleagues [outside of the Change Agency]" and another said "I shared one of the postings with my colleagues and it has generated quite a discussion." Another used the contributions to generate discussion in her local principals' group. The learning community was being redefined through this process.

The fact that the "information is current, up to the minute" was noted by the students. Not only were they critiquing recent publications, but the students' contributions were written about issues of immediate concern and interest. Also, there was a number of postings on particular issues such as networking, future trends, and postmodernism, which built into a source of reference material for future use.

### ***Influence on professional beliefs and practices***

Although more difficult to ascertain from the students' responses, we believe there was an influence on students' professional beliefs and practices through the reading and posting of contributions on the listserver. One student in particular intentionally sought clarification and challenge of his own beliefs, values and practices. He said "I have tried in all my contributions and discussions to use or reflect on situations from my country in the hope that I will receive contributions or critiques from members which will help me adjust my perceptions or practices in the areas of policies and practices in education." Another student stated that this learning experience "promotes reflection and analysis of personal beliefs." Other students' responses to questions on the survey did indicate that

their involvement in the collaborative study had prompted them to change their leadership practice or take action in some way. One student said "Some postings have given me metaphors that help me understand certain ways of thinking and made me reflect on my practice," and then gave specific examples of these from postings both from Canada and New Zealand. One student commented on her further reflection on the issue of student respect and the wearing of hats and said "I have really done some hard thinking and am looking at this issue with my students and parents."

An over-riding theme, through the comments the students made about their involvement on the Change Agency, was the power it had of making them reflect upon their own value positions, culture and ways of knowing. One student said "One re-examines one's own outlook through the eyes of a reader from overseas. For example, when communicating internationally one has to provide context which often simplifies our own issues." The students had to negotiate cultural boundaries in their pursuit of understanding and being understood. Another student commented about the positive challenge to critically reflect as part of this process. She said, "Critical opinions are stated in ways that are not demeaning or hurtful. I really think this helps to push the edges of our reflections of our own beliefs and practices."

Another area of influence on professional beliefs of this electronic task was that the students gained in confidence by personally using e-mail and the Internet, and several students were planning ways they would take a greater leadership role in promoting technology usage by students and teachers in their educational institutions. This was particularly true of those educators who had not used e-mail prior to this project. At the beginning of the project one student shared her "trepidation about the unknown and feeling of inadequacy" and ended the study by saying, "I'm pleased I had to do this and have found the interchange of information and exposure to the ideas of others to be very valuable and at times challenging." Significantly, one student stated that she believed that personal experience like that provided by the collaborative electronic study was imperative for an educational leader. She said, "In the future we will be using e-mail as an educational tool for our children and so we need personal experience as teachers [with] the benefits and practicalities of this process." The new skills they learned were seen as an added bonus to the benefits of being involved in the collaborative study.

### ***Publishing Skills and Opportunities***

Not only were the students challenged to reflect but the students also commented on how they had developed in being able to put forward a strong case or perspective on particular issues. They said this necessitated being able to think carefully and to make sure they had read well on the subject. One student said that responding to issues "...forced me to do additional readings on topics to expand my perspectives or to support my personal belief." Another agreed that "in making a contribution it's a real commitment of your own ideas when going public, so they have to be well founded." One student stated, "Writing for a particular audience (potentially global) in a particular format...requires a certain ability to analyze, [and] synthesize in a succinct manner." Others concurred that a short posting was much more difficult to develop than a full 3000-word assignment as they had to think more carefully about what to say when word length was limited. One student went so far as to say that compared with literature reviews and critical essays, the contributions to the listserver incorporated a process that "is superior because it broadens one's perspective so much more and one is accountable to a much wider audience." However, one student did not post to the Change Agency because "the brevity of the postings did not allow much critical discussion" and another

student preferred to read the longer contributions and enjoyed the chance to read more than one response on a particular issue.

Students received international "publishing" opportunities which are seldom afforded graduate students. One student was "spotted" by the editor of an international journal who asked her to further develop her contribution and submit it to the journal. The student described this publishing experience by stating that "the opportunity has afforded me 'courage of voice' [and] stretched me into realizing the potential of shared ideas.

