Perspectives on Education: Voices of Eminent Canadians

Spring 2010 Vol. 3 No. 2

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Statement of Purpose

LEARNing Landscapes™ is an open access, peer-reviewed, online education journal supported by LEARN (Leading English Education and Resource Network). Published in the autumn and spring of each year, it attempts to make links between theory and practice and is built upon the principles of partnership, collaboration, inclusion, and attention to multiple perspectives and voices. The material in each publication attempts to share and showcase leading educational ideas, research and practices in Quebec, and beyond, by welcoming articles, interviews, visual representations, arts-informed work and multimedia texts to inspire teachers, administrators, and other educators to reflect upon and develop innovative possibilities within their own practices.

Dedication

Photo Credit: Sandor Fizli

This issue of LEARNing Landscapes entitled "Perspectives on Education: Voices of Eminent Canadians" is dedicated to Muriel Duckworth (nee Ball) who spent the greater part of the century which her life spanned (1908-2009) as a tireless advocate for peace, education, feminism, and social reform. She was born in Austin, Quebec in the Eastern Townships, and graduated from McGill University in 1929 where she also met her lifelong partner, Jack. Subsequently, they did graduate work together at the Union Theological Seminary in the City of New York. They had three children, Martin, Eleanor and John, and much of their family life was spent in Halifax, Nova Scotia where Muriel became a founding member of the Nova Scotia Voice of Women (VOW) and ultimately national president. She is renowned for her work in VOW along with many other initiatives which included founding member of the Canadian Research Institute for the Advancement of Women (CRIAW), the Canadian Association for the Advancement of Women and Sport, and the Canadian Conference on Education, among others. She became a provincial candidate for the New Democratic Party in the late 1970s, vigorously campaigning for women's rights, health care, education and day care, and later participated with the Raging Grannies in satirical performances to promote social justice. Her ground-breaking work, talent and commitment as a woman leader throughout her lifetime did not go unrecognized as she was the recipient of ten honorary degrees, the Companion of the Order of Canada, the Person's Award, and the Lester B. Pearson Peace Medal. Notable leaders must have vision, energy, compassion and integrity. Muriel Duckworth was one such leader, an eminent Canadian who paved the way for many to follow. In planning for this issue, our intention had been to invite Muriel Duckworth to be a contributor. Unfortunately, our timing was wrong, but we are delighted to be able to include the work of Eleanor, her daughter, an eminent Canadian in her own right, and whose work reflects the wonderful qualities mirrored in the life and work of Muriel Duckworth.

Editorial

Three years ago the inaugural issue of LEARNing Landscapes made a reality of the vision to create a peer-reviewed, open access, online journal that would bridge theory and practice and give voice to all educational stakeholders—academics, graduate students, educational leaders, principals, teachers, and students—and use technology in ways that would expand and enhance communicative possibilities and representational forms. The LEARN Foundation made this possible and continues to support the work that LEARNing Landscapes strives to do. To date, the issues have focused on student engagement, leadership, education and the arts, curriculum, and literacy, and in each, the technology has been used to enhance the communication in varying ways.

With the second decade of the 21st Century upon us, and as we were planning for our sixth publication, we decided it would be appropriate to mark this juncture with a special, invitational issue. We thought it would be interesting to get a sense of what a cross-section of Canadians think about education at this moment in time. Accordingly, we cast a wide net, and sent invitations to a broad spectrum of eminent Canadians from various walks of life and from a wide range of places and backgrounds. We asked these special guests to write commentaries on education from any perspective they deemed important. We purposely left the focus wide open so that our contributors could explore their visions and experiences. We believed that cumulatively these essays would give a multifaceted and interesting view of education. We were not disappointed. We were overwhelmed by the positive and enthusiastic responses and the generous amounts of time and energy that went into these compelling articles. Even when busy lives prevented some of our invitees from participating, we were heartened by the kind messages of interest, encouragement and support we received.

It has been the practice in the editorials of the five previous issues of LEARNing Landscapes to cluster the contributions into themes and to give a brief introduction to each of these. In this issue we have decided to let the readers/viewers draw out the themes, of which there are a number, and to let each piece stand alone to underscore the individual, varied, and nuanced nature of the work. The articles are arranged in alphabetical order and the authors, all of whom are eminent in their own right, include Jean Clandinin, Professor, University of Alberta; Eleanor Duckworth, Professor, Harvard University; Jane Gaskell, Dean, Faculty of Education, Ontario Institute for Studies in Education, University of Toronto; Saron Gebresellassi, doctoral candidate at York University; Margie Gillis, dancer and choreographer; Tim Goddard, Dean, Faculty of Education, University of Prince Edward Island; Michael Goldbloom, Principal, Bishop's University; David Johnston, President, University of Waterloo; Ben Levin, Professor and Canada Research Chair, Ontario Institute for Studies in Education, University of Toronto; The Right Honourable Paul Martin; Elizabeth May, leader of the Green Party of Canada; Avrum Morrow, Montreal entrepreneur and philanthropist; Terry Mosher, cartoonist; Lorri Neilsen Glenn, Professor, Mount Saint Vincent University; Julie Payette, astronaut; Hélène Perrault, Dean, Faculty of Education, McGill University; Cecilia Reynolds, Dean, Faculty of Education, University of Saskatchewan; Sharon Rich, Dean of the Faculty of Education, Nipissing University; Bernard Shapiro, Principal Emeritus, McGill University; Fern Snart, Dean of the Faculty of Education, University of Alberta; Duffie VanBalkom, Professor, University of Calgary; Larissa Vingilis-Jaremko, founder and President of the Canadian Association for Girls in Science; Sheila Watt-Cloutier, environmental and climate change awareness advocate; John Wiens, Dean, Faculty of Education, University of Manitoba.

We hope that this publication will stimulate and expand the conversations about education by sharing views and possibilities that exist within educational circles and beyond. We know it will underscore how central education is to everything we do, and just how involved and committed to education these authors are. We feel privileged and honoured to feature their work in this special issue, and extend a heartfelt thank you to each one of them.

L.B.K.

Lynn Butler-Kisber (B. Ed., M. Ed., McGill University; Ed.D., Harvard University), a former elementary school teacher, is a Professor in the Department of Integrated Studies in Education in the Faculty of Education at McGill where she is Director of the Centre for Educational Leadership and the McGill Graduate Certificate in Educational Leadership Programs. She has served as Director of Undergraduate Education Programs, Director of Graduate Studies and Research in Educational Studies, Associate Dean in Education, and Associate Dean and Dean of Students, and on numerous committees inside the University and in the educational milieu. Just recently she was appointed to the Board of Directors of St. George's Schools. Winner of the 1997 YWCA Women of Distinction award (Education) and 2008 Canada Post award (Educator), she teaches courses on language arts, qualitative research, and teacher education. She has a particular interest in feminist/equity and social justice issues, and the role of arts-informed analysis and representation in qualitative inquiry. Her current research and development activities include the Home Instruction for Parents of Preschool Youngsters (HIPPY) Efficacy Study, as well as projects with Trinidad and Tobago, Turks and Caicos Islands, England and Indonesia, and teachers and school leaders in Quebec. The focus of this work is on literacy learning, student engagement, leadership, professional development, and qualitative methodologies and she has published and presented extensively in these areas. Most recent is her book entitled, *Qualitative Inquiry: Thematic, Narrative and Arts-Formed Approaches*, published by Sage.

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Narrative Understandings of Lives Lived in and out of Schools

D. Jean Clandinin, University of Alberta

ABSTRACT

Drawing on a narrative inquiry into the experiences of 19 youth who left school without graduating, I raise questions about stories of school, the institutional narrative of schooling. Through inquiring into the youths' stories, we identified six resonant threads that spoke to the complexities of their lives. Their lives awakened us to what might be possible if we engaged with their stories as a way to open up or disrupt current stories of schools to allow for the reimagining of schools. Through attending to youths' stories we might make the experience of youth, in their life contexts, the starting point not only for education but also for schooling.

My scholarly and personal interests intertwine in my research in understanding lives narratively, as unfolding, enfolding, nested compositions (Clandinin & Connelly, 2000; Clandinin et al., 2006). For many years now, following John Dewey's (1938) ideas on education as experience, I have worked with others to attend to lives in the making, lives in motion. For the most part I have come alongside teachers, student teachers, children, parents and others as their lives met in schools and, while I may have spent time with them in other places such as homes and other social places, we began our inquiries together in schools. By this I draw attention to how schools were the common ground of meeting and we moved in and out of schools, telling, in our words, actions, and bodies, stories of our knowing and of our identities (Clandinin & Connelly, 1995; Connelly & Clandinin, 1996).

In a recent project, alongside a group of other researchers (Clandinin et al., 2010), we became intrigued by the life-composing of youth who had left schools. We came alongside young people who had left school prior to high school completion so that we might learn more about their storied experiences, recognizing that their lives in school were only part of their much larger life compositions. We were interested in learning of their lives and, perhaps through learning about their lives, we wanted to learn more about our lives as educators and more about schools. Our overall intentions were, in part, to learn about what we call stories of school and about how we might begin to shift those stories.

In our narrative inquiry we, a group of 11 researchers, came alongside 19 youth between the ages of 18 and 21 who left school before graduating and who had been out of school for more than a year. We selected youth whose life experiences were diverse. They lived in rural, urban, and suburban places. We included males and females; youth of diverse heritages; youth of different family constellations; youth of different socioeconomic groupings, and so on. We did not come alongside teachers or meet these youth in schools. We met them in the midst of their complex, ongoing lives, lives that had not yet, at least, included high school graduation. We engaged with each youth in a series of conversations shaped by our overall research puzzles around how their lives shaped their leaving of school and how leaving school shaped their lives.

At first, we composed narrative accounts of our unique experiences with the youth we had engaged in the conversations. We then looked across the 19 individual narrative accounts to inquire into resonant threads or patterns that we could discern. We did so in order to offer a deeper and broader awareness of the experiences of early school leavers with an overall intention to open up new wonders and questions about early school leaving and, in part, to help us learn more about schools and how to shape them in ways that might be more responsive to the life-composing of all youth.

We identified six resonant threads: conversational spaces; relationships; identities; complexities over time; responsibilities; cultural, social and institutional narratives. We say much more about these threads in other places (Clandinin et al., 2010), but for now I briefly summarize each thread.

1. The importance of conversational spaces for telling and retelling life stories became evident in the research conversations. We wondered if such conversation spaces along the way might have helped some of the youths to feel less

alone in composing their lives within complex institutional, social, cultural, linguistic and familial narratives.

2. The importance of relationships to the youths was multidimensional and became visible throughout our research. The participants' relationships with family, peers, programs of study, and teachers, as well as the interruption of relationships through disruptions and transitions, exemplified the significance of relationship—connection and association—when we thought about early school leaving.

3. The youths were composing their identities on elementary, junior high, and senior high school landscapes as well as on complex home and community landscapes. While they saw themselves composing who they were and were becoming, they did not tell their stories as dropouts. A number of them actively resisted the label, telling their stories around plotlines of "not in school, for now." Their forward-looking stories included school.

4. Looking across multiple stories, we were struck by the complexity of stories lived when whole lives were considered. When early school leaving was seen as a complex set of storied events composed over time, the notion of a discrete decision or factor in dropping out of school became problematic. Complexity in composing lives over time became evident in the lives of the youths who left school early.

5. Relational responsibility threads were evident in many of the narrative accounts. Many of the youths were composing lives in which they struggled to balance conflicting responsibilities. At times it seemed as though they were trying to compose lives that allowed them to shift between, and across, multiple responsibilities. The institutional, familial, and cultural narratives in which they were embedded shaped their experiences.

6. All stories are embedded within social, cultural, institutional, and family narratives that shape, and are shaped by, individuals' stories to live by (Connelly & Clandinin, 1999). As we attended to the cultural, social, familial, linguistic and institutional narratives within which the youths composed their lives, we noted competing plotlines that shaped their stories to live by. The youths' stories spoke of, and to, contradictions between cultural narratives, familial narratives and stories of school. Caught sometimes in these contradictions, youth were humiliated or embarrassed in front of other students. Within the institutional landscape,

composing an identity seemed to be more challenging than passively accepting one.

These six resonant threads spoke to the complexities of the lives the youth were composing. Their lives awakened us to what might be possible if we engaged with their stories as a way to open up or disrupt current stories of schools to allow for the reimagining of schools.

As we ended our narrative inquiry with the youth, we questioned the discourses around stories of youth who left school early with its embedded assumptions around school leaving. We questioned the discourses of risk factors, resiliency and the focus on school leaving as a singular event, rather than a process over time. We realize we do need to change the discourse, research, policies and practices around youth who leave school early.

We also awakened to, and began to question, some of our assumptions: Is school a good place for everyone? Is it a good place at all times? Is it the only place to be successful? There were moments in the youths' stories where they experienced a good teacher, a good friend, a good principal. Yet there were also times when school was a difficult place, or when their lives outside of school were too complex to allow spaces for school.

We wonder how we can engage these stories and learn to attend more to the voices of youth in our attempts to begin to change the stories of school. We realized that by staying quiet and listening, the stories of youth, those who stay and those who leave, might begin to offer possibilities for shaping the kinds of places schools can become. Might a stance of mindfulness on the part of all who interact with youth in and out of school, enlarge the possibilities for encouraging and supporting youths to compose their lives in ways that are meaningful to them?

We wonder how the youths' dreams about who they might become can be supported. What part do we play in this—we, as members of the larger educational community, as teachers, nurses, parents, friends, administrators, social workers and others? Do we live on the margins of who they are or do we enter the personal and intimate relational spaces, spaces that call forth engagement and relational responsibilities? As a society, how do we honour, support and encourage diverse identities?

Hearing the youths' complicated life stories composed around multiple changes, we began to question the singular notion of transition from school to work.

Where are the stories to help youth negotiate these in-between spaces as they moved in and out of school, in and out of work?

In the youths' stories, we saw schools as narrowly defined places for students to gain prescribed knowledge, skills and attitudes. In their stories, we heard them speak of leaving their multiplicity, the wholeness of who they are and the stories they are in the midst of living, at the door of the school. What might happen if school was understood as a space where learning and living were intertwined? Attending to schooling in this way would allow us to pay attention to the particularities of each youth's unfolding life. Thinking in this way we begin to see the importance of schools as sites of collaboration—sites where students interact with peers, with parents, with families, with teachers and principals, with counsellors and therapists, with nurses and speech language pathologists and other service providers.

The youths' stories call us to, as Dewey (1938) wrote so long ago, make the experience of youth in their life contexts the starting point not only for education but also for schooling. Could we begin to reimagine schooling as well as education as places where,

> we are interested in openings, in unexplored possibilities, not in the predictable or the quantifiable, not in what is thought of as social control. For us, education signifies an initiation into new ways of seeing, hearing, feeling, moving. It signifies the nurture of a special kind of reflectiveness and expressiveness, a reaching out for meaning, a learning to learn. (Greene, 2001, p. 7)

Can we shift the stories of school in ways that might move us closer to education?

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D. Jean Clandinin is Professor and Director of the Centre for Research for Teacher Education and Development at the University of Alberta. She is a former teacher, counsellor, and psychologist. She is the coauthor with F. Michael Connelly of four books and many chapters and articles. Their most recent book, *Narrative Inquiry: Experience and Story in Qualitative Research*, was published in 2000. In 2001 Jean received the J. Gordin Kaplan Award for Excellence in Research at the University of Alberta and in 2003 she received a Killam Annual Professorship. Jean has recently edited the *Handbook of Narrative Inquiry: Mapping a Methodology* (Sage, 2007).

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The Soul Purpose

Eleanor Duckworth, Harvard University

ABSTRACT

The author underscores that in any worthwhile educational enterprise there is not one point to be learned—there are infinite points. Using Nicola Sellitto's insightful "soul purpose" observation as a springboard, she stresses that having no single "point" to convey does not mean doing no teaching. Instead, it means recognizing what enhances the students' sense of the world's possibilities, and of their capacity to take part in them. It means keeping the students connected to the possibilities. Drawing on the work of Rauchwerk, Hawkins, Hughes-McDonnell, Cavicchi, Auger and others, she illustrates how teaching students in genuine open-ended settings—in which soul purposes are cultivated—fosters exploratory behaviour, making them eager and engaged learners.

> The egg experiment was my favorite part of the night. When the eggs were first set down at our tables I thought I had it all figured out. We were going to make observations as individuals and then share them in our groups. You were going to stress the importance of hands-on activities and the power of one's observations. We were then going to move on to the next part of the class. I couldn't have been more far off from what happened next. I never would've thought I could think about eggs for more than one hour in my life. Boy was I wrong! As I was driving home from class and thinking before bed, I still couldn't figure out the soul purpose of this activity. With a good night's rest and time to think while I made my morning coffee, I think I have discovered the point. There was no point! There were infinite amount of points! Some of them won't even come to mind until the very last day of class. (N. Sellitto, personal communication, 2009)

Nicola Sellitto was a student of Susan Rauchwerk, at Lesley University. It is Rauchwerk's work she is referring to, and this comment from her journal does it great justice. In any worthwhile educational enterprise there is not one point to be learned. There are infinite points. There is a soul purpose, a phrase that Sellitto created as a play on words, and a glorious one, I find.

Rauchwerk did more than simply present the eggs, of course. She has written at length on teaching about chickens and eggs, making clear the depth and subtlety of her own thoughts as she considers her students' thinking, along with everything she knows about chickens and eggs (Rauchwerk, 2005). Having no single "point" to convey does not mean doing no teaching. On the contrary. It means recognizing what enhances the students' sense of the world's possibilities, and of their capacity to take part in them. It means keeping the students connected to these possibilities.

The late science educator David Hawkins said, of a provocative set of objects that gave rise to many hours of fascination and exploration, but whose educational purpose was being questioned, "It's not a matter of what they're good *for*. They're just good!" (Hawkins, personal communication, 1961). It's the same idea. What is *the* point of a Beethoven symphony? What is *the* point of an Alice Munro short story? What is *the* point of coming to know the ocean's life? They give rise to endless exploration and insight into the ways of our human lives, and the ways of the world. Tadpoles, guitar strings, geometry theorems, electric circuits, photographs of the eagle nebula, dance moves, mirrors—there is no one point, to any of these. But each of them offers much, in exchange for our getting to know them.

Fiona Hughes-McDonnell (2009) teaches about science teaching to students in programs leading to certification in elementary schools. The students she teaches, like Rauchwerk's students, typically have minimal preparation in science, and do not envision themselves either doing science or teaching science. She has written about engaging her students in exploring sprouting seeds, among other things.

> Finding an authentic way to encourage exploratory behavior and prompt genuine interest in the phenomenon of "sprouting" is always one of the difficult tasks that I face … Without some action from me, most adults would be content to let their potted seed sit in a window … And so, whatever my chosen starting point, my aim always is to initiate my students' exploratory behavior with the intent that the seedling and its behaviors will become the primary director and motivator of student explorations. Each decision I make either compromises or opens up the possibilities for my students. (p. 210)

In trying to understand the role of moisture, light, warmth, air and soil (the list the students created of what a seed needs to sprout), students placed their seeds inside plastic sandwich bags, metal storage cupboards, shoeboxes, purses, pairs of plastic cups sealed together; they placed them under beds, fully exposed to the air, taped to windows.

As her seed sprouted, one student was impressed with its root, "completely webbed," in a cotton pad. She drew her sprouting seed lovingly and wrote, "I wonder how this little seed can have so much potential?"