### ***Opportunity for innovation and challenge***

The students commented in their final course evaluations about the uniqueness of the electronic portfolio assignment as part of their graduate course work. They not only valued the opportunity to be given a variety of assessment options within the course, but also felt that they were taking part in something which was an exciting innovation. Further, they used words such as "exciting," "progressive," and "valuable" to describe the cross-cultural project. One student described the joint initiative as a "very progressive and valuable collaborative effort," and went on to say that, "the major value of this is that it is current - [happening] right now." Another student supported this by stating that she felt that it was "a real activity, [with] real people on the other end." The students felt that it was a useful activity, that "your words actually count" and that others were interested in their viewpoints. They were writing with a purpose and receiving constant feedback. It was too real for one who was "concerned about the consequences of my words on, for instance, central office!"

Some students talked about "possibilities," that is, chances to explore leadership issues collaboratively and motivation to use e-mail with the children in their classes. A sense of global community was aroused and students raised the possibility of this type of study being taken one step further and actually meeting with the students they had discussed and debated key issues with in a collaborative study tour exchange. One student said that the experience "makes me think about possibilities such as school contact with other countries, doing courses by e-mail."

### ***Computer skill level and confidence***

Computer skill level and confidence influenced student involvement in the Change Agency. The New Zealand students were not given an option for this particular assignment and their responses echoed their fears at the beginning. Many of these students said they would not have chosen to become involved but, in hindsight, were pleased they had no other option. One student said, "There was trepidation about the unknown, a feeling of inadequacy because of my lack of knowledge and skills, and bewilderment about the jargon, but [I'm] also pleased to be forced into it and looking forward to the personal growth and finding out what others seem to be so enthused and excited about." This student later said, "I'm pleased I've had to do this and have found the interchange of information and exposure to the ideas of others to be very valuable and at times challenging." Another student said "I was afraid of computers and I was ignorant of the wonders computers can do to help people to do things, especially in education. For a week or so I tried to avoid the rooms where the computers are...It was very scary indeed on the outset..." and later said, "It has been absolutely excellent and educational. There was a whole lot of things covering a wide range of topics and issues I

would not have had access to if I had not joined the discussion group." Another student said that the learning experience was "...wonderful! I really wondered at first whether I should even venture to participate. Once I got through the initial technological 'glitches' and intimidation in writing my views and opinions for such a large and unknown audience I was fine. I felt proud of my accomplishment."

In fact, some of the students were able to link their experiences of the personal change process they underwent to their participation in this study to the theory. One student said, "Everard and Morris (1985, p.170) state change usually leads to temporary incompetence and that it is uncomfortable! How true!" Fullan's (1993) work on change also featured in their final reflections about the process they had gone through to take part in this study. One student said, "I do now challenge Fullan's writings - that people can't be forced to change (1993, p.22). This learning was forced in a way - if we had not changed and become e-mail users we would not have completed this section of the course." Another said "I now see why Fullan (1993, p.27) said 'Problems are our friends.' All those hassles at the start were worth it." Another student had advice for the instructors. She said, "My only suggestion is that you (both) strongly encourage students not to back out at the beginning of the course if it looks too scary."

The Canadian students were given an option and the majority of the students who chose not to be involved in the project said that either skill level or computer difficulties had influenced their choice of assignment formats. Some students had difficulty connecting to the listserver from their homes, while others had malfunctioning computers at the time. They mentioned words like "intimidating," "lack of time to learn," and "frustrating" in their justification for choosing not to be involved.

However, there also were Canadian students who had never used e-mail who took the electronic assignment option. Their comments were similar to their New Zealand counterparts. One student said "I would say it was VERY stressful and intimidating but a learning experience that I would encourage others to participate in because I learned a great deal." Another Canadian student who did take part suggested that the instructor "should make the 4th or 5th class an entire lab and mandate one small posting from each student." Another felt that they should "devote some actual class time to mock postings."

It is important to note that, despite their frustrations with learning new computer skills and the time that took, students from both countries were disappointed the project could not have continued longer and that the New Zealand students finished their contributions just when the Canadian students felt they were getting underway.

### ***Guidelines and structure***

The students in both countries sought more structure than was originally planned for. Students asked for suggestions and "starters" for ideas during the course and also worked on group responses in class sessions. This was more at the beginning of the study when they were unsure of what was expected. They gained in confidence after reading and contributing to the listserver. None of the students made any comment about the mandatory nature of some of the work, particularly in the New Zealand course where no options were given. Indeed, many students felt that all students taking part in the graduate course should be mandated to make at least one posting as part of an in-class session, and many commented that they felt that guidelines and more structure would have enhanced the project. One student stated that the study needed "more direction and feedback" because to him "at times it felt like 'hit and run'." Another student wished that there had been "private" messages of affirmation as there was no evaluative feedback until the end of the study and this did not help to allay fears during the initial stages of

contributing. Finally, one student felt that "there needed to be more emphasis on collaboration in a conversational kind of style" and in a similar vein another student felt the contributions were a "bit dry" at times.

The paradox of the students wanting more structure and our belief of the necessity of a more fluid context for learning raised an issue that needed to be addressed. If we believed in all of the components of the learning framework, highlighted by the findings, overstructuring was the antithesis of what we were striving for. Their discomfort was indicative of how dependent some of their previous learning contexts have made them. We consciously worked to resist their attempts to have too much reliance on us. We knew the initial discomfort was essential in the development of intellectual independence and to enable the formal and informal leadership to emerge from the student group.

### **An Emergent Model**

The results of this exploratory cross-cultural electronic partnership support the development of a structured framework for university-based educational leadership programs. Although the Internet has emerged as a free-flowing, often chaotic environment that fosters--in its positive manifestations--unrestrained creativity, it is obvious from the partnership described here that the successful use of the Internet as a teaching tool depends upon a clear understanding of the resultant changes to roles and expectations for participants, that also may have implications for more traditional approaches to leadership development. Table 1 (see next page) portrays an emergent technology-enhanced model for university-based leadership development programs. Many aspects of the model are consistent with widely used leadership development models. However, the nature of on-line instruction changes the model components in many ways, including the ease with which international delivery can occur. The model is described as "boundary breaking" because of its capacity to move learning beyond the boundaries normally imposed by cultures, roles, institutions, economics, and national borders.

**Table 1**  
**Boundary Breaking: An Emergent Model for Leadership Development**

<b>Attribute</b>	<b>Student Role</b>	<b>Instructor Role</b>	<b>Implications</b>
Construction of meaning	<ul style="list-style-type: none"> <li>● Rigorous reflection</li> <li>● Active 'listening'</li> <li>● Juxtaposition of self &amp; others</li> </ul>	<ul style="list-style-type: none"> <li>● Examination of instructional practice</li> <li>● Reduced role as information provider</li> </ul>	<ul style="list-style-type: none"> <li>● Co-learning</li> <li>● Reduced hierarchy</li> </ul>
Provision of a forum for discussion	<ul style="list-style-type: none"> <li>● Challenging debate</li> <li>● Public expression</li> <li>● Self-evaluation</li> <li>● Risk taking</li> <li>● Cross-role dialogue</li> </ul>	<ul style="list-style-type: none"> <li>● 'Public teaching'</li> <li>● Asynchronous communication</li> <li>● Redefinition of 'courses'</li> <li>● Shared evaluation</li> </ul>	<ul style="list-style-type: none"> <li>● Potential discomfort</li> <li>● Technological infrastructure</li> <li>● Computer skill development</li> <li>● Seamless integration of technology</li> </ul>