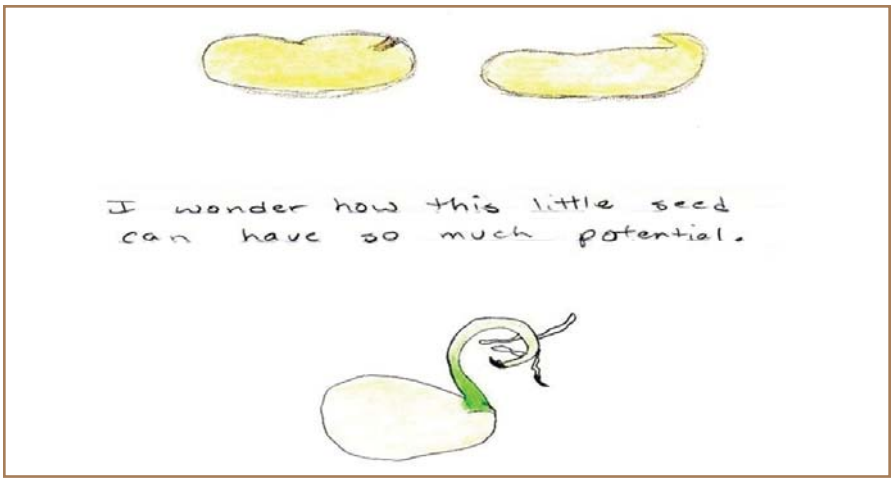

Fig. 1: A page from a student's journal in the second week of the study

Another student, equally attached to her own seed, wrote, "I'm puzzled by my bean tonight … [I]t seems to be sprouted facing downwards."

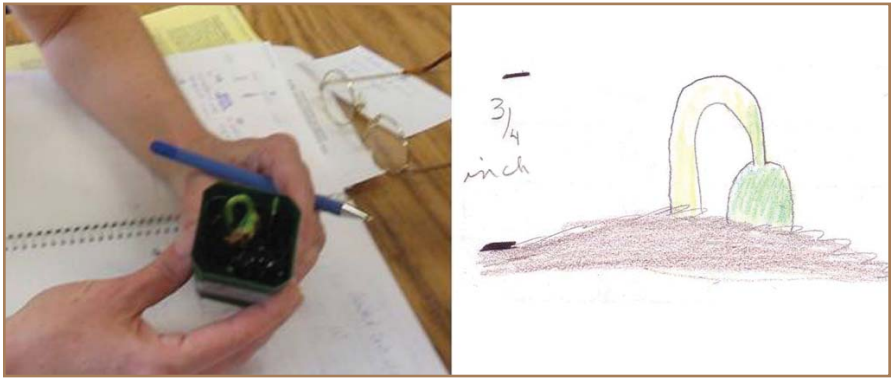

Fig. 2: A student examines a "hook-like" structure

This was a deep and valuable puzzle, leading the whole group to weeks of careful observing and careful thinking about what happened next, and how.

Caring for their seeds, and raising more and more questions about them, they went as deeply into the matter of seed germination as any botany student. Understanding their seeds became a soul purpose.

At the end of the study, one student slipped two photographs under Hughes-McDonnell's office door. One photograph showed a leafy bean plant. The second photograph focused on a single green bean.

Fig. 3: One student's "amazing" green bean

In an email, the student explained, "I am giving you two pictures of my plant … I wanted you to see them in color because the green bean looks amazing to me!" Like every proud parent; to almost any other adult, the baby is indistinguishable from any other baby.

I give one more example from science, since that is an area where, in current teaching, "the point" is usually so closely prescribed.

Elizabeth Cavicchi (2009) worked with undergraduates (not becoming teachers), with another commonplace object—mirrors. She started with mirrors, not necessarily intending to continue with them. But on the second day, she reports,

> Samantha amazed us by telling about the store front window where she works. Standing at the cash register and looking toward the window, she saw an image of the cars approach, until a point where the image met itself and broke off. Then the car was seen directly, but from the rear, driving away. (p. 256)

Samantha's story provoked many questions from the students, and Cavicchi took up Lucienne's, asking, "Can we find out more about where the thing seen in the mirror seems to be?" and she passed out mirrors again.

One pair tried to redo Samantha's shop window, but could not figure out how to coordinate movements of their object, their own selves, the window, and the light source. Peter and Aaron teamed up, intently peering into a calling card sized mirror while trying to measure the height of an object they saw in it. Jenniemae wished she could remember what her physics class said about a mirror's "focal point" (though there is nothing about a focal point involved in activities with flat mirrors); working with Andrew, she placed a quarter and a dime in front of a mirror, moving the dime closer to the mirror until its image matched the real quarter in size.

Cavicchi wrote:

> Each experiment uniquely responded to what the students wanted to know. It was their own creation and yet it put them in contact with something they did not understand or control: the reflection of light. When we left off that second day, what stood out for my class was the complexity of factors that affect mirror images … [M]ore was going on with mirrors than anyone in the class previously supposed possible … [just like Rauchwerk's eggs] (p. 256)

She went on: "Their knowledge correlated with science laws, like the equal angle reflection of mirrors, and science history, such as operating Ptolemy's curved mirror device [which they had also investigated]." And: "While shared, … this knowledge was no uniform 'answer' that anyone could summarize or repeat, and each participant apprehended it by different means." (p. 269)

As a complement to these science examples I would like to describe some work from young children.

In Jessie Auger's grade one class—a two-way bilingual, English-Spanish, class—one of the class practices is "buddy-editing." Whenever someone is ready for

a buddy-editor, he or she seeks out a classmate. In this example, Gabriel has sought out Fernando to help edit his story. For both, English is the second language.

"Fernando and Adrian and me threwing snowballs at the snowman untol we threw the snowman off the cliff. I me and Fernando made a big snowball and threw it at his fase." "The End"

At one point in their editing, there was this exchange:

Fernando:	"We didn't throw the snowman off the cliff—the snowballs made the snowman fall off the cliff."
Gabriel:	"No, the snowballs threw the snowman off the cliff … Didn't you read the story?"
Fernando:	"But … snowballs cannot throw the snowman."

Despite considerable effort, Fernando fails to persuade Gabriel to change the wording.

They go back to the passage. This time Fernando suggests that the word "are" is missing in the first sentence. Gabriel and he discuss this briefly, and then start debating whether the word in that sentence should be "throwing." Gabriel wants to keep the word threwing.

Fernando:	"You can put here throw or throwing but threwing is not a word."
Gabriel:	"But they threw the snowballs."
Fernando:	"Yes, but they are not threwing them when they are doing it—they are throwing them."

"When they are doing it"—Fernando is expressing the need for the present tense. He is six years old! I doubt very much if Auger had set her lesson goal to be to teach the children to recognize the need for the present tense. This is simply how life in her classroom is. The children undertake interesting and worthwhile activities, and help each other do the best they can. There is no "one point" to this editing session—Auger was in fact not in the picture. There were countless points—about telling stories, about working together, about asking for help, about who owns the writing, about spelling and English, about making themselves clear. Auger, setting her classroom up in the most thoughtful of ways, knows how to involve the children in important work. The buddy-editing had for them, I would say, a soul purpose.

My last examples come from a recent book, *Playing for Keeps: Life and Learning on a Public School Playground* (Meier et al., 2010). A school in downtown Boston has a playground with dirt, asphalt, walls, a chain link fence, a walkway, an area of tall unkempt grass—and all the constituent pieces of one enormous tree, which had died, and was cut down, leaving on the ground all the pieces: trunk, small branches and wood chips.

Beth Taylor spent recess in this space with the children, over a period of several years, and made notes. We see and hear the children investigating, building, decorating, digging, imagining, observing, pretending, jumping, climbing, growing things, negotiating, cherishing, hypothesizing, inventing.

Among other things, the children became natural scientists, closely observing, noticing and discussing the characteristics of the creatures on the playground. A butterfly's eggs were spotted on a leaf; a child noted the S shape in the dirt, made by a worm; a group admired a bumblebee's "fur."

Investigating the natural world was intertwined with imaginative play, with constructing, with physical exertion, with caring for each other and for living things.

> Children making fairy houses dug up a big earthworm. A new child shrieked. The child holding it said, "You want to touch it?" Very slowly the new girl did. Later, she took it to a hole she was digging, checking again still later "to see if he was safe." (Meier et al., 2010, p. 46)

And the playground also took them back to the classroom, as this child exclaimed when they unearthed a particularly intriguing rock: "We need a world dictionary. We need to find out about all things." (pp. 39–40)

This playground had no pre-determined point. It had a soul purpose. I think that we would be better off to cultivate soul purposes; I think the particular points will become part of the soul purpose, along the way.

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LINK TO:

www.gse.harvard.edu

www.en.wikipedia.org/wiki/Eleanor_Duckworth

Urban Education Policy in Canada and the United States

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ABSTRACT

Canadian and U.S. educational policies in relation to the challenges of urban education have diverged dramatically since the 1960s. This article points to some of the ideas and political processes that lie behind the divergence, and suggests that more comparative analysis of educational policy is both enlightening and important.

I have been struck recently by how different the current approach to urban education is in the United States compared to Canada, even while both countries emphasize the importance of raising the achievement of students from poor and disadvantaged backgrounds. The fact that the American government has a democratic president, while Canada has a Conservative prime minister, makes the difference even more remarkable; this is not just about left/right ideology.

In the U.S., a bipartisan consensus supports merit pay for teachers, charter schools, high stakes standardized testing, mayoral control of education and closing poorly performing schools and firing their teachers, despite the outrage of teachers' unions. The dominant rhetoric is about scaling up innovative programs and finding alternatives to a hide-bound traditional system. In Canada, teacher unions remain powerful and opposed to merit pay; there are virtually no charter schools; standardized testing is primarily focused on grading the system, rather than grading students or teachers; and underperforming schools get help, not further disruption. Canadian rhetoric is about supporting the public system in its efforts to raise student achievement, and increasing parents' confidence in the school system.

I am highlighting the overall differences, when there are important nuances by province and state and school board. But the differences are pervasive, despite the fact that both countries have what Manzer (2003) describes as educational regimes based in the political traditions of Anglo-American democracy. I much prefer the Canadian approach (and students in Canada perform better on international achievement tests), but I wonder why the two countries have moved in such different directions. It is an interesting case study in the sociology of educational systems.

There are certainly some enduring social and economic differences between the two countries that can be called upon to account for the current educational divide. Lipset (1990) notes the origins of the U.S. in revolution, and Canada in counter-revolution, or continuing loyalty to Britain. The "organizing principles" of the two nations were different, he claims. One is Whig and classically liberal or libertarian, distrusting the state, with optimism for the future; the other is Tory, accepting the need for a strong state, with respect for authority and hierarchy, and a cautious attitude towards the future. The constitutional commitment to "life, liberty and the pursuit of happiness" in the U.S. contrasts with the commitment to "peace, order and good government" in Canada. The symbol of the cowboy contrasts with the symbol of the mountie.

These differences map onto the current differences in educational policy. But over time, differences between the two countries change, and they take different forms in different spheres of activity. Manzer (2003) traces in great detail the political ideas that animated educational change and the educational institutions that have managed it in the United States, Canada, Australia, New Zealand and the United Kingdom from the early 19th century.

The period that I have been writing about in a study of the Toronto School Board starts in the 1960s. At the time, the rhetoric and the policy initiatives in education were very similar across our borders. The civil rights movement, the feminist movement, President Kennedy's war on poverty, and activism around urban renewal all inspired rethinking equality of educational opportunity. In both countries, there was research on and concern about the effects of poverty and the impact of racism on students. The Coleman report, John Porter's Vertical Mosaic (1965), the Toronto school board's "Every Student" survey and Christopher Jencks' (1972) analysis of educational inequality were required reading in faculties of education; they were also discussed in newspapers, magazines and policy circles. Urban school boards were committed to increasing community involvement, and teachers' unions were gaining power. There were conflicts among these agendas, most openly displayed in the New

York City debate about the merits of a community control initiative that allowed a largely black school board in Ocean Hill Brownsville to fire a Jewish teacher over the objections of the union (Podair, 2002; Perlstein, 2004). But the debates about unions and community involvement, alternative curriculum and literacy programs resonated in both countries. Canadian magazines like *This Magazine Is About Schools* circulated new ideas across academic and educational borders.

The challenges of poverty in urban areas across North America have grown over the past quarter century. Increasing wealth has been concentrated in the hands of those who were already relatively well off (Green & Kesselman, 2006; Organisation for Economic Co-operation and Development, 2008). The diversity of both the U.S. and Canada's urban population has increased, and the resulting linguistic, cultural and religious differences interact with economic inequality, leaving aboriginal, racialized and new immigrant populations at a greater disadvantage than they have ever been. In this context, both governments recognize that the challenges of educating all children with the intellectual and social capacities they need to participate as citizens and make a living is critical. And the difference in approach has never been as marked.

Education is only one social policy, among many, that differ in Canada and the United States. Canadian cities have avoided the worst urban decay observed in American cities and Canadian government policies have provided a social safety net that is less available in the U.S. Higher taxes, public health care and more generous government programs have mitigated the effects of economic inequality and supported relatively strong public systems in many spheres of activity in Canada.

But education policy has its own structure and dynamic. We need to make sense of how both the ideas and rhetoric that are appealing, and the political structures through which educational decisions are made, have diverged so markedly in the two countries over the past 40 years.

Much of educational policy is about defining educational problems, for education is a complex and poorly defined intellectual space (Stone, 1998). While there is wide agreement that education should be improved, and more people should be educated to higher levels, the specifics of what this entails are by no means agreed upon. It is here that prevailing political ideas about justice, governance, accountability and democracy come into play.

The way these ideas have developed in Canada and the United States support different ways of defining educational problems and solutions. Since the Reagan era in the U.S., a more individualistic ethic defines problems in market terms and applauds entrepreneurial solutions. Charter schools and school choice make sense to Americans, and merit pay rewards individual effort. Unions, on the other hand, are seen to restrict competition. Standardized testing provides an accountability framework that holds individual students, teachers and schools responsible for their own performance. There has not been as dramatic an ideological shift in Canada. Our more communitarian beliefs continue to provide more support for teachers' unions, the public provision of equally funded and provincially regulated schools, and the professional discretion of teachers when it comes to judging students. Inequality is defined as more of a problem in this context than it is in the context of market-justified systems.

Ideas matter, but political institutions translate these ideas into concrete educational policies and provision. As Stone and his colleagues (2001) point out in studying educational reform efforts in U.S. cities, changes in schools take place through politics, not despite it or around it. And the political structures that govern Canadian and American schools have shifted in somewhat different directions since the 1960s.

In the U.S. system, the federal government has taken on increasing leadership in educational policy. The "war on poverty" led to federal funding for Head Start programs and initiatives in poor school districts, while the Supreme Court mandated integration and bussing in relation to racial segregation. The federal presence in education has remained, and strengthened. The Bush legislation called No Child Left Behind pushed all states toward high stakes standardized testing; Obama's new Race to the Top program requires states to bring in merit pay, increase charters and base teacher evaluations at least partly on the test scores of their pupils. Conservative appointments to the Supreme Court have changed the court's decisions on a number of issues that affect integration, equal funding and the use of race in admissions decisions. So changes in federal politics have had a dramatic and direct effect on urban education.

In Canada, the federal government has little impact on education, despite frequent calls for more intervention from interested bodies. Provincial jurisdiction has been protected by claims for the distinct status of Quebec, the historical belief that local communities should make choices for their children and the continued struggles for autonomy that all provincial jurisdictions (especially Alberta) have waged.

Even as arguments about the country's interest in developing educated workers for global competitiveness have gained favour (deBroucker & Sweetman, 2002), Canada's education system continues to lodge authority over schooling overwhelmingly in provincial ministries of education. No major policy change, with a federal mandate and substantial funding, has displaced local politics in Canadian schools.

In the U.S., while states' authority has been constrained, local school boards remain very powerful, embodying the idea of democratic community involvement in education and creating very unequal funding for schools in wealthy and poor districts (Kozol, 1991; Morone, 1998; Berkman & Plutzer, 2005). Large urban school boards in the U.S. have struggled badly, with declining test scores, school violence and erratic governance. Attempts to turn them around have been widely documented (e.g., Stone et al., 2001; Cuban & Usdan, 2003; Shipps, 2006) and not particularly hopeful. Mayors have taken direct control of the schools in a number of cities, including New York.

In Canada, local boards have steadily lost power and influence over the past half century as provincial governments gained it. Only in Manitoba do boards still have the power to raise local taxes; in most provinces they have become largely vehicles to provide some local discretion in how the curriculum and funding policies of the ministry are implemented. This has equalized funding and increased the consistency in curriculum and testing across boards.

While this would generally seem to help urban districts, I have been studying a board (Toronto) that resisted provincial intervention and managed to pioneer innovative approaches to urban education over the last part of the twentieth century. At a time when poverty and immigration, particularly of visible minorities, were increasing, the Toronto Board of Education had the power to raise taxes, to design curriculum and to run programs that explored new ways of approaching the education of poor and immigrant children. Although there is no "hard" evidence that its initiatives improved the achievement scores of students, it maintained its political support in the city and, because it could tax businesses, it spent more than the provincial average on its students. It is a counter-example to the failure of large urban school boards in the United States. In Ontario, it was the suburban boards that had fewer resources and a weaker political mandate to run effective programs for their increasingly diverse school populations.

My conclusions are far from firm. The form and value of local school governance, the appropriate role of federal governments in educational policy making and

the impact of broadly shared ideologies on schooling are matters for our continual inquiry. I am not convinced there is a single best model, but in the current climate, the Canadian approach seems to be working.

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Dr. Gaskell's research has focused on a range of policy issues in education, including the organization of secondary schooling, links between schooling and work, teacher education, school choice and the meaning of equity in education. She has examined the role of social movements in education and worked with Chinese educators on research projects related to minority and women's education. Her forthcoming book, with Ben Levin, is *Making a Difference in Urban Schools: Ideas, Politics and Pedagogy*.

A Perspective on Higher Education Through the Lens of a Student Activist

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ABSTRACT

Both historically and present day, students and youth have been at the forefront of social justice movements. Environmental justice, defence of undocumented students, whistleblower protection, international solidarity and labour rights are among a myriad of issues which have emerged to expand the range and scope of equitable education politics within student movements. This commentary provides a perspective on higher education through the lens of one student activist. This reflection shares some thoughts on the implications of high tuition fees for marginalized communities and emphasizes the importance of youth activism in advancing the struggle for accessible postsecondary education and socioeconomic justice domestically and abroad.

"Walking down the halls…
… Speaking back to the Walls"

This piece was motivated by years of walking down university halls as a student and wondering why things are the way they are… why classrooms are crammed, why so many barriers exist, lack of funding, inaccessible buildings, daycare waiting lists for students with children, line-ups at the University food bank… Yet at the same time the University's wealth is apparent when it comes to those fields of study representing commercial interests, millions in endowment funds, gambling away public money in stocks, or the construction of buildings driven by corporate profits.

We need to be aware of the decisions being made and take part in decision-making at the university. Perhaps it is time for students to get together communally to educate ourselves and each other in order to work towards transforming the academy — making this a publicly accessible, open, university, where the curriculum and teaching methods represent the diverse nature of our communities.
—Commissioned for the Students by the Students

I came across this description beside a beautiful painting created by one of my colleagues. It was originally installed in the hallway of a college at an Ontario university before it was quickly taken down by the college administration. The college was originally built for part-time students; however, in recent years it has been moving away from its original mandate and vision to ensure full access for part-time students. This is not all that surprising. In recent years Toronto's universities have seen an increased attack on programming designed to enhance access to marginalized communities.