Validation of personal knowledge	<ul style="list-style-type: none"> <li>● Exploration of practical experience</li> <li>● Analysis of personal beliefs</li> <li>● Articulation of assumptions</li> </ul>	<ul style="list-style-type: none"> <li>● Acceptance of practice-based knowledge</li> <li>● Contextualized theory</li> <li>● Critical analysis of relevant theory &amp; research</li> </ul>	<ul style="list-style-type: none"> <li>● Confluence of theory &amp; practice</li> <li>● Reduced status differential</li> </ul>
Generative approach to learning	<ul style="list-style-type: none"> <li>● Active involvement</li> <li>● Examination of personal practice</li> <li>● New metaphors for practice</li> </ul>	<ul style="list-style-type: none"> <li>● Trust in process</li> <li>● Reduced intervention</li> <li>● Less control</li> <li>● Diverse student needs for information</li> </ul>	<ul style="list-style-type: none"> <li>● Flexible course structure</li> <li>● Varied evaluations</li> <li>● Issue relevancy</li> <li>● Contextualized participation</li> </ul>
Formal & informal leadership	<ul style="list-style-type: none"> <li>● Enhanced locus of control</li> <li>● Embraced stress</li> </ul>	<ul style="list-style-type: none"> <li>● Shared leadership</li> <li>● Modeled leadership</li> <li>● Clarification of leadership practices</li> </ul>	<ul style="list-style-type: none"> <li>● Expanded participant profile</li> <li>● Shared responsibility for learning</li> </ul>
Sense of community	<ul style="list-style-type: none"> <li>● Links to colleagues outside classes</li> <li>● Consideration of 'others'</li> <li>● Cross-role dialogue</li> </ul>	<ul style="list-style-type: none"> <li>● Attended to affective behaviors</li> <li>● Encouragement</li> <li>● Attention to safety</li> <li>● Pastoral care</li> </ul>	<ul style="list-style-type: none"> <li>● Reduced teacher isolation</li> <li>● Global community</li> <li>● Enhanced local community</li> </ul>
Growth of a counterculture	<ul style="list-style-type: none"> <li>● Seeking cognitive dissonance</li> <li>● Scrutiny of the heretofore accepted</li> </ul>	<ul style="list-style-type: none"> <li>● Imaging of alternatives</li> <li>● Creating opportunities to question and imagine</li> </ul>	<ul style="list-style-type: none"> <li>● Pushing the edges of beliefs &amp; practices</li> <li>● Possibilizing</li> </ul>
International perspectives	<ul style="list-style-type: none"> <li>● Cross-cultural analysis</li> <li>● Reconsideration of personal contexts</li> </ul>	<ul style="list-style-type: none"> <li>● Collaboration with compatible instructors</li> <li>● Provision of materials</li> <li>● Integration with local &amp; national communities</li> </ul>	<ul style="list-style-type: none"> <li>● 'Big picture' focus</li> <li>● Alternative perspectives</li> </ul>

## Construction of Meaning

The on-line leadership development model is intended to complement and not replace other activities such as face-to-face classes and seminars, principal internships, and independent scholarly research. As such, expectations for student and instructor participants in on-line learning should be consistent with normal standards for academic rigor. However, the on-line model is intended to create a context in which participants' reflections and understandings are subjected to intense analysis from several perspectives: self, local colleagues and instructors, peers in international settings, and individuals representing, for example, parents and policy makers. This juxtaposition of self and 'others' is designed to clarify personal understandings, promote active 'listening,' and create cognitive dissonance that motivates participants so that individual and collective meanings may be constructed. These alternative perspectives form part of the reflective observation and abstract conceptualisation of Kolb's (1984) learning cycle.

If substantive meaning-making is to occur, however, on-line instructors must alter some of their instructional practices. For example, courses must be reconstituted to permit active involvement by a wide range of individuals who are registered formally as students and others who participate informally as participants from the broader community. Thus, the saliency of the role of instructor-as-information-provider, of necessity, is reduced because 'others' also provide participants with access to theoretical and practical information. However, there is a corresponding increase in the importance

of instructor-as- instructional-designer, able to formulate a learning environment that promotes co-learning and restricts traditional participant hierarchies.

## **Provision of an On-Line Discussion Forum**

Expressing one's emergent understandings in an on-line forum is decidedly public, more so than what registrants in university leadership development programs usually expect to experience. Instructors should anticipate at least an initial reluctance among graduate students to post messages to an Internet forum. Nevertheless, the nature of on-line communication, and the resultant care that participants take with their public statements, enhances rather than reduces academic rigor. That is, messages tend to be subjected to extremely thorough analyses by authors prior to posting.