This past year, the University of Toronto attempted unsuccessfully to push through a proposal that would severely curtail the Transitional Year Program (TYP) through drastic budget cuts among other structural changes. TYP has its roots in the Black community in the City of Toronto and was founded 40 years ago as a second chance program for those who did not complete high school to attend university. This same year critical equity programs such as Disability Studies at the University of Toronto, Women's Studies at the University of Guelph and History and Philosophy at the Ontario Institute for Studies in Education (OISE) have all been eliminated. We are also seeing the intervention of the Conservative government into the governing of Social Sciences Humanities and Research Council (SSHRC) grants and scholarships to make research legible to business interests (Canadian Association of University Teachers, 2009). This comes at a time when York University is preparing to abolish the minimum funding guarantee for incoming graduate students—a particularly dangerous move that paves the way toward a two-tiered graduate education system and will inevitably bring higher education further out of reach for already underrepresented groups. This happens a year after a three-month strike by graduate students and contract faculty at that university, which mirrors ongoing labour unrest unfolding on campuses throughout the Greater Toronto Area (GTA). In this context, a narrative on the part of the university administration emerges which justifies cutbacks and reduces labour costs in the name of finer scholarship and a better education. This begs the question: "What is the university teaching us when graduate student employees are asked to subsist on sub-poverty level wages and when we're told to pay upwards of twenty thousand dollars to access higher education?"

The lesson here is deceivingly simple: education is a privilege and not a right. Often times, those of us who are unable to come to university are not absent because we're not smart enough, but because we're not rich enough. I want to reflect on what this means for Black youth in our city. Given that the Toronto District School Board (2006) documents a 40% high school drop-out rate among its Black students and given that the median economic income for Black families in the GTA hovers at the poverty line, we are particularly concerned by the implications of unaffordable fees. Education is the great social equalizer, yet this door to upper equity slams shut to Black youth who cannot transcend the social and structural barriers which prohibit our full participation in universities. Those of us who do end up in university classrooms come to find that Eurocentric curricula and a lack of diverse representation among faculty and social stereotyping persist. It is not surprising then that we feel compelled to organize for systemic and structural changes that will make our universities more accessible to our community. Black student formations in universities in the GTA and for that matter across the country and even internationally have a long-standing history of engaging in social justice activism.

Both historically and in a contemporary context, university students have been catalysts for social change. From advocating for fair trade policies to national liberation struggles in the Global South, students have been strong and articulate leaders for political justice. From the sit-ins at college counters to abolish "separate but equal" legislation to transnational efforts to isolate South African apartheid, Black students have been key players in struggles to advance social equality. On the morning of June 16, 1976, thousands of Black youth orchestrated a high school walkout. The Soweto Uprising came as a response to the apartheid regime's having adopted a policy that would mandate Afrikaans as the primary language of instruction in all secondary schools. Contesting the language of instruction constituted a form of resistance to imposed cultural superiority and to a particular social order. The advocating for instruction in an Indigenous language signifies a form of cultural reclamation and a desire to maintain one's native values and knowledge system and thus bore profound symbolic and practical significance. The anger of Black youth living under apartheid in South Africa reached a boiling point and the children took over by taking to the streets. The world bore witness to what the South African Defence Forces would do to an unarmed and defenceless population. The riot resulted in hundreds of fatalities and marked a turning point in the global anti-apartheid movement. June 16 is now celebrated as "Youth Day" in South Africa to commemorate the Soweto Uprising.

The story of Black youth resistance in the United States echoes the South African struggle for self-determination. The Student Non-Violent Coordinating Committee (SNCC) was a leader in the American legislative reform and civil rights movement. This Black youth-led initiative ran voter registration programs and built the analysis and skills of some of the most prominent members of the Black liberation movement throughout the sixties and seventies. Universities have and continue to be major sites of social justice activism. This is conducive to a central function of the university which is to generate ideas that question and challenge the cherished beliefs of society and of the university itself. It is not surprising then to see students consistently engaging in politically charged activities of all kinds. It is also not surprising to see that the segments of the population disproportionately impacted by exclusionary university policies and practises are also at the forefront of those activities—including women and racialized students.

When the issue of accessible education is located on a multi-issue social justice platform, we can make links between war, migrants' justice, racism, poverty, sexism, academic freedom and labour solidarity. We have to see how unaffordable tuition fees widen the wealth gap, exacerbate pay inequity and disproportionately impact members of equity-seeking groups. This includes mature students, parent students, women, racialized groups, LGBT (lesbian, gay, bisexual and transgender) communities and first-generation students (those who are first in their family to attend university). We need to take up the issue of undocumented students whose precarious immigration status translates to constant fear of deportation. In the past two years, we have seen university students deported but we have also seen a successful "education not deportation" campaign which reversed the deportation order of one York University student thanks to a well-orchestrated mobilization. The popularized "don't ask, don't tell" policy calls for universities to be declared sanctuary zones. This would mark the campus off-limits to immigration enforcement and bar anyone in a university from asking and reporting students' immigration status to Immigration Canada. This means that all students would be able to study at university without fear and with dignity irrespective of their immigration status—a right protected under Section 49.1 of the Education Act (Ontario Ministry of Education, 2004).

Those who advocate for migrants' justice are also the ones who work to counter racial discrimination. After a string of racist incidents at another Ontario university in 2008, the institution conceded to demands calling for a taskforce to investigate systemic racism. I was an undergraduate student at the time and remember spending late nights with other students writing press releases about the latest act of overt discrimination on campus. Among the list of incidents included death threats

to student leaders, the deportation of a campus community member, the setting of the African students' office bulletin board to fire, security using metal detectors to search Black students entering campus and so on. We the students, mostly women and mostly Black, fought back. When a member of the campus chapter of the Conservative Party issued a racist letter to a member of the United Black Students (Black students' union), we demanded and received an apology from the leader of the Ontario Progressive Conservative Party. When our bulletin board was put to fire, we got the attention of mainstream media where we identified the issue not as an isolated incident but as a symptom of systemic racism which empowers some people to express hatred without fear of reprisal. With minimal resources and a very restricted budget, but with a handful of dedicated young organizers, we shifted the terms of debate concerning equity on campus.

I am inspired by the work of the student movement in this province, across the country and globally. Accessible education is the door to a life free of poverty. Those of us from historically excluded groups who have accessed this door to upward social mobility have a special responsibility to ensure that the door remains open so that others can pass through. If the student movement is to remain relevant, it will have to continue to make connections between different social justice causes to strengthen the progressive character of these movements.

We need to remind our university communities that values of equity, civil discourse, human rights and relationships of integrity do not merely belong in textbooks and do not end when a seminar is over. We need to embody these values in our words, our actions and in everything we do. We also need to contest the notion of inclusion as it is sometimes defined, one that advocates adding more seats to the classroom and is prepared to add voices to an existing conversation—one with all of its philosophies and politics already established. We cannot be satisfied with the "add-a-seat-to-the-table" strategy which reifies existing inequitable social relations. We must be ready for the *transformation* of the conversations in the classrooms and outside of them. We can be confident that the learning which takes place in this context will be richer for it. We, young people, must take our learning beyond the four walls of our classrooms and actively engage in social justice work on our campuses if we are to realize a future of postsecondary education without user fees as presently exists in several states throughout Europe and the Global South. History has shown that the will of young people can drastically alter social and cultural norms. It is my firm belief that through creative imagination and political action, young people will be the ones to realize a Canadian postsecondary education system that is emancipatory, equitable, democratic, and universally accessible.

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LINK TO:

www.ywcatoronto.org/women_distinction/2007/wod2007_young.htm

Dance and Desire

Margie Gillis

ABSTRACT

The author describes her lifetime relationship with dance and how it has touched every aspect of her life—physical, spiritual and emotional. The control and discipline methods of teaching dance when she was a child were ill suited to her curiosity and creativity. This curiosity and her "soul's yearning" have led her to explore dance as a source of knowledge, expression, exploration, communication and soul connection. As a teacher of dance, she describes how it is important to encourage her students to explore their relationship to themselves in dance. Lastly, she gives uplifting guidelines to inspire both teachers and readers.

Learning and Dance: Dancing From the Inside Out

The society we live in pulls and pushes us to consume, achieve and accomplish. Yet our outward expression is only as potent as its rootedness within. Dance is expression that engages all of who we are, connecting inner and outer and yielding questions like… Who is dancing? What is being danced? What is the experience of being and how do we communicate and transform? How do we learn, change, shift, value, understand, connect, explore, and can we truly share what it is to be human?

Why dance? Because dance is nature. Dance is thought/intellect, emotion, and spirit/soul sparked through the nervous system; connected to nature. It is experiential, humanly complete, transformational and a pure knowledge. I use the words "pure knowledge" here to express that sense of connected knowingness or soul

connection, when all aspects of our conscious selves come into relationship and congruency with a sense of source.

I have had the joy to have a lifetime relationship with expression, exploration and communication through dance. When I began to dance at age three the dominant dance training was a prescribed set of exercises that one used control and discipline to achieve. The ideas were presented in a "sport" or simple goal format. This attitude of mastery over Nature was rampant in the world in general in the 1950s. Nature was something to be conquered and/or paved over. A shape was presented and one was encouraged to control oneself in order to achieve the shape…then on to the next. One followed the shapes as presented by a teacher then on to a choreographer's direction. Artistic expression was the domain of providence and temperament. Emotion was suspect, as it led to wildness and lack of control.

But it was here, in this wildness, that my heart was at home. Wildness of thought, feeling and motion. For me dance was a way to experience and understand life, to connect with a sense of "soul singing," something eternal, ecstatic, and yet so tenderly human it could break the heart open. I could use the dance to fully know, to question and to experiment with the experiences of life that came to or through my awareness.

Relationship with my neuromuscular system became an intimate love affair as I spent time understanding the nature of the inner "cinema" or "landscape" and how it was made muscle, how it was physicalized. I have endless curiosity for the miracle of thought, emotion, and spirituality becoming flesh. I am eternally grateful for the wisdom of the body as my guide and teacher. I experience great joy in the infinite nuances of idea that can be purely expressed. The full experience, as energy runs the path of the nerves, touching the muscle and causing an orchestra of contractions and releases that can manifest as outward motion or be experienced as "under the skin" or "feelings." This is "natural" dance that we socially have learned to suppress. This is the connection to "source."

When I was young I was looking for something that did not, or seemed not to, exist in the world outside me. Something drew me that I could hardly name. How to pay attention to this call when it was not reflected back to me in the dance classes or the educational institutes I had access to, nor indeed, in the world as I knew it. I could only be brave and curious and follow this soul's yearning, believing as I did, that if it was not already in the world or even in myself, it should and could be. I have had the joy of following a unique path and feel honored and grateful to have been embraced with an incredible career performing, dancing, and choreographing.

The logical sequence was "how can I teach others to do this?" As I aged I began to understand how to teach, share and draw others towards their own relationship with their nature, their life in motion, manifestation and Dance. In other words, to experience the miracle of who we are in a fuller dimension. My Teaching has embraced working with professional dancers at the peak of their careers as well as children, non-dancers, actors and those with a focus on physiological and physical health. Knowing that desire, a thirst for knowing, is the greater teacher, I have focused on inspiring my students to their find their own curiosity, to learn how to safely expand their parameters, to engage their desire to explore and to deepen their experience and understanding of themselves in motion. It is indeed a great joy to see my students renew their love of life and dance and apply these explorations to their diverse personal and professional lives.

There is something so true, congruent and remarkable about experiential knowledge. This is where we really can initiate and make our profound shifts in life. For indeed we are alive. We are alive in a world that is now threatened with extinction. That we have become so abstract and disrespectful of nature and our own nature; that we are now capable of annihilation; seems to me a symptom of distance from our full embodied self, our nature and how that nature is a part of, connected to, a larger nature.

I now teach this approach to dance, to life's interconnection with dance and experiential exploration. No surprise: I am very passionate about it. I create games/dances/constructed improvisations, based on the needs (as I perceive them or as I am requested) that allow the participants to explore their relationship with themselves in dance, in motion. Below are some of the basic element guidelines for me as a teacher, instigator, and/or guide. These are listed to give a sense, a feel, of where I come from. It is my hope to inspire the reader to reflect on his or her own investigation and relationship in motion, and in life, to these starting points.

Health is the basic guideline—exploration of what health means; elaboration follows from there.

Curiosity, necessity, desire, love, humility, perseverance, courage

Respect, for self and others in partnering and audience (ritualized) communication (use the airline wisdom: put your own face mask on before assisting others)

Listening with all senses and instinct and responding, or rather releasing a response in motion

Compassion will help solve most dilemmas

The more you do the more you master

To follow the Idea? Experiences, letting the idea tell you how to move

Allowing oneself to shift into the witness position, avoiding the critic position

The problem holds the solution

If you do not "know it," invent it. Allow yourself to manifest your own unique experience of the subject…any subject/word/state of being

Being open to the unexpected

Who you are and who you are becoming—held in relation, not as combative focuses

Building a relationship with risk from the ground up. Learning how to fall safely

Many secondary skills are learned-acquired, by following one's Bliss or vision

Curiosity for the total experience of life, our interior landscape of experience and how we bring that to a manifestation. Predominantly in the miracle of nature/dance

Source, transformation, essential, nature, life, health, compassion in motion, the experience of life, Love…and how all of these become "life" in dance

Holding the work inside oneself. Embodying the idea or experience

Observing. Knowing that the observer is changed by the observed

Exploring qualities, nuances

Listening, observing, open attention, curiosity—the greater love is being heard

Instigating, suggesting
Supporting, guiding, give feedback

Inspiring

Desire looks a lot like discipline on the outside but is the deeper learning skill

As I write this I have begun collaborations on two books. The first book, with Michelle LeBaron—friend, celebratory dancer, humanist, poetess, Professor of Law, Director of the Program on Dispute Resolution at the University of British Columbia—is on the uses of dance and my particular methods in relationship to where they may be useful to those engaged in conflict resolution. The second book, with Eleanor Duckworth—dancer, friend, humanist and Harvard Professor of Education—is about my process in the hopes of sharing that information more keenly with dancers with a particular focus on dance professionals.

"What I Love about Dance is that it is a litmus test for being. It is truthful, it tells you, at each moment, who truly you are. It does not lie. It employs every aspect of one's self, every bit of you, in a way that no other art form does. [My intellect, body emotion and spirit]."[1] — Christopher Gillis[2]

Notes

1. This quotation is a remembrance of what Chris said. He said it in many different ways at many times; this is my memory's composite.

2. Christopher Gillis was a noted modern dancer and choreographer who worked with the Paul Taylor Dance Company as well as many other groups. He regularly collaborated with his sister Margie.

Photo Credit:
Tamara Fiset

Margie Gillis is an accomplished and socially active dancer who performs and organizes workshops at the Margie Gillis Dance Foundation in Montreal and across the world. Gillis' art and life are both brimming with energy, creativity and spirituality. Gillis' passion for dance began at an early age and quickly blossomed, aided by her teachers and an inherent love for her art. Over the course of her career Gillis has danced with the Paul Taylor Dance Company, National Ballet of Canada, and many others. Some of Gillis' most notable achievements include receiving the MAD Spirit Award from the Stella Adler Studio of New York for her social justice work and being the first modern dancer to be awarded the Order of Canada. Last year, she was also appointed Chevalière de l'Ordre du Québec. Social causes are close to her heart: she supports OXFAM, Planned Parenthood Foundation, and actively participates in the fight against AIDS.

LINK TO:

www.margiegillis.org

The Role of Education in Rural Communities

Tim Goddard, University of Prince Edward Island

ABSTRACT

Drawing upon a conversation held in rural Prince Edward Island, in this article I explore community questions regarding the role of education in Canada. I present five brief vignettes and then consider these through a lens that recognizes the criticality of community, context, and culture.

Recently I attended a meeting in a rural community on Prince Edward Island. The purpose of the meeting was to discuss the role of education, with a focus on how the education system could contribute to further economic and social development within both that specific community and also others in the local area. As I listened to the conversation, it struck me that the issues raised were not exclusive to that place and could, in fact, be considered as integral to the role of education in Canada. In this article I shall consider some of the challenges facing the education system in one part of Canada.

The discussions at the community I shall call Redsoil Creek covered the gamut of educational provision, for students of all ages. We considered both formal and informal education activities as well as delivery methods which ranged from the traditional to the esoteric. Other than me, none of the 15 participants had any professional connection to public education.

Redsoil Creek is a small collection of houses strung along a major highway. A rural road cuts across the highway at this point, and the community has grown up around that junction. It is a landscape of low rolling fields, mostly cleared, with some sections left as woodlots. There are numerous potato fields, a dairy farm with fields

left to hay and silage, and a small general farm which operates a market garden. A small river (or large creek) winds its way along the valley parallel to the main road. In the community there is a gas station with a convenience store attached, an elementary school, two churches (one Roman Catholic, one Anglican), a high school serving villages up to an hour away by bus, a pottery where two CFAs (Come From Aways, or "Islanders By Choice" as some prefer) use a large garden shed to construct ceramics for the summer tourist trade, and two homes with hopeful tole-painted Bed and Breakfast signs swinging in the constant breeze. Most of the people who live in Redsoil Creek are seasonally employed, although a number of them drive down the road each morning in their commute to the nearest city. There is one small manufacturing plant a few kilometres away, with some skilled welders and machinists employed there, and the local farms employ general labourers to drive the cattle, drill the potato fields, and care for the fruit trees in the orchards. Generally, however, the farms are family concerns and do not provide many employment opportunities to the wider community.

A Range of Issues

The people at the meeting identified five areas of concern and it was apparent that the education system, broadly defined, was considered crucial to community health. The conversations covered the full human life span, ranging from kindergarten to senior's college.

Kindergarten

In Prince Edward Island the kindergarten system has, for the past ten years, been publicly funded but privately delivered. Children who are under five years of age attend an Early Childhood Centre and then, when they go to school, enter Grade One. Many of the early childhood educators are mothers who live within the community. They are required to have completed a two-year community college diploma. This system is now changing and kindergarten is being incorporated into the public school system.

The transition requires early childhood educators to complete a Bachelor of Education degree and a major question for the community is how they might do that while continuing to work in their classrooms. There is concern that people may have to leave their homes and families, and give up their work, in order to complete their degree. The University of Prince Edward Island, working closely with the Department of Education and Early Childhood Development and other stakeholders, has

designed an innovative Bachelor of Education (Kindergarten) degree which builds on the experiential and educational experiences of the candidates and provides them with courses on a part-time basis. Classes are to be offered on a part-time basis during evenings, weekends and summer schools, allowing the degree to be completed over a six-year period. Further, the courses are to be offered in the east, west, and central parts of the Island, so that candidates do not all have to drive to Charlottetown. In this way, the University is trying to bring its educational programs to the people and hopes to minimize the stress faced by the working mothers who are being required to suddenly enter postsecondary education if they wish to keep their jobs.

School graduates

A second issue concerns the continuing exodus of young high school graduates, who leave the area almost as soon as they leave school. This rural depopulation not only strips the community of the next generation of entrepreneurs, managers and workers, but also reduces the number of young parents—and thus, children—in the region. Although Canada spends a high proportion of its gross domestic product on education (Brockington, 2009; UNICEF, 2008), the progress in high school graduation rates remains comparatively modest. The achievement of a high school graduation diploma is considered a crucial measure of success within the education system, and some $50 billion is being spent annually on the K-12 education system in Canada (Brockington, 2009). In Redsoil Creek, as in many other parts of the country, there are questions raised about the value of the education system and its appropriateness to local context.

Less than one third of high school graduates from Prince Edward Island directly enter a postsecondary institution for further education (Cobb, 2009). An argument made here is that when a school is driven by externally mandated curriculum and assessment protocols, and is not relevant to the local community, then the graduates who do not go away are not prepared for life in the community.

Current workers

A third question for the community relates to those workers who are employed and yet who both want and need continued skills upgrading. Such courses are only offered in the major centres of Charlottetown or Summerside, and to attend such programs means not only a major commute (in Island terms) but also time away from work. One local company has invested by providing courses to its own workers but such programs are, by definition, limited and limiting. A sheet metal worker may

learn some new means of fabrication but this is unlikely to be a skill transferable to another workplace.

The lack of ongoing professional development opportunities means that both workers and industry become static. New methods of working pass by without anyone in Redsoil Creek becoming aware of their existence. New technologies accrue to competitors, whose products then become less expensive or more refined.

Returning workers

The collapse of industries based on natural resources, such as farming, forestry and the fishery, has thrown the lives of many people of working age in disarray. No longer able to pursue their trade, they do not have the skills needed to participate in the modern knowledge-based economy. The availability and delivery of retraining efforts is a fourth concern of many in the community.

This situation is exacerbated by the traditional transition from school to work which took place with earlier generations. Young men (and sometimes women) would leave school before completing their grade 12 diploma examinations and would move seamlessly into one of the resource industries. Jobs as loggers were plentiful, and those whose family owned fishing licences were able to enter the fishery. As a result they do not have the academic skills and formal qualifications required for work in the knowledge economy of the twenty-first century. The skills honed as first mate on a fishing boat do not easily match with those required for employment in a call centre.

Retired workers

The fifth question arises out of the experiences of the retirees, some of whom have spent their whole lives in the Redsoil Creek area but others who are either new or newly returned. Some have left other communities and have decided to retire on Prince Edward Island, others have returned after a working life spent in other parts of Canada or abroad. These older members of the community are seeking opportunities to enjoy their retirement and to continue to contribute to the social fabric of the region.

For many, the prospect of a quiet and bucolic retirement soon loses its charm. They are comfortable with an unpaid life but are looking for a filled-out life, one in which they continue to learn and to contribute. Programs such as Senior's

College, where those with expertise in a field lead their peers in a voyage of discovery, require organization and facilitation skills which must be carefully administered if they are not to be confused with bossiness and superiority.

Toward a New Paradigm

These five communities of concern, extending from the early years to the senior years, were identified during a community discussion. It is important to consider ways by which these issues might be addressed.

It is clear that for the people of Redsoil Creek the formal education system has not worked. The kindergarten teachers are bound to the structural limitations of policy as they face the trauma of transition to a new system. Graduates of the high school have limited opportunities and are educated in a curriculum of little direct relevance. Those who have the skills to attend postsecondary education have to leave the community to do so—and rarely return. The workers who require skills upgrading are prevented by geography from accessing available programs. Those seeking a move from collapsing industries to the new economy are finding that they do not have the skills required. Those who have retired have few options for engagement. The dismembering of education into discrete sections has resulted in the differentiation of services and the separation of educational experiences by age, rather than by ability or interest.

However, if we were to view education through a lens which focused on the strengths, rather than the liabilities, of the community then perhaps a different picture would emerge. Theories of asset-based community development (e.g., Kretzmann & McKnight, 1993; Mathie & Cunningham, 2005), provide a lens which helps us view socioeconomic development in a way that recognizes the criticality of community, context, and culture.

The content of the curriculum needs to be contested. It has become the norm to have teachers saying that they do not have time to teach, they have to cover the curriculum. Similarly, the fetish of league tables and school rankings has resulted in a focus on the measuring and assessment of knowledge, rather than the construction of that knowledge. Programs such as guided apprenticeships and co-op placements need to be given school credit and equal status to pre-university academic courses.

If we were to permit our schools to focus on the teaching of the skills and knowledge required to contribute to the continued growth and revitalization of community, then perhaps new graduates would be better prepared to function within their community. If we were to encourage the delivery of education programs at a variety of times, and using a variety of delivery media, perhaps the transitions between education and work would become less distinct and more open to all citizens.

The organization of education in Canada has evolved in a responsive rather than proactive manner. It has remained externally driven, with policymakers located in central urban conurbations making decisions affecting the operational aspects of schools across the jurisdiction. There is a need for Canadian education to return to a local locus of control, and to have decisions made at the point closest to where they are applied. Through the reallocation of resources from central to community control, the people of Redsoil Creek would be able to design and deliver an education system which contributed to economic and social development within the region.

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Tim Goddard is Dean of the Faculty of Education at the University of Prince Edward Island. He took up this role in July 2008.

Dr. Goddard has worked as a teacher, principal, superintendent of schools, university professor and education consultant. Internationally, he has extensive experience in England, Kosovo, Lebanon, Papua New Guinea, Slovenia and Sweden. Within the Canadian context he has lived and worked in Alberta, Saskatchewan, Nunavut, Nova Scotia and P.E.I.

Dr. Goddard's primary area of research and teaching is educational leadership and administration, broadly defined, with a focus on the role and impact of cultural and demographic change on structural systems within schools, particularly those serving minority and marginalized populations.

A Well-Rounded Education: The Gateway to Successful Careers and Lives

Michael Goldbloom, Bishop's University

ABSTRACT

Michael Goldbloom explains how his education in Liberal Arts and Law has helped him pursue careers as varied as lawyer, newspaper publisher, community leader and now, Principal of Bishop's University. He believes that learning good communication skills in elementary and secondary school as well as interacting with others in an effective and respectful way are key elements to any future career. His family's emphasis on education and community involvement was critically important to the educational and career choices he made. He makes a case for the model of the small university as an ideal community for young people to develop their academic skills, participate in sports or artistic pursuits, contribute to student life and forge relationships with fellow students and professors. Lastly, Mr. Goldbloom supports the idea that entrepreneurship should be a key ingredient in postsecondary education, not just for business students, but for all students to have the ability to manage their careers.

What educational experiences that you have had, either formal or informal, have given you direction or inspiration for what you do?

I now lead a liberal arts university and, interestingly, my own educational background makes me something of a poster child for a liberal arts education. I studied modern European history and literature in university. I went to law school and I'm now on to my fourth career. I practised law for ten years. I worked as a journalist and became a newspaper publisher. I ran a major community organization, the YMCA, and now I'm leading a university. I never realized when I was studying

history and literature in university or studying law, that that education was going to prepare me for these different careers. Each one of these learning opportunities is something that prepares you for the next challenge you're going to take on. Thus, I believe strongly in the value of a liberal arts education as it prepares you for a variety of different fields and work experiences.

Your career path has traversed some interesting terrain. Can you talk about the skills you have drawn out to navigate these contexts so successfully?

The most important skill that both my education and my work experience has given me is the capacity to understand what other people's perspectives and interests are and a way to listen to and to work with people to inspire them to give the best of themselves. If there is one thing in common about all my work experiences, it is that the organizations that I have worked for succeeded when there was a common understanding within the organization of our values and objectives as well as a real opportunity for individuals to give the best of themselves and to feel an ownership in our success. Whether it is a community organization like a YMCA or a newspaper or a university, the same basic formula for success applies.

There are many interesting similarities between a newspaper and a university, which I did not anticipate. One of the unique aspects of a newspaper is that the journalists are trained to be skeptical—not to take things at face value—and they bring that same skepticism not just to the outside world but to their own employer. They feel a greater loyalty to the truth, however they define it, or the pursuit of the truth than they may feel to the organization they work for. And if you are running a newspaper with journalists, you have to be able to be prepared to defend, explain and engage … and it is much the same in university. Why do people become professors? They do so because they are interested in pursuing the truth, however they define it—and their sense of loyalty is first and foremost to their academic discipline, to the truth of their field, more so than loyalty to the institution itself. Given that we expect professors to be skeptical, which is part of their intellectual training, we have to be prepared to explain, defend and listen—and at the same time to inspire. There are undoubtedly some common threads to my work experience. Perhaps my time in law made me a better advocate, because you also have to be able to advocate for a point of view. Leadership is about listening, it is about bringing people together, but it is also about being able to have a sense of where you want to go, and being able to make a compelling case for going there.

What role has your family played in your career?

A very significant one as I came from a family where education was the top priority. My parents and grandparents placed the highest value on education, and they made significant sacrifices to send all three of their children to university in the United States. They believed that an outstanding education was one of the greatest gifts that they could provide to their children.

With regard to my education in a broader sense, my maternal and paternal grandparents were all actively engaged in community service. My paternal grandfather was Montreal's first physician to specialize in the care of children; my father is a physician, my mother is a social worker. Their professional lives were dedicated to providing service to the community. The pursuit of education, not just for personal advancement, but in order to contribute to society, was modelled for me and my siblings throughout our lives. In that respect my family was critically important to the choices I made and in preparing me to take on a variety of challenges.

What do you consider to be the key ingredients for providing a successful elementary and secondary education?

I believe the basic written and oral communication skills are absolutely critical. Elementary and secondary school education are comprised of many facets, but the capacity to write and express oneself in a coherent fashion is absolutely vital to success in virtually every field. As far as I'm concerned, those basic skills are essential.

Schooling is also about socialization. There are very few things in life that one can do solely on one's own—and this includes careers and other pursuits. Therefore, learning to interact with other people in an effective, respectful way is paramount to any human being's success in terms of career aspirations.

Do you have any memories of how these skills were acquired by you in elementary or secondary?

I went to Selwyn House School, an independent school in Montreal. I remember that every second weekend we were required to write an essay—so we did a great deal of writing. I used to feel that I was cheating a bit because I used to review my essays with my father. But in fact it was the best education I could have

had. It was through those sessions with my dad that I learned to write. I remember in fourth grade we had a test in class where we had to write an essay. We had a double period, it was 80 minutes, and I wrote three sentences. Afterwards, everyone was panicked about the fact that "Michael can't write." Meanwhile, four years later I won the Royal Commonwealth essay competition, because my teachers were so committed to helping me learn to love writing.

I remember Ted Phillips, an interesting teacher I had at Selwyn House School. Most of us can point to a teacher or two who had a critical influence on our lives. He was my English teacher, and rather than doing whatever we traditionally did in English class, I remember that for several classes he read to us Thornton Wilder's *The Bridge of San Luis Rey*. We thought we were getting away with something, because we did not have to write essays or learn vocabulary or grammar … I still identify my love for literature very much from Ted Phillips. I strongly believe that teachers have a capacity to inspire, and we are very fortunate when we are exposed to that type of teacher.

Based on this most recent experience that you're having as Principal of Bishop's University, what are the advantages and challenges for a small institution?

I had not thought much about that before taking on this role, but it has struck me that it is surprising how few universities there are in Canada like Bishop's. The small, 2,500-student, undergraduate, primarily residential, liberal arts university is a rarity. That may sound like a lot of qualifiers, but there are only three or four similar institutions in the whole country. It may be hyperbole, but one could argue that Bishop's is Canada's western-most university of that profile. Lennoxville is only 40 kilometres from the U.S. border and if you throw a dart at a map of New England it would be hard not to land on a university like Bishop's: Williams, Amherst, Middlebury, Swarthmore, Skidmore, Bates, Bowden, and so on … We know that the model works. In the recent National Survey of Student Engagement senior students in universities across Canada were asked to evaluate their experiences in their universities. Bishop's was the only university to be ranked in the top six in the five different categories. The students were also asked "If you could start over, would you go to the institution you are now attending? Bishop's placed first in the country. I don't say that just to boast about Bishop's. I think what it speaks to is that for a large majority of 18- to 22-year-old students, the smaller university where they can get to know each other and their professors, where there is an opportunity and virtually an obligation to participate in class, an opportunity to play on a sports team and write for the student newspaper

or perform in the play, is a better model for undergraduate education. I'm not saying that Bishop's is better at undergraduate education than anybody else, but rather that we are following a model which works. The United States recognizes that the small, liberal arts, residential university is a great environment for undergraduate education. And yet it is very much an exception in Canada because our funding systems make it very difficult to sustain. If I could launch a debate in Canada, it would be: "Are there ways that we can provide this type of undergraduate experience to more students?" That is not to say that the bigger universities with forty, fifty and sixty thousand students don't offer special advantages and opportunities to undergraduates. But I think for most undergraduates, if asked to choose between attending a class with four hundred students and a Nobel Prize winning professor or being in a class with 25 students with a less renowned professor, the latter option would be preferable. Most undergraduates will learn and grow more in a smaller environment than in a bigger one. I think we should have a discussion in Canada about whether the small undergraduate model is one that we wish to sustain and expand.

Universities talk about collegiality; it's one of the things that distinguish us from other organizations, from corporations, from other ways that humans govern their activities. Traditionally, universities operate in an environment of collegial governance. I think there is a lot strength that comes with that. There are, at the same time, significant challenges. One of the risks is that too many people may spend their time focusing on the internal politics or administration of the university, as opposed to putting more time and energy into improving their teaching, recruiting more students, or focusing on their research. I think one of the challenges that one has as the leader of a small university is to help strike that balance, to make sure that the community is able to continue to be fully engaged and invested and listened to about the evolution of the institution. But at the same time, that it does not become so preoccupied about its internal politics that it loses sight of what its most important mission is.

If we took that idea a little further about liberal arts colleges, what are the things you would envision in an ideal world for postsecondary education?

I believe that the world is going to require more and more people who are able to innovate, and that innovation is generally going be driven by people who are able to draw on learning approaches from different disciplines, bring them together, and out of that something new will emerge. I believe in a liberal arts education because it encourages science students to study literature and history, and history

students to study science and math. It is through exposure to the different intellectual disciplines that the truly creative ideas are going to emerge. That is why we must maintain the breadth of learning that we are providing in our liberal arts institutions.

What else would I like to see? One of the terms I would use is *entrepreneurship*. I would like to see more of our students exposed to the principles of entrepreneurship—because through my career I have seen that the ability to develop and execute a plan is an essential skill that is critical to success in virtually any field. It is not just those people who want to go into business who must be entrepreneurs. I can say from having had a closer opportunity to observe academics that a great many professors are in essence running their own small business in which they are the "product." These professors have to think about what they wish to achieve, how they will market themselves, where they want to get to, what resources are going to be required to get there, and how they can mobilize other people to support them.

We have outstanding drama students here at Bishop's. When some of them graduate they're going to go back to their home town and they're going to start a little theatre troupe, performing Shakespeare in the park. Well the reality is you're going to need some basic entrepreneurial skills in order to be able to do that. My hope for Bishop's is that we are going to be able to take some of those entrepreneurship skills that we teach in our business school and provide more of an opportunity to students in other disciplines to have exposure to it. Equally, the ability to talk to 200 hundred people or to advocate effectively in a small group are skills that our business people require. Perhaps our drama department can help students in other disciplines enhance their communication skills—how you carry yourself physically, how you use your voice, how you marshal your arguments, all of those things. Although we already do a lot here, I think there is an opportunity to do much more, to help our students learn from the different disciplines that are available in the university.

How might educational institutions and businesses partner in innovative ways?

As in most things in life, successful partnerships are ones in which everyone is both giving and receiving. The university must go beyond turning to the private sector and saying, "We want you to give real experience to our students." While it is true that some businesses will do that, we must find a way so that the businesses also benefit from the involvement of our students. There can be a virtuous circle between the professor, the student and the entrepreneur where all three can benefit. That's where I think we can continue to do more, and in order to do that we need to reach

out more to the business community. We need to have a better understanding from the local business community: Is there teaching that we can provide to their current employees? And what are the skill sets they require in their future employees? The more that we can bring the external community on to our campuses, and the more that we can have our students go out into the external community, the better off we all will be.

In your next commencement speech, what advice will you give to graduating students?

It's so hard not to fall into cliché at convocation time. From my own career, one important lesson is that every experience has somewhere within it a learning opportunity that can help you discern what you should do next and help equip you to succeed. Some students will know precisely what career they wish to pursue. But many will not. And there is nothing wrong in that. I started out to be a lawyer and ended up as a newspaper publisher and the principal of a university. So no matter how uninspiring one's first job or graduate program may be, the key is to learn from the experience and then to move on.

Most of our graduates are not going to work all their lives for one organization or one company, or even in one field. Therefore, I would advise students to immerse themselves in whatever they are doing, to learn as much from it as they possibly can, and to take risks. That's classic commencement advice but people should not become too conservative too soon. I look back on my own career and realize how fortunate I was. I practised law for ten years. I learned a lot but I should probably have left earlier. I stayed at it because I was more conservative and more concerned about long-term security than I should have been. I would encourage young people to take some risks. I'm a big believer in taking a year off, travelling or getting a job in another part of the world. I don't think people have to rush into becoming permanent members of the workforce.

In conclusion do you have any additional comments about education for the future?

We must have universities whose raison d'être is first and foremost the teaching of undergraduates. That being said, I don't think that many young professors are embarking on academic careers with teaching as an exclusive priority. Therefore,

institutions like Bishop's are going to have to adapt to preserve what is best about us and at the same time make this environment sufficiently attractive so that a young professor, even if she is more interested in teaching, will have an opportunity to pursue a research career as well. That's a significant challenge of change for an institution like Bishop's and it's one that we are taking on.

The world is becoming more and more specialized. Again, for a smaller university, we need to make sure that we maintain the breadth of our liberal arts program so that we can provide our students with the full range of the *intellectual buffet*. At the same time we must focus on where we can provide significant strength, particularly if we are going to develop a more intense research agenda. Those are challenges for this institution. My hope is that we will continue—and all Canadian universities will continue—to draw students from across the country and around the world. It is a smaller world today and it is that much more important that the world meets on our campuses, that our young people have an opportunity in the relatively safe environment of the university to interact with people who are different from themselves. The capacity to interact effectively with people from other backgrounds and traditions will be critical in the world that our students will be stepping into.

Michael Goldbloom is Principal and Vice-Chancellor of Bishop's University in Quebec. Born in Montreal, he completed his undergraduate degree in 1974 at Harvard University (Modern European History and Literature), and completed law degrees at McGill University in 1978 (Bachelor of Civil Law) and 1979 (Bachelor of Common Law).

Mr. Goldbloom began his professional career in 1981 as a labour lawyer at Martineau Walker (now Fasken Martineau). In 1991 he became President and Chief Executive Officer of the Montreal YMCA, Montreal's oldest and largest community organization. In 1994 he assumed the reigns of another Montreal institution as Publisher of *The Gazette*, a position he held until 2001. In 2003, following a year as a Visiting Scholar at the McGill Institute for the Study of Canada, Mr. Goldbloom was named Deputy Publisher of the *Toronto Star*, and became Publisher one year later. In 2007 he was appointed Vice-Principal (Public Affairs) and Senior Fellow in Media and Public Policy at McGill University.

Blueprint for a Smart Nation

David Johnston, University of Waterloo

ABSTRACT

Canada is in desperate need of a national strategy that harnesses education and innovation to address the intellectual health of the nation, just as the Canada Health Act was created to protect and enhance the physical well-being of Canadians. A Canada Learning and Innovation Act (the "Smart Nation Act") would help close the longstanding productivity gap that exists between Canada and its peers, and reverse the decline in research and development investments. The Act will recognize the importance of lifelong learning, the need to invest in knowledge and talented people, and the opportunities for collaboration that will bring about new innovations.