Instructors using an on-line delivery format for courses or modules also should be aware of the public scrutiny that awaits their own work. In the context of the Change Agency, participants include professors from several universities, policy makers, department of education personnel, teachers, and both school-based and central office administrators. Public and private assessment of instructors' work is immediate and widespread. Consequently, instructors must structure the on-line discussion forum carefully.

Other instructional considerations include a willingness to alter the definition of teaching to include asynchronous communication, which is of particular relevance to international participants operating in very different time zones. The resulting 'teaching' that can and does occur at all hours of the day and night requires instructors to develop patterns of work that allow them to fulfil their other research and service obligations. As well, graduate courses that had been taught previously as twelve three-hour meetings over a four-month period may need to be reconceptualized as an integrated package of face-to-face and virtual 'classes.' Consequently, student and instructor understandings of courses will be challenged and some discomfort may result, particularly among those expecting a 'typical' university course format. Even student evaluation will be altered because of the need for instructors to incorporate into assessment procedures the feedback that students get from other on-line participants.

It is worth noting here that the design of an on-line discussion forum, whether that be the construction of a listserver or the use of a news group, should include opportunities for graduate students to strengthen their computer skills. As well, it is critical that the integration of technology into instruction be as seamless and user-friendly as possible, regardless of the technological infrastructure that is utilized.

## **Validation of Personal Knowledge**

Participation by non-students in on-line instructional settings may promote the inclusion of practice-based knowledge in conversations. Rather than weakening the academic rigor associated with graduate study, practical knowledge can serve as the basis for examining professional beliefs and articulating previously taken-for-granted assumptions. In fact, the wider the participant audience, the greater the likelihood that individuals will experience public challenges to unstated beliefs and assumptions, something that most graduate programs strive to include.

It was obvious in the project described in this report that theoretical and empirical perspectives can be integrated into dialogue as significant issues emerge from practice-oriented conversations. However, this may only be possible when university instructors are able to recognize the value of practical knowledge as a vehicle for

contextualizing the academic focus of leadership development programs. That is, the on-line instructional framework proposed here may provide enhanced opportunities for theory and practice to converge in ways that are meaningful for participants who are willing to accept and, in fact, to seek a reduction to the status differential that too often is associated with theory and practice. Theory takes on a wider meaning through this validation of personal theories.

## **A Generative Approach to Learning**

The proposed model for on-line graduate learning is generative in nature. That is, it is based on the belief that active engagement in personally meaningful activities is essential to significant learning. Feedback from participants in the Canada-New Zealand collaborative project included mention of how the on-line dialogue made course content more meaningful because the topics of conversation emerged from individuals' professional and cultural contexts. However, participants highlighted the fact that feedback from colleagues in very different settings elicited examinations of personal practice and the construction of new metaphors that were useful frameworks for considering their professional environments.

From an instructional perspective, generativity requires a relinquishing of some control and a sufficient trust in the ability of other participants in the on-line learning community to pose and respond to learning challenges relevant to the course. Further, instructor interventions in the conversation should be relatively minimal and particularly strategic when compared to many face-to-face interactions. Conversely, there is an increase in the need for instructors to respond to a much wider range of student information needs, the result of greater individualization in course expectations.

The potential results of a generative approach to learning include a course structure that is sufficiently flexible to allow for varied evaluation formats, such as electronic portfolios and collaborative writing by students in different universities and countries. Similarly, issue relevancy may be increased and students may find that their course participation is contextualized in terms of their individual settings and in the international educational community.

## **Formal and Informal Leadership**

Student participants in the proposed model have the potential to exercise extensive control of their learning. They are able to choose, more than in traditional courses, when they will participate in on-line dialogue and to address topics of greatest relevance to them, supported by a broad range of university- and field-based colleagues. Further, different students will emerge as dialogue leaders and information sources as different topics within the parameters of the course arise in the conversations. It is noteworthy that, despite the greater stress of learning in a significantly public setting, the strong control that students have of their learning permits them to reframe the stress so that it becomes an 'embraced stress' that is supportive and motivating.