The Canada Health Act protects and enhances the physical well-being of Canadians across the country. We must address the intellectual health of our nation the same way we approached our country's physical health—by building a national framework to secure the well-being of our nation's most valuable resource, its talented people.

Other nations have recognized that national strategies for education and innovation are key. In the United States, for example, the Higher Education Act was a critical component to President Lyndon Johnson's "Great Society" agenda in the 1960s.

Canada is in desperate need of a national strategy that combines education and innovation. Our productivity levels remain stagnant when compared to our peers. According to the Council of Canadian Academies (2009), Canada's business sector productivity has fallen from 90 per cent of the U.S. level in 1984 to 76 per cent in

2006 (p. 5). International innovation success stories are in short supply, BlackBerries notwithstanding.

Currently, Canada is not investing enough in research and development. Research and development expenditures account for 1.9 per cent of Canada's Gross Domestic Product (GDP), an amount below the Organization for Economic Co-operation and Development's (OECD) average of 2.2 per cent. The Council of Canadian Academies reports that business research and development (R&D) as a percentage of GDP has fallen by 20 per cent between 2001 and 2007.

Canada also lags its OECD peers in the production of advanced degrees. For example, in the province of Ontario, less than one Master's degree was granted per 1,000 people in 2006, compared to 2.01 per 1,000 people in the United States; for PhDs, the figure is 0.14 per 1,000 people in Ontario, versus 0.19 per 1,000 in the U.S. (Task Force on Competitiveness, Productivity and Economic Progress, 2009, p. 45). The Science, Technology and Innovation Research Council (2009) reports that Canada ranks 21st in the OECD for production of science and engineering degrees (p. 54).

That is why I have proposed the Canada Learning and Innovation Act ("the Smart Nation Act"). If Canada wants to be a truly smart nation, it will invest in people, their ideas, and the application of those ideas through its commitment to learning on a national level.

The Act is anchored in three core premises. The first premise is that the opportunity to learn, to develop intellectually, to improve skills capability and to achieve one's best is the right of each Canadian at any age. The second premise is that the best path to creating a civic and prosperous society is through embracing lifelong learning and innovation. The third premise is that knowledge and its innovative application is a national treasure best fostered by engaging every citizen in its pursuit, but anchored by ambitious investments in research and development.

The objectives of the Act are far reaching. The Act will seek to make appropriate learning opportunities available to all Canadians at every stage of life, beginning from the earliest years and at every place in the country. It will ensure opportunities to create and disseminate knowledge through research and development equal to the best in the world. The Act will seek to meet the highest learning and innovation standards worldwide. The Act will maintain and create techniques and avenues to ensure affordable learning opportunities with due regard for the individual's responsibility to contribute to or repay the collective investment made. It will

also recognize that different persons learn best in different ways and will emphasize techniques to reach out in innovative ways to attract individuals to learn to the best of their capabilities.

The Act will recognize the importance of lifelong learning by establishing goals to maximize such opportunities for all Canadians. It will also recognize the overriding social and economic significance of investment in knowledge and in skilled and learned people by establishing goals for investment. Also, the Act will endeavour to build Canada's capacity for research and development and to generate knowledge. The receptor capacity to apply knowledge will use comparative measures for "best in the world" practices to measure progress. For research and development, this will include measures of investment at levels comparable to the best in the world. For learning opportunities, this will include measures to ensure breadth and depth of such opportunities and comparison with the best in the world by helping to develop the maximum capabilities of all individuals.

Sociologists Fred Block and Matthew Keller conducted a review of award-winning innovations in the United States between 1971 and 2006 and concluded that groundbreaking innovations have increasingly resulted from partnerships among government, business and academia, rather than from companies acting on their own. In 1971, 86 per cent of the top innovations were developed privately, but by 2006, that number had fallen to 31 per cent (Block & Keller, 2008, p. 10).

The Act will invest resources where they will do the most good—funding research and teaching activities that will not only develop new technologies for a new economy, but also prepare talented people to make the most of those innovations. Building Canada's research and development ecosystem must be done systematically as part of a larger effort to create a truly smart nation.

The Act will craft accountability principles to measure and enhance the efficiency and effectiveness of investment in learning and innovation systems and institutions that can be benchmarked against the best in the world. These should include, first, secondary school graduation achievement for at least 90 per cent of Canada's youth and tracked programs to age 21 for the remaining 10 per cent, and, second, robust standards for trade certification, college diploma, undergraduate and graduate degrees.

The Act will also recognize that education is a wonderful export industry: it is environmentally clean and value-added. A recent study submitted to the

Department of Foreign Affairs and Trade shows the economic impact of international education in Canada. The authors of this report found that in 2008, Canada's 178,227 international students, studying at universities and colleges, spent $6.25 billion on tuition, accommodation and discretionary spending (Roslyn Kunin & Associates, Inc., 2009, p. 33). To put that in perspective, the total amount that international students spend in Canada is greater than our country's export of coniferous lumber at $5.1 billion annually. International students generated $291 million in government revenue, and international education services contribute 65,000 jobs to the labour market across Canada, or 5.5% of the total jobs in Canada's education services sector (p. 34).

Canada is poised to share its learning and innovation experience with citizens in other parts of the world. Therefore, the Act will include measures to harmonize Canada's immigration and visa policies to attract talented people from elsewhere, measures to help foreign-trained individuals bridge their skills appropriately with the Canadian workplace, opportunities for international students to apply for landed immigrant status while studying in Canada, recognition of international credentials comparable to the best in the world, efforts to encourage Canadian students to study and work abroad to cultivate truly global citizens, efforts to export our learning and innovation systems and opportunities and share Canadian expertise with the world, and incentives to encourage Canadians to both work and learn past the traditional retirement age.

The goal is to make appropriate learning opportunities available to Canadians of all ages, regardless of their geographical location. At the same time, it will meet the highest world standards of learning and innovation, and will ensure that those standards become the floor and not the ceiling of our national learning ambitions. Developing the skills, talent, and innovation capacity, both of individual Canadians and the country as a whole, is the best way to promote long-term, sustainable economic prosperity. Our intellectual health as a nation must be a national priority.

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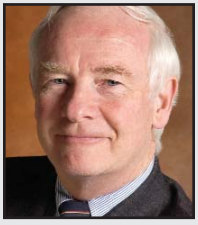

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Evidence in Education

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ABSTRACT

How much can we reasonably expect from research in education? There are many reasons to think the effects could be both powerful and positive. The call to make more use of research evidence does not in any way conflict with professional autonomy; if anything, it reinforces it. There are many areas of education where we do not have enough evidence to be confident about what to do. However, there are areas where we do have enough knowledge and yet are not applying it broadly. The take-up of evidence greatly depends on professionals' belief that their work should be guided by reliable knowledge, yet that belief is itself largely created by social practices and communication patterns. Many of the necessary elements to do so are simply not there today in most schools or school systems. Many of these features could be reinforced with relatively little effort with good results for students.

To what extent is public education an activity grounded in solid evidence? To what extent can it be such an activity, and what would be required for this to be the case?

My career has been about half as a university professor and researcher, and half in government working on issues of education policy. From the start of my active involvement in education, which goes back to when I was a high school student trying to give students a stronger voice in our education, I was struck by the degree to which policy and practice in schools seemed to be based on people's own experience and opinions, whether well founded or not, on what children needed or were like. From that day to this—now four decades—I have been involved in efforts to connect research knowledge about education to what happens in schools. I have done that

work in universities, in government, in school districts and in third-party organizations. In the last few years my academic work at Ontario Institute for Studies in Education (OISE) has focused very largely on this connection, now sometimes called "knowledge mobilization."[1]

Looking back at these efforts is in some ways encouraging and in other ways depressing.

Let's start with the encouraging side. First, the interest in and respect for research among professional educators has grown immensely. Twenty years ago a group of professional educators would greet the term "education research" with distinct lack of interest, if not derision. Today, while educators continue to have many criticisms of education research, almost all educators believe that research does have important contributions to make to what we know and what we should do in schools.

This change is not just rhetorical. Just as new evidence influences public behaviour in areas such as health or diet, new information about effective practice in education is of interest to the education profession. And some practices in education have changed, driven at least in part by evidence. For example, corporal punishment has been eliminated from schools with support from research showing its negative impact. Streaming of students has been reduced for similar reasons. Some students with disabilities are much better educated due to more research on their capacities and ways of addressing them. Teaching of reading has changed to emphasize new research on balanced literacy.

The growing impact of research in these and other cases results from several factors. The first is increasing research knowledge. There are more areas of education in which we have enough good research to be reasonably confident that we know or understand what to do—in areas as diverse as early reading, student motivation, parent engagement, impacts of staff development, and others. Of course, there is a great deal more to learn, but we know a reasonable amount now in a range of areas. Moreover, especially in the last few years, there have been increasing efforts to move that knowledge from its original academic form to other forms more likely to be attended to by educators. There are more, and better, syntheses of research, and more, and better modes of sharing research information whether through Web sites, documents, conferences, videos, coaching, learning communities, or other means.

But the supply of research only matters insofar as there is demand for it, and demand has also been increasing. One reason is increasing levels of education among educators, including many with graduate degrees. Another is more effective advocacy by third parties seeking to have particular policies or practices adopted in schools that use research as one of their supporting grounds. Evidence from research is routinely sought out and used by advocacy groups of various kinds and, as a result, has more public prominence. Although some advocacy groups are looking for research to advance a pre-determined position, not all third parties take this stance. Organizations such as associations of teachers of various subjects, or national bodies such as the Canadian Education Association, or interest groups such as learning disability associations tend to begin with a commitment to follow the evidence wherever it leads.

That is the optimistic side. However, there is also a pessimistic picture that applies to both the supply and demand sides of education research.

The picture here is that education research in Canada—and internationally—continues to be poorly funded, small scale, and does not have enough replication and cumulation of knowledge (OECD, 2007). There are few large-scale programs of research. Canada simply does not have enough people who have strong research skills and understand education policy and practice deeply in a way that allows the right connections to be made. We have nothing in education like the strong efforts in health by the Canadian Institutes for Health Research to build strong links between research, policy and practice.

Moreover, even if we had much more compelling research, Canadian school systems, again like those in other countries, lack the organized capacity to find, share and use that research (Levin, 2008a). Very few school systems have people, processes or systems related to research use. By this I mean that few school systems have routines that bring research to people's attention on a regular basis, or make research results a normal focus of discussion or consideration. This is not just true of schools and school districts; few ministries of education have an infrastructure to support research either. So the rhetoric about the importance of education is not (yet) matched by the steps needed to give evidence a rightful place.

How much can we reasonably expect from research in education? There are many reasons to think the effects could be both powerful and positive. Education is unique among professions in its view that each person can and should find his or her own way, and that standard practices are something to be eschewed. Every other

profession, whether lawyers, nurses, engineers, architects or even airplane pilots, regards standard practices supported by evidence as the core of what it means to be a professional. Professional preparation largely consists of learning when and how to use standard practices as well as how to exercise professional judgment as to their applicability. Standard practices are not seen as infringement on professional autonomy, but are viewed as a repertoire that allows professionals to focus on those areas where their judgment is required. Yet schools resist the whole idea that there should be things that virtually all teachers do in the same way, or all schools do in the same way.

Parenthetically, this resistance has not stopped school systems from insisting that all teachers adopt practices that may lack empirical warrant. Educators are all too familiar with the frequent faddism in school systems that adopt one or another package promoted by some entrepreneur, only to drop it a few years later. That faddism is one reason why teachers and school leaders are resistant to new change proposals. It is also a reason that educators always have to be thoughtful about their practice. Educating can never be reduced to rote just as students' learning should never be rote. The call to make more use of research evidence does not in any way conflict with professional autonomy; if anything, it reinforces it.

There are many areas of education, as already noted, where we do not have enough evidence to be confident about what to do. However, there are areas where we do have enough knowledge and yet are not applying it broadly. A couple of examples can illustrate. One would be failure and grade repetition. Very large numbers of students end up repeating courses or grades during their schooling. In Canada about 30% of students do not finish high school "on time." This means that literally hundreds of millions of dollars are being spent so that students can repeat courses or years. Although many people still think failure teaches important life lessons, one of the strongest findings in psychology is that failure depresses future effort (National Research Council, 2003). So the research says that we should do everything we can to prevent failure, as this will bring better results in the long term. Such an approach is far from standard practice in most school systems.

Take a second example—student motivation. We have a lot of evidence on the kind of practices that students find motivating (an excellent summary is in National Research Council, 2003). These are pretty similar to what motivates adults—worthwhile tasks, some autonomy in how to do them, good feedback, good colleagues to work with, opportunities to learn and improve. These features lead to more effort and better results. Yet to a large extent these principles are not common

practice in schools. Recent Canadian evidence (Willms et al., 2009), as well as international evidence from PISA (Willms, 2003), shows how few students in secondary schools report high levels of engagement with their schooling.

In both these instances there is potential for large improvements in educational outcomes through wider application of current knowledge. However, getting that application is not a simple matter. Substantial research (e.g., Mitton et al., 2007; Nutley et al., 2007) also shows how difficult it is to get people to change their practices, even when the changes are widely understood to be desirable and fairly easy to do. For example, it is very difficult to get hospital staff to wash their hands consistently (Gawande, 2007) even though people know this is important and know how to do it. It is much harder to change complex practices such as teaching.

Yet we also know something about how such changes happen. Change in organizational practices requires both will and skill (Levin, 2008b). It certainly takes more than telling people. While we often think of change in schools as being a matter for individual teachers, it is really much more a matter of altering social conditions in ways that support new behaviour. The take-up of evidence greatly depends on professionals' belief that their work should be guided by reliable knowledge, yet that belief is itself largely created by social practices and communication patterns. Many of the necessary elements to do so are simply not there today in most schools or school systems. These elements include constant repetition of key messages, systems and processes for educators to learn about and discuss research findings, opportunities to practice new strategies with coaching and feedback, and good evidence that new practices produce better results.

Many of these features could be reinforced with relatively little effort. It is possible to add the discussion of research findings to meeting agendas, to share key research messages regularly, and to gather and share evidence on current practices without huge efforts, yet each of these steps would change the climate around the use of research and evidence. Of course there are other, larger steps that would support a profession with a stronger base in solid evidence, but the point to be made here is that every teacher or education leader can do something to move the system in this direction, with good results for students.

Note

1. See www.oise.utoronto.ca/rspe for more information on my team's current program of research.

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LINK TO:

http://home.oise.utoronto.ca/~blevin/

A Passionate Plea: Equal Educational Opportunities for All Canadians

The Right Honourable Paul Martin

ABSTRACT

Former Prime Minister Paul Martin discusses the importance of providing equal educational opportunities to all Canadians, particularly to our First Nations, Métis and Inuit people. He describes the propelling force behind the Kelowna Accord, which made history by bringing together Federal, Provincial, Territorial and Aboriginal peoples leaders to resolve critical problems related to education, among other things. Mr. Martin's interest in Aboriginal education has led him to participate in four important initiatives that focus on improving K-12 education in Aboriginal communities: a Promising Practices Web site for teachers, a Mentorship Program for high school students, a Model School Program aimed at primary schools, and a Business Education Program focused on preventing dropout. He describes these programs, and the results they are achieving. Finally, Mr. Martin offers words of advice for parents, youths and governments for the future of education in Canada.

Mr. Martin, what educational experiences, informal or formal, do you believe contributed to your success as a politician and an entrepreneur?

(**Editor's Note:** Any reprints, video or other linked to this article should be verified with the Office of the Right Honourable Paul Martin at http://www.paulmartin.ca/en/contact)

Well, there is no doubt that having good primary, secondary and, obviously, university education is very important if, in fact, there are a number of avenues which you want to follow that might well otherwise be

foreclosed. And I was very lucky in that way. As well, informal education is important, as are the examples that people set. I would say probably my father had the greatest influence upon my life. He came from a very poor family, and was the first person in his family to go to university. He understood the role of government in helping those who were not born to wealth essentially to have the opportunity to take advantage of everything that is out there.

Other people, like Maurice Strong, who was one of Canada's first great environmentalists, influenced me heavily in terms of the Third World and the environment. Then, of course, there were my experiences working up north. I worked north of 60 a number of summers to put myself through school. And it was there, really, that I came to really know young people my own age who were either First Nations, Inuit or Métis and I saw how different and how valuable their life experiences were. Unfortunately, in our system they just were not able to take advantage of what Canada has to offer.

So I think it is a combination of all these things. There is no doubt that a university that teaches you what life is about in terms of the great studies that have been achieved is very important. But also, to then be able to take that and be able to see it in the eyes of people who are living different kinds of lives is also extremely valuable.

Can you describe some memorable experiences you had as a student at any level of education, and why these stand out in particular?

Oh, any one of a number. I will tell you perhaps of the one set of lectures that will always stay with me (this is at the University of Toronto and my minor was in history)…I walked into the auditorium where this particular course was being taught and there must have been a thousand people in it. And this was usually a small class. I thought, *I have walked into the wrong room*. I couldn't understand it. And they said, *No, no, no. This is a series of special lectures that is given every year by one of the professors*. The first lecture was on the Reformation. It was how, in fact, those who had protested (meaning Protestants) had basically brought about the Reformation. I am a Catholic. And at the end of that lecture Catholics would leave saying, *Oh my heavens, what was that all about?*

The second lecture was on the Counter-Reformation. And when the Protestant students came out of the room, they'd ask themselves the same question. Both sides of the divide then understood just how intense the Reformation and Counter-Reformation were. And then the third lecture was when everything was reconciled. And I must say that if I were to pick one series of lectures, it was certainly that.

One of your major accomplishments as the 21st Prime Minister of Canada was the signing of the Kelowna Accord in 2005. Can you talk about the efforts that went into this agreement, what has been accomplished as a result, and what you envision for the future?

Well, essentially, the world's treatment of its indigenous peoples has been simply unacceptable. The damage that we have done to so many people is virtually unspeakable. This is true in Australia, it is true in Africa, in South America, and it is certainly true in the United States and in Canada.

Essentially, what we did when the settlers first arrived was to say to the First Nations, the Métis and the Inuit, that everything that we believe is good and everything that you believe is bad. We were the dominant economic force and as such we burdened them for 300 years with that mantra. And yet, despite all of that, their desire to hold on to their traditions, their identity, is there. This is a wonderful thing that speaks so highly of Canada's Aboriginal peoples. But the fact is that the entire system was built against them—housing, water, the residential school issue where we turned education into a way to assimilate them and destroy their traditions—all of this is part of our history and, in fact, it is very much a part of our contemporary reality. The last residential school did not close until the early 1990s, as an example.

Thus one example of the purpose of the Kelowna Accord was in education. It was to recognize that governments have been under-funding primary and secondary school education on reserve compared to what the provinces do off reserve. As well, we under-fund welfare, we under-fund hospital care and healthcare; the housing conditions, the potable water conditions . . . all of this is just an absolute national disgrace.

So, what the Kelowna Accord said was, *we are going to right this. History is going to change, and it is going to change now in terms of these areas which are such*

fundamental parts of Canadian life. In the past what the Canadian government had done was to simply say, *there is a problem, here is a solution*—and ignore the Aboriginal leadership. We said we are not going to do that. What we are going to do is work in partnership. During the 15 months before we met in Kelowna, we sat down with First Nations, the Métis and Inuit leadership in this country, and we said, *how do we deal with these issues? What do you think?*

And every bit as important, because the provinces deliver healthcare and education, we said we want the provinces and the territories at the table. That is the first time in the history of Canada that provincial, territorial and Aboriginal leadership and the federal government were at the same table.

In 15 months we worked out a plan among all of us as to how we were going to deal with these issues and how they should be funded. And then we met in Kelowna—Canadian Prime Minister, pertinent ministers of the Federal Cabinet, all the provincial premiers, the Territorial leaders and the Aboriginal leadership—and we came to an Accord, televised in front of 33 million Canadians, in which we said the history of this country is going to change in terms of the essential elements that give a person a chance to succeed in the 21st century. And that is the Kelowna Accord.

Another important initiative into which you have put energy and resources is the Martin Aboriginal Education Initiative. Can you talk about the impetus for this initiative, what has been accomplished so far, and what lies ahead in the future?

Well, the reason for doing this is that, as I mentioned earlier, I had worked up north with the Aboriginal communities and I have a lot of friends there and I understood what they had gone through in their lives. They were not given the same opportunities as the rest of us. Fundamentally, it comes down to education available to other Canadians.

Forty-four per cent of all Aboriginal students in the provincial school system do not graduate; 60 per cent of all First Nations on reserve do not graduate. And the difference between having a high school education and not having a high school education in terms of quality of life, the opportunity for a good job—and, obviously, the opportunity to go to university—is overwhelming.

There are reasons for this. The fact is that on reserve, for instance, the schools are isolated. There is no such thing as a school network. Furthermore, the federal government does not deliver elementary and secondary school education as do the provinces, therefore it does not have the requisite background or skills. Many Band Councils do not have the kind of skills that they should have. You have to remember that up until 1953 if you were a Status Indian you were not allowed to go to university. So we decided that we would focus (this is when I stepped down from government) on education.

But Canada's universities are doing a tremendous job. I mean, they are playing catch-up, but I have to say that over the last 10 to 15 years what our universities have done in terms of Aboriginal education has been awe inspiring. The same is not true at the primary and secondary school level. So we decided to focus on that.

We have four programs. One of them is what we call the Promising Practices Web site, which is simply taking all the best ideas, K–12, and putting them on a Web site, because K–12 is a problem not just for Aboriginals. It is a problem in Canada, it is in the United States, the United Kingdom, right throughout the Anglo-Saxon world. Fortunately there are all kinds of good ideas, initiatives that are taking place to deal with these issues or problems. However, they never translate over to Aboriginal education. So we decided to put up the Promising Practices Web site and make them available to all the Aboriginal educators in the country.

Our second program is a Mentorship Program. I was trained as a lawyer, and yet before I went into politics I ran a shipping company. Well, people said, *how could you ever know how to run a shipping company?* Well, the answer is simple: somebody taught me. I was mentored. And so, we met with the Association of Chartered Accountants and they have agreed to be mentors. They said, *we have offices throughout the country. If you will start to offer students to us who might drop out but have an eye for detail, an eye for math, we will start to mentor them and give them internships in high school. Maybe that will keep them in high school and they will want to go to university, and maybe some of them will become chartered accountants.* Well, that's the second program.

The third initiative, which we just started in two elementary schools on a reserve in Southwest Ontario, is our Model School Program. There are good primary schools on reserve; but there are also an awful lot that are not really up to snuff. The province of Ontario has a tremendous program, an At-risk Grade School Program. [The challenge is]: "How [to] take a grade school which is not functioning very well

and give it the skills to be able to teach literacy and mathematics [just like] the best grade schools in North America." So, we have taken that program, we hired the lead teachers, and we are going to do a pilot in these two primary schools with the full support of the principals and the Band Councils. Hopefully it's going to work, and what they will be able to do is meet all of the provincial tests. They will then become model grade schools, and then we will extend that program throughout the rest of the country. But we really hope that at that point governments will start to pick it up.

The last program I would mention was in fact our first. It is based on the insight that students who are dropping out of school will stay in school if they can see that they will be taught something concrete, fundamentally something that may well give them a better life later on. A teacher, some 30 years ago in the inner city of New York, discovered that if you teach potential dropouts business they will stay in school. This program is now in 14 countries—the United Kingdom, in Ireland, in Israel, in Belgium, and 30 U.S. States. We took the program and married it with the Ontario curriculum and introduced it as a pilot project on a reserve school in Thunder Bay, a reserve school that is dealing with kids who come from fly-in communities down the coast of Hudson Bay and James Bay, and the program is working tremendously well.

As a result of that, I called the Premiers of the four western provinces and the Premier of New Brunswick and I said, *send your education people to take a look at this*. And they did. We now have a school in British Columbia, we have a school in Alberta, a school in Saskatchewan, a school in Manitoba and we're opening next year in New Brunswick. Our intention is, essentially, once we get enough of these schools across the country, then we want to start to expand them within the individual provinces because in terms of keeping kids in school, they are really working quite well. We also open next year in Laurentian University.

In educational initiatives, student voices are most often left out of the equation. This has not been so in the MAEI Initiative. Can you tell us some stories of these mentees?

One of the interesting issues is Aboriginal leaders tell you how important it is to know one's identity. In other words, if you do not have an understanding of who you are, then you are not going to be open to continuing education. I wondered about this at first. So one of the things that I have done, when I go to meet the

students (and I do this a lot) I ask them, *how important is it for you to know who you are and what you are about?* Students never cease telling me about their background and why it is important for them to be able to stand tall as Cree, or a Chippewa or a Mohawk and what it means to them.

But what is most interesting is that the more education a young person has the more that identity is important to them.

In our business program, the students basically develop businesses. Aboriginal students have incredible artistic talent. They are great painters. I do not mean just great painters as students; there is a huge talent out there and the same thing with music.

I'll never forget the first time we visited Thunder Bay and all of these students had their programs and their various businesses. A number of them were related to music. One of them had a program where it was sort of a Karaoke-type thing, which you would take around with you and you would come out and play a guitar and the guitar would actually play. So I tried it. Then they showed me what I looked like on the screen. And I have to say it took me about six months before I could go back to the school, because I have to say that they have to still be telling the story about how clumsy and how I must have anvils for hands. And they had a great deal of fun out of that.

One of the student's businesses was designing comic books. He showed me his first book. It really is one that I think at some point should win a prize. It was about his best friend who had committed suicide. It was to be distributed to other young students so that they would understand just what a terrible thing suicide is. It was impossible for me to read it without crying.

We really are breaking new ground here. Teachers are tremendously dedicated to the work, but unless you go to the students and say to them, *look, is this working for you? And if it's not working for you, what would make it work for you?* well you will never succeed. I found that the students had huge talent. What we find often times is that we'll go with the first class at the very beginning. I'll go around and some of them are so shy they're barely able to tell you their names. Six months later they're standing up in front of 200 or 300 people and they're describing their business. Where does that self-confidence come from? I think it is because they're young. It is easier for them to develop that self-confidence if somebody is supporting them. I'll give you another example. At the beginning we had competitions. There would

be 20 kids who would put their business programs up front and then we would bring in a jury who would pick first, second or third.

And when we had done that the first time, I said, *You know, I don't think this is a good idea. I don't think having these kids test their ideas against each other makes a lot of sense.*

And so I said to the teachers and to the school, *I think we should just let them make their presentations.* Then the teachers went to the kids and told them this. The kids said, *no, no; we want to have that contest*. They said, *you misread us, we want to stand the test. This is what it is all about*. They actually understood the program better than I did.

In an ideal world, what would you envision for the future of Canada's educational system, and what major challenges must be faced?

Well, I'm not an educator. I spent a lot of time in school, but I was always on the other side of the desk. But I think I do have a bit of an understanding of Aboriginal education. I think first of all, proper funding. Let me give you an example in the province of Ontario (but it is the same way across the country). In the province of Ontario the federal government gives $12,000 per capita per student to the province to educate an Aboriginal who lives on reserve who is going to go to an off-reserve high school. But for an on-reserve high school, they give the Band $6,000—50 per cent of the cost. Look, if I am spending $12,000 on your education, and $6,000 on somebody else's, well there is no doubt that there is going to be a difference in the quality of that education.

Second: we have to understand that there are a lot of damaged young people out there either as a consequence of their parents going to a residential school, or their grandparents, or as a result of things like fetal alcoholic syndrome and there has to be greater funding for kids with disabilities or special needs.

Third: we have to understand how important identity is, and how important an understanding of others' tradition. For instance, Foreign Service officers whose children are going to the French School, or the American School in foreign postings will come back and they will talk about the cultural difference prevalent. They will say that "it is taking my child a while to understand it." Or, if they have gone

to the American School or the French School for all of their lives and all of a sudden they come back to Canada and they have to make an adjustment … well, just think what it is like if you are a young boy or girl living in an isolated community of 300 people on the shores of Hudson Bay, and then all of a sudden at the age of 14 you are sent to a reserve school in Thunder Bay and you live in a boarding house. Just think about the cultural shock that represents. Or, if your family has moved from northern Saskatchewan to Regina or Saskatoon, and all of a sudden you are living in a community, and there are problems at home … and just think of what those young people are going through. Our education system is simply not up to dealing with that, and it has to be.

Aboriginal Canadians are the youngest and fastest growing segment of our population. It is immoral not to treat those young people the same way as you would treat anybody else and to recognize their differences. But it is economically dumb as well.

We are 33 million people. We are competing with countries with massive populations and we cannot afford to waste a single talent.

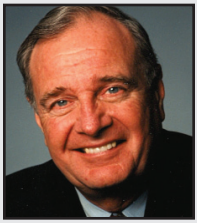
As a parent, grandparent, politician, business person, philosophy minor, historian, lawyer and a citizen, what advice can you offer young students, their parents and teachers?

Well, as far as the parents are concerned, I think that they should sign a contract with your children that you're going to make them go to school and that you're going to make them do their homework and that you're going to make them understand what it is they have to do.

I've got to tell you that I am certainly impressed with the teachers involved in aboriginal education I have met—the grade schools teachers, the primary school teachers, the high school teachers, and obviously the university professors.

They are really, truly dedicated people. I think they need a lot more support in some areas. It is impossible not to see when you realize what a contribution they are making, that they should not be given far greater recognition.

As far as the students are concerned, I think that for the problems that inevitably occur in the teen years that they occur in everybody's teen years; not just in the early years of Aboriginal students. I believe that you've got to give them a sense of what the outside world is all about so they know what it is that they are going into. You've got to give them a sense of confidence.



The Right Honourable Paul Martin was the twenty-first Prime Minister of Canada from 2003 to 2006 and its Minister of Finance from 1993 to 2002 and the Member of Parliament for LaSalle-Émard in Montreal, Quebec from 1988 to 2008.

In November 2005, under Mr. Martin's leadership, the Canadian Government reached a historic consensus with Canada's provinces, territories, First Nations, Métis and Inuit leaders that would eliminate the gaps between Aboriginal and non-Aboriginal Canadians in the areas of health, education, housing and economic opportunity. This agreement became known as the Kelowna Accord.

Domestically, he is leading two new initiatives. The Martin Aboriginal Education Initiative which aims at reducing the Aboriginal youth dropout rate and at increasing the number of Aboriginal students attending post-secondary institutions. He also founded, along with his son David, the Capital for Aboriginal Prosperity and Entrepreneurship Fund, whose investments seek to further a culture of economic independence, ownership and entrepreneurship amongst both on and off reserve Aboriginal peoples, through the creation and growth of successful businesses.

Mr. Martin studied philosophy and history at St. Michael's College at the University of Toronto before obtaining his LL.B. from the Faculty of Law at the University of Toronto. He was called to the Ontario Bar in 1966.

LINK TO:

www.maei-ieam.ca

Education for Its Own Sake

Elizabeth May

ABSTRACT

In this commentary the author examines the exciting role that education has played—and still plays—in her life. She discusses the joy of attending law school where legal cases and rulings piqued her thirst for knowledge. Later, she reiterates Jane Jacobs' cautionary warning about education being replaced by "certification" and students being degraded to mere "consumers" of an educational product. She concludes by stressing the importance of protecting and valuing education for its own sake.

When I think of any and every advantage and opportunity through life, those I prize the most have been my educational experiences. I loved school from Grade One. I love learning and believe that that process never stops. Although family financial reverses meant I was never able to complete an undergraduate degree, I was fortunate to access a law school program for older students. Having missed university through most of my twenties, I approached law school as someone who had been lost in a desert offered an oasis of cool water.

Law school was a joy—although few of my fellow students felt that way. I read case law as though each piece of litigation was a pulp novel, full of drama and suspense. And some actually were. Somerset Maugham's brother, a High Court judge, wrote wonderful judgments, as did Lord Denning. My favourite of his began, "It was bluebell time in Kent …" (1970). I developed my own legal theories: if Lord Denning was the judge, no cricket club could be successfully sued.

Even the first week of law school exams did not dampen my happiness. In fact, friends even asked me if I would please have the decency to stop smiling. There is something magical about sitting at a desk and having someone else decode new and wonderful mysteries. I have on a number of occasions (at Dalhousie and Queens) had the great good fortune to teach courses myself. And now, in my fifties, I love taking courses part-time in theology. I am still not sure what I want to do when I grow up.

The threats to education were best crystallized by Jane Jacobs (2005) in *Dark Age Ahead*. She wrote that true education, particularly through university, was in danger of being replaced by "certification."

There is a repressive force that wants to see all education justified by the earning power guaranteed by a degree. This is what Jane Jacobs saw as corroding a fundamental pillar of our civilization. You pay your money to get your ticket. Students are degraded to mere "consumers" of an educational product. Education should never be so transactionalized. Education should be about expanding the mind, building the capacity for critical analysis, and allowing students to experience a world beyond their reach. Real education has nothing to do with future income and everything to do with fulfilling potential. Studying philosophy, poetry or dance may not sound like a "realistic" endeavour, but what sort of civilization would we have if we lacked poets, dancers and philosophers. And for those seeking those "practical" degrees, must not they also have at least some contact and understanding of the rest of the tapestry of the world in which we live?

Education for its own sake must be valued and protected. The increasing dumbing down of media, the acceptance of mediocrity in our political leaders, and ugliness in our public spaces, needs to be challenged. Educate. Teach. Learn. Change. Breathe. Dance.

Education in its truest form should lead to a metamorphosis.

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Elizabeth May is an environmentalist, writer, activist, lawyer, and leader of the Green Party of Canada. She is a graduate of Dalhousie Law School and was admitted to the Bar in both Nova Scotia and Ontario. She held the position of Associate General Council for the Public Interest Advocacy Centre prior to becoming Senior Policy Advisor to the federal minister of the Environment from 1986 until 1988. Elizabeth became Executive Director of the Sierra Club of Canada in 1989, a position she held until March 2006, when she stepped down to run for leadership of the Green Party of Canada.

She has served on the boards of numerous organizations, including the International Institute for Sustainable Development and as Vice-Chair of the National Round Table on Environment and Economy and is currently a Commissioner of the Earth Charter International Council. Elizabeth became an Officer of the Order of Canada in 2005, and was elected as leader of the Green Party of Canada in 2006.

LINK TO:

www.elizabethmay.ca

www.greenparty.ca

Curiosity, Passion and Learning

Avrum Morrow

ABSTRACT

In this commentary, business man and philanthropist Avrum Morrow maintains that learning need not be dull. He recalls some of the passionate teachers, from primary school to university, who had a profound influence on him. Through innovative art projects and singing arias in class to attention-grabbing science demonstrations, these teachers sparked his interest in art, music and science. He believes that curiosity and a receptive mind are the keys to lifelong learning.

As far as I can recall, I was more interested in sports as a student than I was in my classes. I owe whatever knowledge I have to books that I have read, to friends who have sharpened my thinking, and to teachers who developed my critical faculties. If you are curious and receptive you can't help but learn. But I don't know where ideas come from. The creativity of the human mind has always amazed me. It seems to me that it is an accumulation of the books you have read, the people you have met who have influenced you, and the stories that have been told to you. You read something, you experience something, you imagine something, you put it all together and an idea is born. But the mind has to be shocked, seduced or otherwise provoked into action. Even the Biblical prophets understood that.

I suppose The Bible is as good an introduction to learning as any. The philosopher and poet, Max Eastman, taught me how to read The Bible, not as a work of theology or as the inspired work of God, but for pleasure and instruction. Max was a rebel, but a wonderful human being who was against the Second World War. He defended his position when he was tried as a dissident in a court of law.

What I learned from him is that you can appreciate Scripture as an introduction to the human condition. You don't have to be a believer to realize that The Bible, like the works of Shakespeare, is an instructive primer into literature, the social sciences, ethics, history and psychology. All human virtues and transgressions are depicted in the Old and New Testaments—greed, charity, rape, incest. In its books you will find both loving and dysfunctional families, liars, cheats, honest men and murderers. The Bible never arrives at the ultimate definition of good or evil, but teaches that they are a paradox of opposites and introduces readers to the whole range of human experience. By reading scripture you venture into what Robert Browning (1855) calls "the dangerous edge of things," where you discover the contradictions of the human condition—"the honest thief, the tender murderer, the superstitious atheist" (p. 236).

Esther Tammarin was one teacher who made an impact on me when I was at Fairmont Elementary School, and who, upon reflection, stimulated my lifelong interest in art. She was original in her approach to teaching and had us do projects that were not part of the standard curriculum. For example, she had us make our own stained-glass windows by oiling brown wrapping paper and then having us cut window frames out of black construction paper. By pasting the oiled wrapping paper behind the cut-outs, the paper became translucent. I found it a pleasure to make windows out of oiled paper. The exercise almost certainly triggered my interest in art. Not only did I try my hand at painting, which I still do, but in 1965 our company commissioned an artist, R.D. Wilson, to draw Avmor's head office on Ste. Helen Street in Old Montreal for a Christmas card. His work became the first in what has become the Avmor Collection. Over the years various artists have painted portraits of the same building, and today more than 400 works by some of the country's most well-known artists are on display. It always amazes me to see how one building can be seen and interpreted by so many people in so many different ways.

You can make art out of anything. Some years ago I got the idea of giving each of the artists a white tie to decorate, and today we have a collection of over 300 hand-painted ties. You can't always take yourself seriously. Learning doesn't have to be dull. You can have fun making a lamp out of a used showerhead or making pepper mills out of the branches of dead trees.

When I was at McGill studying engineering physics, I had a teacher, Professor Watson, whose demonstrations of electromagnetism remain vivid in my memory. He had a metal tube wound with wire connected to an alternating current, and a rod went back and forth in a *lewd* manner. It was an effective yet simple way to demonstrate how polarity changes from north to south.

Professor Watson led me to appreciate science and to read biographies of such prominent scientists as Richard Phillips Feynman and Niels Bohr. Feynman was not only an outstanding scientist who worked on the atomic bomb and expanded our understanding of quantum mechanics, but also a splendid raconteur and musician. Bohr won the Nobel Prize for Physics in 1922 for his contributions to our understanding of atomic structure. To me it is magnificent that people can think like they did. Learning about them has enriched my life.

Good teachers are passionate about what they do, and that passion comes through in their classrooms. Of all the teachers I had, the ones that I remember were interesting as people, sincerely interested in what they were doing, and interested in imparting something to their students. They weren't blasé. They didn't just read or comment on something but took a hands-on approach to education. I still remember Mr. Herbert at Baron Byng, who sang us arias from all kinds of operas. Thanks to his enthusiasm, Mr. Herbert left me with an appreciation of music. The only word that comes to mind, to describe all the teachers that had an influence on me, is "passionate." They imparted something more than information. They were caring educators who made a genuine effort to relate to their students.