Opportunities for shared leadership facilitate the modeling by instructors of the very leadership practices being studied by graduate students. That is, instructors can model educational leadership characterized as facilitative, collaborative, adaptive, informed, proactive, and constructive--the features of the transformational leadership so necessary in a rapidly changing, postmodern educational context. Importantly, the modeling of effective leadership practices in the context of graduate learning is enhanced if instructors describe the ways their instructional practices reflect current



knowledge. That is, instructors should explain to graduate students how course organization and delivery formats were not accidental but, in fact, the result of a conscious attempt to model the manifestations of effective leadership. This clarification can emphasize to students the benefits of distinguishing between what Purkey and Novak (1984) described as intentional success versus accidental success.

The benefits of promoting formal and informal leadership within on-line graduate learning include an expanded participant profile. Several graduate students in the project described in this report found that their postings to the Change Agency resulted in requests to submit manuscripts to academic publications, to participate in policy committees within their local educational community, and invitations to apply for administrative positions. Other students reported going to meetings and seminars to discover that their postings were the basis for constructive dialogue outside of the graduate courses. These were unanticipated benefits to project participants that resulted from the public nature of their reflections, critiques of literature, and analyses of public policies.

## **Sense of Community**

A key feature of the university-based, on-line model for graduate learning being presented is the strong sense of community that can result from its successful implementation. Project participants certainly communicated with colleagues in another country, but equally important was the fact that the electronic dialogue reflected a consideration of 'others' that increased as the project evolved. Participants found themselves responding to one another in ways that precluded the posting of treatises that were of interest only to the people writing them. In other words, participants' postings reflected considerable consideration of the needs and beliefs of the authors of other postings, including individuals in parental and policy-making roles. This became a redefining of the learning community through the dissonance created by different roles and cultures within the educational context. From this perspective, the graduate learning was strengthened by cross-cultural and cross-role dialogue that elicited a host of rich learning opportunities.

It is incumbent upon on-line instructors to attend to affective behaviors that influence a developing sense of community. That is, instructors need to send electronic mail messages to all participants in order to make gentle suggestions about posting practices that invite broader participation rather than stifle it. Alternatively, instructors should be willing to embrace the equally necessary 'invisible' work encompassed by private messages to individual participants to validate and encourage continued participation. Other behind-the-scenes work includes efforts to familiarize graduate students with computer software and hardware, and to provide them with information, authors, titles, and ideas that support students' information needs and interests.

Successful participant attention to community building can reduce teacher and administrator isolation, plus promote membership in an international community, a phenomenon that is a particularly rare experience for school-based educators. Furthermore, participants' sense of membership in a local community can be strengthened because of on-site conversations that are enriched by participation in the international on-line community.

## **Growth of a Counterculture**

A strong counterculture emerged during the six-week cross-cultural dialogue. That is,

participants quickly understood that it was safe to disagree with one another on-line and in face-to-face classes, more than might normally be expected. Students and instructors found that their taken-for-granted assumptions were challenged by participants in both countries. For example, most individuals in the two groups seemed to find relevance in discussion topics that ranged from the possibly trite-- students' wearing hats or ball caps in schools, to the seemingly narrow--the possible relationship between the length of postings and the depth of analyses, to the very broad--postmodern influences on learning. Nevertheless, virtually none of the topics featured in the on-line dialogue escaped the scepticism of some participants. Thus, cognitive dissonance was encountered by participants who previously had not considered the possibility that hat-wearing students did not necessarily lack respect for teachers, that on-line dialogue may be limited in some important ways, or that postmodern debates may have little or no relevance for colleagues in developing countries.

The emergence of a counterculture meant that the instructors had to nurture opportunities for themselves and their students to discuss how cognitive dissonance may be a prerequisite for meaningful academic discourse. The instructors learned to highlight how intended and accidental cognitive dissonance provided opportunities to embrace intellectual discomfort, rather than avoid it. Pushing the edges of beliefs and practices in this way created new possibilities for learning. We called this "possibilizing". In fact, one of the more powerful components of the learning model could be its capacity to facilitate participant understandings of the need for leaders to seek out and nurture those members of the school community who are most likely to voice uncertainty or discomfort about policies and practices. Further, the cross-cultural dialogue experienced in the present project suggests that educational leaders may benefit from developing their abilities to move comfortably and often from the perspectives of formal leaders into the worldview of a viable school counterculture.

## **International Perspectives**

One of the most potentially beneficial components of the on-line delivery model is its international dimension. Participants in the New Zealand-Canadian project developed a deeper understanding of how educational systems in the two countries were undergoing very similar changes, often mandated by governments with equally conservative economic and political philosophies. Learning was enriched further by the views of international students, particularly those from developing countries in attendance at the New Zealand partner university, who countered the tendency of their Western colleagues to fail to consider the contexts of educational leadership in developing countries. Thus, the focus of the program promoted participants' understandings of international influences on local educational conditions.

Instructors working within the framework of the on-line model must assume responsibility for promoting the international connections necessary for successful collaboration. Responsibilities include identifying and contacting colleagues with a shared interest in collaborative on-line instruction, collectively ascertaining the compatibility of instructors and courses, and deciding upon the materials and procedures that will form the basis for the cross-cultural dialogue. Equally important is the responsibility for linking the international component of instruction to the local and national educational communities. Instructors must not neglect their responsibility to help future and present educational leaders apply their 'big picture' understandings appropriately within local communities, because a key determinant of the success of educational leaders is their ability to understand the culture of their immediate

educational surroundings.

## Conclusion

The proposed on-line model for graduate learning is based on understandings that emerged from a review of relevant literature and an exploratory joint project conducted in the contexts of Canada and New Zealand. However, the model should be understood to be tentative and in need of further development for several reasons. First, New Zealand and Canada share a common history in many respects: date of settlement by Europeans, cultures that evolved from British colonization in the last century, and governments that are based on the British parliamentary system. Even with strong cultural similarities, students in the two countries varied somewhat in, for example, their desired levels of formality in postings to the Change Agency listserver. Therefore, the model's applicability in countries that have greater differences remains uncertain. In addition, the model depends upon a reasonably sophisticated computerized infrastructure, something that participants in leadership preparation programs in developing countries may not be able to access easily. Even with access to advanced computers, the model depends upon participant familiarity with computer-based communications or, at least, the willingness to learn computer skills within a short time period. Moreover, differences in university timetables, exacerbated by time zone differences, restrict the degree to which collaboration can occur, particularly between universities in the northern and southern hemispheres.

Nonetheless, the proposed model has the potential to facilitate leadership development that incorporates local, national, and international interactions among educational stakeholders. This is a significant development in an era of rapid educational change influenced by factors with a global impact, particularly among Western nations. The model is based upon the concept of breaking boundaries. Cultural, political and economic boundaries were traversed. Community, institutional and role boundaries were challenged. The boundaries between theories-in-action and espoused theories were brought closer together. Technology often imposes its own boundaries, and these were overcome and fully utilised in the learning process.

A powerful description of the vision for the model came from an international student attending the New Zealand partner university: "In my view, cross-cultural and local knowledge can be enhanced by network linkages. Our electronic discussion group is part of this global/local network group...I look forward to the day when parents, teachers, and pupils in, say, Canada, New Zealand, Zimbabwe, Indonesia...would be able to share ideas making use of their experiences through the Internet." In an era when such a vision can be held by an educational leader from a developing country, perhaps the most relevant question for those of us responsible for leadership development is not "Should we adopt an on-line model for graduate learning?" but "When?"

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## Notes

1. An earlier version of this paper was presented at the annual meeting of the American Educational Research Association in San Diego, California, April 13 - 17, 1998.
2. Writers in Electronic Residence: <http://www.wier.yorku.ca/WIERHome.html>
3. School Net: <http://www.schoolnet.ca/info/>
4. Leaders-Net: <http://www.soe.waikato.ac.nz/elc/network.html>
5. American Educational Research Association Listservers: <http://aera.net/resource/>
6. The Change Agency Network: <http://www.acs.ucalgary.ca/~c11/CAN/frameset.htm>

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