Great minds DO NOT nor should they think alike. And, as I said previously: "If you are curious and receptive you can't help but learn."

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Avrum Morrow studied engineering physics at McGill University. In 1948 he founded Avmor—a manufacturer of professional cleaning chemicals—with Henry Chinks. Today, the company is an industry pioneer that employs some 100 people.

A passionate supporter of the arts, he transformed the company's original headquarters in Old Montreal into an art museum. Artists from all walks of life have been commissioned over the years to do paintings, photographs, drawings and sculptures of the Avmor building at 445 Ste Helene Street.

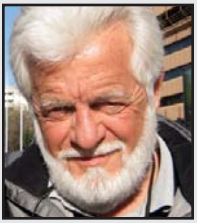
Morrow is a member of Concordia University's Fine Arts Advisory Board and also sits on the boards of the Montreal Heart Institute and the Montefiore Club. He received awards from the City of Montreal in both 1996 and 2000 as well as the Dobson Fellowship from McGill University in 2005. Morrow was named to the Order of Canada in 2007, making him the first person from the janitorial industry to receive such an honour.

Higher Learning, Meager Earnings

Terry Mosher

ABSTRACT

This cartoon, a favourite of mine, was drawn for *Maclean's Magazine* to illustrate a column written by Paul Wells on the subject of university professors trying to survive on their often meager earnings.



AISLIN is the name of **Terry Mosher**'s elder daughter—and the nom de plume he has used for over thirty-five years as the political cartoonist for Montreal's English-language newspaper, *The Gazette*. To date, forty-two Aislin books have been published. His latest collection of cartoons is entitled *AISLIN'S SHENANIGANS*.

Over the course of his career, Terry Mosher has frequently appeared as a commentator on many of Canada's major television and radio programs. He is also a regular speaker on humour and the importance of cartooning as a communications tool. In recognition of both his charitable work and his contribution to the world of political cartooning, Mosher was named an Officer of the Order of Canada in May 2003. In 2007, Terry received an honorary Doctor of Letters from Montreal's McGill University.

Filmmaker John Curtin won the Gemini for best Canadian biography documentary of 2007 for his Life and Times documentary on Terry Mosher entitled, *Dangerous When Provoked*.

LINK TO:

www.aislin.com

Ear of the Heart

Lorri Neilsen Glenn, Mount Saint Vincent University

ABSTRACT

Contemplation plays an important role in developing mindfulness and in preparing us for the work of community in education. Silence, solitude, and the chance to develop one's sense of self and of purpose are often lost in the fast-paced, technologically driven lives we lead at home and at work. This essay provides a rationale for slowing down and paying attention in order to develop the empathy required to face educational challenges collectively.

It's quiet as I write this. The phone is off and I have time to think. What comes to mind is an image of Graydon's 86-year-old hands as they touched the wood and metal items on the table at the school reunion in the Strathclair Community Hall: a penknife won in the school spelling contest; a swing-armed pencil case he shared with his sister; a protractor; a muddied paint set with a mashed brush; slate the size of a piece of foolscap on which he practiced his letters. And here, he said, is a photograph of the sled and the horse that drove your mother, your uncle and me to the schoolhouse every winter morning. They were long, cold, quiet rides, he said.

Simpler times and yet harder. One-room rural schools (arrived at in blizzards; uphill all the way, we joke) meant the physical work of replenishing woodstoves and water, but it also meant a roomful of children from the ages of five to fifteen, musical performances, community spelling bees, pot lucks, dreams of the Chautauqua, and mornings creating drawings for visiting dignitaries. If you didn't quit to work on the farm, you finished your education with flowing, legible script, a reasonable command of numbers, and the ability to read the articles in *The Family Herald and Weekly Star*.

"Most of my grade threes can't read cursive writing," one of my graduate students dropped into the conversation recently. "Let alone write it." I blinked. Somehow that fact sharpened my focus on differences in schools between the last century and this. No more scratching on slates, dipping ink in pots, and relying on a single text: digital media such as email, texting, Googling, social networking, and other technological wizardry now allow us to exchange information across the globe. Schools are populated by children with a rich mix of heritages, who speak more than one language. Sums, letters, times tables, and recitations are no longer enough to fill the school day: we now have complex, multiplying and interwoven curricula, performance measures, and accountability regimes that monitor both teachers' competence and the educational growth of their charges—students who are increasingly defined, and some say limited, by labels and the weighty cumulative files they drag behind them through the years. It is tempting in climates of such complex activity to romanticize the past, to assume the insular, hard-scrabble life of the last century was a better world.

Yet, as one teacher noted: who has time to spend learning or teaching penmanship? Typing is faster. Texting, even more so.

The year is 2010. More than a jungle out there—it is a circus. Everywhere is a midway: hurry up, buy this, watch that, friend me, tweet me, and drive through. We are forced to ride on the surface of it all—snatching short bits of data as they fly by. Learners are caught up in the melee, and some of them often seem dazzled by the frenzy to do several things at once. Teachers are pulled in many directions simultaneously, hammered by the bell and the expectations of "stakeholders." School boards, pushed by public and political agendas to do what seems right, and do it quickly, add more weight to their employees' workloads: teachers are commandeered to enforce a fashionable new policy, for example, or asked to forfeit prep time to complete their administration's tasks. All of us—from whatever entry point we look at education—are interrupted and interruptible. If we can manage a thought, it is often fragmentary, and to save time, we hit "reply all." Our lives are marked by beeping, dinging, ringing, movement, and quick, shallow breaths. The White Rabbits of the 21st Century: *No time to say hello, good-bye; I'm late, I'm late, I'm late*.

And, as a result, when I consider what we have gained and lost in a century of progress, my thoughts do not go to increased numeracy levels, to finer-tuned ability groupings, to critical literacy, or to the questionable grip that policymakers, and assessment structures have on contemporary education. My thoughts go to the luxury of having thoughts—to contemplation, empty spaces in a day in which to dream,

take flights of the imagination, and find solitude. We can add knowledge to our lives, but for wisdom, as Taoists remind us, we must learn to take away. Simplicity does not mean less complexity: it means reminding ourselves of what matters.

When I retreat into writing, I often feel like a child reaching the edge of the circus grounds. The cacophony recedes and I fall into the embrace of silence. Solitude affords me an opportunity to enter what psychologist Mihaly Csikszentmihalyi (1998) calls the flow state, an optimal state of suspension in which we forget time and external circumstances. Most people, especially artists, find this state of absorbedness to be blissful, pleasurable at the very least. It can be a productive state, not because we produce things, but because we let go, and simply be. We are present: absorbed. As a child, I coloured or drew; made towns out of mud; imagined a life beyond. In school, periods of silence—enforced, mind you, and not always kindly—grounded me, gave me time to work through problems, hear my own voice. From that baseline of sustained silence and relative solitude I drew strength to step into the larger world.

Amid the busy-ness and noise of schools and universities today, I try to breathe deeply and slow down: what are you doing here, I ask myself. What matters? My answers have changed over decades, but I come back to one that endures: our capacity for contemplation is necessary to healthy, creative, and productive educational climates. Without moments of stillness and reflection—moments that Graydon and my mother had in abundance—we run the risk of becoming fragmented beings, diffuse, shredded by data, drawn away from the river of our own wisdom.

From my earliest days as a public school art and English teacher to my circumstances now—teaching literacy education, research, and creative writing in and out of the university—the art of paying attention has been critical to my teaching and my own learning. I have created spaces for silence and mindfulness in my classrooms in a number of minor—yet welcomed—ways: opening a class with journal writing, for example, encouraging doodling during discussions (it is calming, and it improves memory), sending people outside for a ten-minute reconnection with themselves and the natural world, or assigning solitary observation exercises. This cultivation of quiet goes beyond turning off a cell phone. It requires stilling the waters so that we can see the riverbed.

Psychologists, counselors, contemplatives, spiritual leaders, among others, agree that we need quiet and solitude in order to have conversations with ourselves, to change or stretch our minds, and to renew our sense of place and of belonging. Time alone affords us the seasoning of thought: ideas turn over, become nuanced,

cause us to redirect or reconfirm. Buddhist practice suggests that when we cultivate contemplative states and mindfulness we ward off the relentless invasions of the everyday, invasions that detract from our sense of our bodies at rest in the world, of groundedness. St. Benedict, a contemplative, considered silence in and out of community as an opportunity to listen with the ear of the heart. When we attend and listen—whether we want to call it the flow state, meditation, silence, or reflection—our attending opens us up to empathy. We then become more present for others.

Which is where contemplation and community connect, I believe. It is true that technological advances have brought education to people in far-flung locations; online communities can be a lifeline and a necessary resource. Yet when we find our attentions are directed away from face-to-face connections toward primarily online connections, we lose a critical element of being human. The hustle and bustle, the exigencies and the urgencies in the rush of our days, can turn us increasingly toward virtual connections, leaving us with often fragmented, fleeting, and unsatisfactory encounters. To be human is to be social; nothing can replace eye-to-eye conversation, the brush of contact, the synergy of alert and attentive bodies in a room. Human contact is at the heart of learning.

Schools have the potential to be sites for ideal communities. By "ideal" I mean places where individuals, who themselves have learned the value of silence and reflection, come together to create, imagine, push one another's learning. These communities comprise children and adults who enjoy the thrum of thinking in a space where listening breeds understanding; who experience silence not as uncomfortable or oppressive, but as one of many ways we can be present; and whose capacity to listen to others means they feel no need to make performative or competitive noise.

Communities that nourish empathy and productivity, in my experience, are fueled by possibility, by hope, by a sense of common purpose and the prospect of their own and their members' renewal. These communities are dynamic: they grow organically and are generative and responsive. They allow each member time and a voice, including a dissenting one. A community is, after all, an organism—there is a sense of possibility in the arc between one body/mind to the other body/mind, in the energy the collective creates.

And yet, as Parker Palmer (2007) has noted, community is an outward and visible sign of an inward and visible grace. Without time for stillness, reflection, and the cultivation of empathic listening, we are more easily tempted to resort to the

most expedient solutions to problems that fly at us individually or collectively. A group of teachers I worked with recently remarked that their rapid pace causes them to rush to judgment. When members of a system have little time to have engaged, sustained conversations, the group said, the too-frequent response is to move into more rules, regulations, and procedures, more control and surveillance. To tamp down creative alternatives, to close off conversation. *I'm late, I'm late*.

In the absence of deep thinking and even deeper conversation, it becomes easy for policymakers or curriculum developers to grab a good idea—a fragment from a research study, for example—and turn it into a strategy, then into a teaching model on its way to becoming testable outcomes. Soon a once-inspired strategy, stripped from its original context, becomes a system-wide requirement, a demand absent of human connection and the joy of learning and teaching.

As L'Arche founder Jean Vanier cautions, community can begin in mystery and end in administration. To cultivate both contemplation and community in education means that we will have to learn to allow for the alchemic mystery and messiness that fosters individual and collective growth. The philosopher Simone Weil (1952) always claimed that fixity is the root of injustice. Creating order, gathering information, and planning for education are necessary strategies, but only when they arise—and are revised—out of the time it takes to listen to each member of a community. To paraphrase Weil again: our minds are enslaved when we accept connections we have not ourselves made. When we make easy, expedient decisions that threaten to undermine teacher confidence, force-march students through fabricated outcomes profiles, and turn good teaching ideas into pre-packaged resources, we risk ripping the wings off the joy of learning and teaching that brought us into the profession in the first place.

Contemplation—slowing time, being mindful, seeking the grace of imagining—develops in each of us a sense of what we stand for and what we can achieve. Heart—its connotations of centre, of source, and of enduringness—is where authentic acts of learning begin. We seldom talk of heart in education, or of spirit, for that matter. But listening with the ear of the heart is an act of the spirit that can reconnect us more forcefully, more enduringly, than high speed or Bluetooth. Our hands hold electronic wonder gadgets, not hundred-year-old wood-trimmed slates, but we do have choices. We can create time anywhere for each of us to turn away from noise, confusion, bells, a blizzard of multi-syllabic edu-speak, from acronyms and to-do lists, toward the gifts that a free hour, a still river, or an empty horizon can bring.

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Lorri Neilsen Glenn is Professor of Literacy Education at Mount Saint Vincent University in Halifax, Nova Scotia. The author and editor of eleven books of non-fiction, scholarly writing, and poetry, Neilsen Glenn was Poet Laureate for Halifax for 2005-2009, recipient in 2005 of her University's research excellence award, and of Halifax's 2009 Women of Excellence Award for her work in the arts. Her work appears in national and international journals and anthologies, and she has led workshops in Australia, Ireland, Chile and across Canada. Currently, Neilsen Glenn is completing a SSHRC-funded study of contemporary Canadian women poets, a collection of essays on grief and loss, an anthology of writing about mothers, and a memoir.

Taking Charge of Our Educational Journey

Julie Payette

ABSTRACT

In this interview Julie Payette discusses the role education has had in her life and in achieving her childhood dream of becoming an astronaut. She shares her experience of attending the United World College of the Atlantic as a teenager and her discovery of the value of learning languages. Julie speaks on the importance of parental support in encouraging children to pursue higher education and expresses some thoughts on teacher preparation. She also comments on how stereotypes and stigmas can still prevent girls from choosing to become scientists. Finally, Julie gives us a glimpse of what it feels like to contemplate planet earth from the window of a space shuttle.

Julie, you were born in Montreal and are a Canadian icon, many students look to you as a model—where did your passion for this career come from and what educational moments contributed to this?

I was very fortunate to grow up in a city, in a country that gave me a lot of opportunities. I'll never forget being in primary school and watching TV with my fellow students and there on the screen were people walking on the moon. It was the beginning of the 1970s and the Americans had the Apollo missions to the moon and astronauts were out there, in spacesuits and with a lunar rover and going around on the moon and I thought that was the greatest thing and I wanted to do the same thing. I just wanted to be an astronaut too, go in the rocket and explore. And when I grew up I realized there was no school or place that would allow me to do this, so I decided to pursue a career in engineering with the idea that if ever, one day, there

was an opportunity to go to space, then maybe at least I would have the right qualifications. I made a lot of my decisions with that little idea in mind, not thinking I would actually achieve it, but if you don't try you never know.

Generally, what do you consider to be the fundamental or more important dimensions of education?

To me, getting an education is key. There are a number of things that we cannot control. We don't control where we are born, what we look like, what our genes are … As well, we cannot choose the socioeconomic setting in which we are raised. However, as individuals, in this country, we have complete control on our life decisions about whether or not to get an education and how we're going to go about it. If we have to work, we can still get a full education and that is the key for making future decisions in our lives. Education is the foundation for being able to choose for oneself and for being fulfilled as a person. Then you can exert your own choice of career, profession or trade, which is an amazing feeling. We have to start early though because it takes time to get an education and we have to persevere at it, because it doesn't come over just a one- or two-month effort. And once we get some credentials by receiving our education we can grow from that, we can continue, we can then contribute to society. To me it's absolutely fundamental and I always encourage young persons to view education as their tool, as their asset, as some precious jewel in their treasure chest, and to nurture it.

Looking back on your many and varied educational experiences, what changes would you suggest for education?

At the age of sixteen I received an opportunity to go and study at an international college in South Wales, it was called Atlantic College, it is a United World College. There, students came from all over the world to study in the International Baccalaureate program. When I arrived in Wales, I was a teenager. I came from Montreal, my mother tongue was French, and I had started to learn English in fourth grade. My English was okay but I did not speak any other language. And then I noticed that some of the other students at the school spoke many different languages, mainly because they were exposed to them at a very early age. Later in life, through reading and listening to conferences about this particular topic, it became clear that we learn languages more easily when very young than later on in life. I was wondering why we don't make it so that we learn languages at a time when our brain

will carve the neural paths necessary to transfer data between the language centres of the brain. So that is one thing I would emphasize as much as possible in early education. I live in the United States right now and people don't usually speak other languages and it's sometimes an impairment. Languages are a communication tool: they allow people to talk to each other, to communicate information, to share. And the more you speak, the more languages that is, well the better off you are, so let's get an early start on this.

Statistics show that still young girls do not choose to study sciences as often as they might. How do you think that this could be changed?

People laugh when I make the suggestion that part of the reason that young girls often shy away from science and mathematics in particular, usually turning their back on it at the end of high school, beginning of college, has to do with the aura around it. It seems like science is not for them. There is an idea that science is difficult—it's not. There's also an idea that it's not really cool to live and work in a lab. There's a stigma and some stereotypes about what a scientist looks like and how much fun they are socially, and so on and so forth. And there are other stigmas about engineers. I'm always thinking, gosh, we have all these programs on TV that people watch—those TV programs with doctors and lawyers and politicians and there is very rarely any of those programs where the principal actor or the hero of the program is an engineer or a physicist or chemist or zoologist, something like that. I believe this is partly due to the stereotypes being perpetuated, the lack of role models as well as—and this has been statistically proven by those who have done research on it—the lack of encouragement from the student's inner circle. All too often, female student declarations of "well I'd like to study mathematics," are not necessarily positively received by others … it seems to the people around them not quite the right path—and the students end up feeling discouraged. So if we could portray careers in the sciences as a natural route for young women, or even have TV programs featuring heroes that are scientists, then that would help, but of course that's a little utopian.

If parents want their children to pursue higher education what would your advice be to them?

I don't know if I have advice for anybody but I certainly have suggestions, some of which I took from my parents. Trying a lot of different things when you are a child will allow you to choose a path—a path that you like and that will challenge and bring

out the best in you. It's much easier to put effort in a path of studies that one likes than in a path that one doesn't like and didn't choose. So diversity at an early age, exposure to different things will most of the time make people curious and then help them decide on what they want to do. I think encouragement is important of course, every single step of the way, encouragement to do better, encouragement to look for answers, to be curious and to excel. And that also takes effort and the encouragement to really try. An education doesn't come free and doesn't come without effort. It is something that pays off down the road but one needs to work at it, and parental encouragement makes a big difference here.

What educational suggestions would you have for policymakers?

Clearly education has to be accessible to all. We have to tend to students who have special needs and to students who are gifted. We have to tend to adult immigrants who come to Canada and need to learn another language or a particular trade. We also have to make sure that everybody can read, write and count because today it is impossible to function without these basic tools. So that is, of course, the main responsibility of the lawmakers and decision makers. Interestingly, some countries have a very different way of teaching the teachers, of preparing, in the educational faculties, those that will become teachers at primary school and high school in particular. In some European countries, Great Britain for example, there is a particular training for teachers of science and mathematics, and these individuals usually come from these disciplines. So to be a teacher of math in eighth grade or ninth grade you have to have a background in mathematics and science. It has been found that this helps a lot with retention and interest because of the facility with which the teacher can tackle the subject. Mathematics is a very specific subject and it is hard to teach and a lot of people get discouraged if it is presented in a dogmatic way, but it is a lot of fun and people who have a mathematics background often do a very good job. So, changing perhaps the way we teach teachers by having people that are more specifically trained for specific subjects.

Based on your wealth of experience, what changes are needed to make the best possible world for all children?

The key it seems for the welfare of children is a stable environment, one free of war and in which they can eat and have access to water and education, and so on. In North America we don't appreciate how very privileged we are, so we don't know

what it is to live in a country that is ravaged by war, where people will fight openly and will take from each other, or where the circumstances of poverty and settlement mean that they have to think about just feeding themselves all day. If we could distribute the wealth better, that would be a good start; if we could get along better, it would also be an important start, and respect each other's opinion and be tolerant. I think we're still a long way from that but we have to strive toward making it a better world and for that to happen we all have to share the wealth.

We all wonder about space and about the adventures that you have in space, is it possible to describe one such adventure for our audience?

Perhaps the most important reason why people want to be in space, to fly in space, is to explore, to be able to float in weightlessness, but it's first and foremost to be able to contemplate *the planet from above*. And it's an extraordinary experience. What a privilege to be able to float to a window inside the space shuttle or the international space station and then to look back down, and see this marvel of blue, white and darker continents in the vastness of space. It is absolutely magnificent. It's better than any movie or television. You can stay there and see the earth pass by for hours and hours at a time, if we only had time. We only do it a few minutes at a time, but every single opportunity astronauts have to go to the window and look at the planet, they take it. It's a marvellous sight, but it's also home. It's the only place we have, the only place we can live, so far in the entire universe, and it's the place we return to, *planet earth*.

Julie Payette currently works at Mission Control Center in Houston as a CAPCOM (Spacecraft Communicator) and is responsible for all communications between ground controllers and in-flight astronauts. Prior to this she held positions at IBM Research Laboratory in Switzerland and at Bell-Northern Research in Montreal.

In 1992 she was selected from 5330 applicants to become an astronaut for the Canadian Space Agency. From May 27 to June 6, 1999 she flew on Space Shuttle Discovery serving as a mission specialist and oversaw the Station systems, supervised the space walk and operated the Canadarm robotic arm. Her second mission was aboard the Space Shuttle Endeavour, from July 15 to 31, 2009, where she served as the flight engineer and lead robotics operator. She was in space a total of 9 and 16 days, respectively, for these two missions.

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www.asc-csa.gc.ca/eng/default.asp

Integrated Thinking, Integrated Learning: Changing Our Ways for Changing Global Realities

Hélène Perrault, McGill University

ABSTRACT

The author strongly believes the complexity of our natural world and current societal issues cannot be addressed without interdisciplinary insights that can emerge only if formal education is allowed to go beyond the traditional silos of knowledge and practice. She describes how the Quebec Education Program, started 10 years ago, is based on competencies and integrated learning, thus transcending the boundaries between subjects. She discusses how Education Faculties have adapted to align teacher education with the current educational reform. Finally, she questions whether universities will be ready to receive this new generation of "transdisciplinary thinkers" who will soon be at their doors.

Introduction

Scholarship bears little value unless it can be translated into meaningful community contributions. In fulfilling their mission of advancing knowledge, institutions of higher learning must therefore also ensure that they foster and sustain this commitment. The vehicle of choice remains Education.

Great institutions of higher learning throughout the world are rooted in centuries of scholarship involving reflection and discovery, serving to advance knowledge, contribute ideas and concepts, and forge theories. The end result of this has been organized bodies of knowledge recognized as academic disciplines, the acquisition of which was collectively embraced in a formal course of learning. To a

great extent, the framework for our current institutions of higher learning evolved from European and later North American Learned Societies, such as the Académie des Sciences created by Louis XIV, the British Royal Societies, or the American Philosophical Society, whose activities brought together scholars to share ideas or lines of inquiry with a view to advancing disciplines, or fields of knowledge. The outcome of such debate was, among other things, intended to contribute to offering solutions to social problems. The perspective of a shared civic responsibility for the organization and promotion of research, as well as the dissemination of knowledge, contributed to the development of the North American research university as we know it today. In the university, historically, disciplinary societies established the standards for intellectual and scholarly credentials and provided the pool for the appointment of academic staff.

Times change, however. While remaining true to their mission to advance knowledge, to be recognized as applying the highest standards of scholarship, institutions of higher learning internationally face a very different world today than that referred to above. The changing global realities of the 21st century demand attention. High-stakes societal issues, such as climate change, global food shortages, and the need to reconcile energy consumption with energy supply, are pressing. We are called upon to understand and control the emergence, the transmission, and the global impact of new pathogens. We share a responsibility to contribute to the debates on issues ranging from biomedical ethics, to optimizing human development and quality of life. At the same time, new emerging technologies are changing the global landscape, as well as the scope of potential solutions. Yet, while advances in information and communication technologies have radically impacted and continue to transform our world, our conceptual approaches may not have followed.

None of these challenges can be addressed through a single disciplinary lens, but call upon us to draw on elements from the natural sciences, the social sciences, the humanities and the arts. The complexity of our natural world and of current societal issues cannot be addressed without interdisciplinary insights that can emerge only if formal education is allowed to transcend the traditional silos of knowledge and practice.

Changing Our Ways for Reshaping Minds

The collaboration of various single disciplines, each one making a contribution towards solving a problem, the borrowing of technical knowledge from one

discipline to another is not new. Such "multidisciplinary" approaches have indeed been practiced for some time, and examples abound. In such instances, one discipline typically leads the way toward a solution, borrowing from other fields in its development and application. While this approach may provide a timely resolution for a particular issue, it has done nothing to forge approaches to addressing the broader, multifaceted challenges noted above. What is needed is something which is of greater value than the sum of the parts. For this, we turn to "interdisciplinary" or "transdisciplinary" education or research, wherein two disciplines coexist and grow together, integrating concepts and method, eventually giving rise to new research fields or disciplines. Such an approach, however, faces important barriers—personal and institutional—that can impede or even prevent transdisciplinary activities.

The Quebec Education Program—A Model to Follow

Reflecting its commitment to the central role of schools in fostering the development of intellectual skills and knowledge necessary to adequately respond to a rapidly changing 21st century environment, the Quebec government has carried out considerable reflection on the future of education in Quebec. This was done through briefs, reports, and surveys on how schools can best serve society, with a view to making recommendations for adapting its educational system to the new and evolving sociocultural realities of the 21st century. The 1994 report from the Conseil Supérieur de l'Éducation, *Preparing our Youth for the 21st Century*, for example, urged the education system to undergo transformations. That report was followed in 1996 by the Commission for the Estates General on Education (Ministère de l'Éducation, 1997), the outcome of which was instrumental in paving the way for a revised educational policy in Quebec. The philosophical foundation of the proposed new approach was grounded in the view that optimal learning environments are those which encourage the active participation of the learner in the construction of knowledge. The curriculum review targeted essential learnings for early 21st century students, and proposed the diversification of educational options to meet a wide range of needs and interests and a more flexible organizational model.

The new educational approach, what is referred to as the "Quebec Education Program (QEP)," is based on the attainment by students of "competencies," defined as "a set of behaviours based on the effective mobilization and use of a range of resources" (Ministère de l'Éducation, 2001). In this framework, attainment of a competency is not subject-specific, but rather reflects the student's ability to integrate elements acquired in various learning activities or settings. Competencies "…do not

necessarily follow a subject-specific logic. This requires that the school transcend the boundaries between subjects in order to help students perceive the connections between their various learnings" (p. 5). The QEP recognized that integrated learning and the development of competencies also occurs across curricular areas, and can be related to intellectual, methodological, personal and social or communication-related competencies, for example. In responding to its mandate to "prepare students to contribute to the development of a more democratic and just society" (p. 2), the Quebec Education Program was indeed proposing the building blocks to scaffold a "transdisciplinary" model of education.

Implementation of the educational reform involved not only reviewing the alignment, the complementarity, and the overlap between various subject areas, but it also redefined the time frames for learning. Rather than yearlong units, the system was revised to comprise cycles that are much longer than one school year. More importantly, however, it required the engagement of all stakeholders and participants in its commitment to "transdisciplinary learning." What is often referred to as the Quebec Educational "Reform" was introduced progressively a decade ago, starting with preschool and moving through the three two-year elementary school cycles and three secondary school cycles (Ministère de l'Éducation, 2004). Today, some 10 years after its inception, competencies have been operationalized so that they may be monitored, and new cross-curricular approaches have been fostered in schools. A new generation of secondary school graduates educated through a transdisciplinary model is about to reach our institutions of higher learning.

In working to achieve success in a transdisciplinary approach, it is important to foster the interface of several communities of knowledge such that the appropriate environment, climate and supporting structures may be shaped and fostered. The first step is to ensure that the qualities defining and promoting cross-disciplinary collaborations are well communicated, understood, respected, and supported. Second, it is essential that there be commitment at all levels—local, national and international—to ensure that the knowledge acquired may be transformed into meaningful actions with positive impact. Facilitating this involves minimizing barriers of all sorts, including personal, disciplinary, and political. In our universities, barriers are located in approaches to teaching and professional preparation, research and scholarship, and institutional administrative structures and practices. Students and faculty members stepping out of the comfort zone of their disciplinary world to engage in "transdisciplinary" education and research face those challenges noted above. They also struggle to gain support for funding or dissemination of work that falls outside traditional disciplinary boundaries. Measures facilitating transdisciplinary

approaches in universities could include allowing students to work with teachers from different disciplines, supporting team teaching, providing opportunities for students to acquire mentors in multiple disciplines, and fostering cross-disciplinary, cross-curricular investigation of phenomena and assessment of this work. This approach also requires adapting administrative structures and practices to allow for collaboration across disciplinary units, favoring a flexible approach that accommodates the cross-disciplinary sharing of ideas. Similarly, funding or publication agencies must adapt to provide better recognition of transdisciplinary approaches. This can be done through, for example, a less discipline-specific selection of peer reviewers.

The barriers faced by the audacious QEP policy advance were not much different from those identified in a report by the National Academy of Sciences (2005) for transdisciplinary research in higher education. Completely engaging with a new system requires, in effect, a dedication to and belief in process, and accurate assessment of a system such as this can only occur with the passage of time. Again, like in any form of transdisciplinarity, successful implementation of the QEP depends upon participants learning the conceptual framework, the language, the culture and the methods of the other discipline (or range of disciplines in this case). It requires a commitment to moving towards the objective, a fostering of the conditions that enable it, and perseverance and time to achieve it.

Given their responsibility for preparing teachers for the provincial education system, Faculties of Education of Quebec have been actively involved not only in informing the QEP but also in fostering in their university programs and in their teacher education students the transdisciplinary approach required by the QEP. The integrated learning approach currently mandated as a model for teacher education in Quebec, for example, informed the government's decision to extend the undergraduate teacher education degree to a four-year program.

Driven by the need for alignment of future teachers with the educational reform currently in place, Quebec's Faculties of Education have actually moved ahead and paved the way for transdisciplinary thinking and integrative approaches to formal education. Even within the constraints of traditional administrative structures and procedures, they have found ways to create an environment that promotes and facilitates integrated learning, working toward developing this in partnership with the broader educational system. The challenge inherent in successfully shifting from discipline-based thinking to a transdisciplinary approach is such that few organizations attempt it. Businesses that have successfully changed are hailed as heroes. Yet, with much less bravura and applause, our educational system has dared to take up

the challenge. As is always the case, time and sustained practice will surely lead to continued improvements in expertise in cross-disciplinary teaching and learning. Nonetheless, pre-service and in-service teachers of Quebec, in collaboration with Faculties of Education, are making headway in fostering change. They deserve to be commended for it. A new generation of transdisciplinary thinkers will be knocking on doors of Universities within the next three years. Will our universities be ready to receive them? Will they work to support them in achieving their full potential and, in particular, will they do so through the very transdisciplinary approach seen by many as necessary in the fostering of solutions for tomorrow? It may be the case that institutions of higher learning should turn to the Quebec educational system for inspiration and leadership. True to their mission, Faculties of Education could be leading the way.

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Dr. Perrault has been instrumental in the implementation of major undergraduate and graduate academic program revisions, academic renewal as well as fostering cross-disciplinary interactions across several university faculties. She served as McGill senator between 2001 and 2005, contributed actively to several subcommittees of the Senate and has chaired or served on numerous university academic, selection and administrative committees.

Regaining the Love of Learning

Cecilia Reynolds, University of Saskatchewan

ABSTRACT

This article points to two trends of critical importance for pre-K-12 and postsecondary institutions—the growth of technologies for learning and the need to enhance Indigenous education. With the help of technologies, we must move away from old aspirations of "covering" the curriculum, toward inquiry approaches that help us regain the love of learning. With guidance from the exciting *Accord on Indigenous Education* drafted by the Association of Canadian Deans of Education, we must transform relations between Aboriginal and non-Aboriginal people across Canada and all educational settings must become beacons of hope for Aboriginal communities.

If you were to ask me, "What are the two most important areas of work within Canadian education right now?"—I would respond that they are the use of technologies in learning and future directions for Indigenous education.

I have been proud to call myself a teacher all of my adult life. At the age of sixteen, having completed just one year of teacher education following high school, I found myself in front of a boisterous group of fourteen year-olds in what was then called the "Jane-Finch corridor" in Toronto. It was a notorious area, full of immigrants, rebellious youth and paved over schoolyards. My students and I muddled through that year and in the end we learned how to respect each other and value our time together. In retrospect, it was a perfect start to my long career as an educator. That career has taken me into elementary and secondary classrooms throughout Ontario and into professor, researcher and administrator's roles in three different Canadian universities.

At present, I continue to work as a scholar and researcher interested in gender relations, equity and social justice. While my work is now often in places outside Canada and my "teaching" is often with groups of policymakers, the challenges I faced in my first year and the lessons I learned remain.

As Dean of Education at the University of Saskatchewan, my role entails ensuring support for the ongoing research of our faculty and students in and across the various disciplines related to "education." My role also includes oversight of a relatively large set of graduate programs and a large teacher education program that contains some historically successful routes for the preparation of Aboriginal teachers. Although there are many challenges ahead for Canadian education, my recent experiences have convinced me that technologies for learning and "Indigenous Education" are areas of great promise for the future of Canadian education.

Today, the digital age is upon us. Technologies both enhance and confuse our daily lives. Each of us manages multiple forms of communication, from cell phones to e-mail and beyond. In our educational sites, whether these be K-12 school systems, postsecondary institutions, early childhood environments or lifelong learning settings, teaching and learning activities can harness technological tools but stuffing "content" into our heads is no more desirable than it ever was. We still gain more by learning how to fish than by being handed a string of fish.

All of us are enriched by innovative approaches to teaching and learning that improve the process of learning rather than trying to "cover" a curriculum. And, while mathematics and science skills are important, reading for the joy of it, artistic expression and appreciation that feeds our spirits and hard to measure dispositions such as improved empathy must in my view, be considered as part of all our teaching and learning encounters. As I remember it, in my first classroom much of the valuable long-term learning was caught rather than taught.

Increasingly, technologies help us reach out to find learners "where they live" rather than insisting that they need to travel to us in traditional classroom settings where face-to-face instruction is the only means of learning available. As we move forward in education, I believe the joy of learning must remain front and centre. The measures of our learning must be able to tell us how to enhance further learning. I am a strong advocate of assessment for learning and fear that some government approaches of assessment of learning are very much off-base and ultimately harmful. When we start where learners are and travel with them in ways that use technological tools and the latest information we have about the brain and how it works,

we are moving in ways that improve education. One whole set of strategies that is critical is the set clustered around learning within Aboriginal communities and learning between people in non-Aboriginal and Aboriginal communities. As we say in Saskatchewan: "We are all Treaty People."

Throughout our country, just as in my first classroom in the Jane-Finch corridor, we are still trying to learn how to respect each other. Learning how to value our Aboriginal peoples and their Indigenous knowledge and approaches to life remains critical for all of us. Recently, the Association of Canadian Deans of Education (ACDE) ratified an *Accord on Indigenous Education* that is available on the Association's Web site. It is an ambitious blueprint of how to proceed. In my view, it is one of the most important documents I have ever helped to create.

Following a preamble, the Accord maps out a brief history of the shifting contexts for Indigenous education in our country for First Nations, Métis and Inuit peoples. In summary, this has included a complex maze of jurisdictional issues involving the federal government, the provinces and Aboriginal communities in many regional settings. The Accord stipulates that today, while there are more than 500 First Nations schools on Indian reserves and 51 Aboriginal postsecondary institutions, the majority of Aboriginal and non-Aboriginal students attend schools where "there is often no or limited influence on Indigenous curricular or organizational matters" (Association of Canadian Deans of Education, 2009, p. 4).

The vision of the ACDE Accord is that "Indigenous identities, cultures, values, ways of knowing and knowledge systems will flourish in all Canadian learning settings" (p. 4). The Accord maps out the following overarching categories for specific goals which we all should strive to reach: respectful and welcoming learning environments; respectful and inclusive curricula; culturally responsive pedagogies; mechanisms for valuing and promoting Indigeneity in education; culturally responsive assessment; affirming and revitalizing Indigenous languages; Indigenous educational leadership; non-Indigenous learners and Indigeneity; and culturally respectful Indigenous research (pp. 5–8).

We cannot redo history. We can, however, decide to move forward acknowledging the need to rethink past assumptions and see the promise and potential in all our children and youth, not just those from certain types of backgrounds or in specific circumstances. My class in the Jane-Finch corridor was enriched, not impoverished by the "differences" among those in our group. For years, I have been pointing out that equality, often equated with sameness, should not be the goal in our education

systems or our society. Rather, it is equity, the treatment of people according to their differences that marks a truly just system within our communities and organizations. People often ask me what makes a good teacher. I believe that there is no simple answer to this question. Teachers are as diverse as the learners we work with. We are as gifted and flawed as anyone. We have our strengths and challenges. Like other teachers, I am continuing to become a teacher, despite having been on that quest for many years. Like my peers, I continue to want to make a difference in local and global settings. If education is a journey, it is one we all travel. My personal stance has been to strive to be an informed traveler and to resist the temptation to be a consuming tourist. As I learned in my first year as a teacher, this is not easy, but who ever said that something worthwhile would ever be easy!

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Cecilia Reynolds is in her second term as Professor and Dean of the College of Education of the University of Saskatchewan in Saskatoon. Following seventeen years as a teacher in elementary and secondary classrooms, she completed her PhD at the Ontario Institute for the Study of Education at the University of Toronto. As a faculty member at Brock University from 1986-1998, she was the Director of Women's Studies and then Chair of the Graduate Department of the Faculty of Education. Dr. Reynolds was elected to the first Governing Council of the Ontario College of Teachers and served as the Chair of the Accreditation Committee. At OISE/UT from 1999-2003, she served as the Associate Dean, Academic. Her research has focused on gender and equity issues in education. She has published four edited books on leadership as well as a number of chapters and journal articles related to her research.

LINK TO:

www.usask.ca/education/

www.educ.sfu.ca/aboriginal_education/documents/ACDE_Accord_Indigenous_Education_000.pdf

Where Are We? The State of Education

Sharon Rich, Nipissing University

ABSTRACT

Today the questions that should be asked about schools and schooling are those that take into account the social context in which we live. We need to attend to the world outside of the closed context of the "system" and recognize the ways in which the world is interrelated. We need to understand that each and every student comes to the classroom with a biography and a way of being in the world. For today's young learners that world is a wired one in which social interaction can be conducted anywhere, any place, or anytime. A key challenge for educators is to adapt the institutions in which they work to meet the emerging reality of the connected environment. If we do not manage to make this adaptation, then the future of public education is bleak.

For months I have been trying to tie together thoughts about the role of education in creating a better world. In a paper with John McLaughlin from the University of New Brunswick last year, I wrote about education as a social imperative and concluded that what we need today is the development of wisdom (Rich & McLaughlin, 2009). I still believe that even more so after watching a documentary about the state of education and children in the world. The reality for the majority of the world's population is violence and poverty. Tragically, for the most part we in the West deny our individual responsibility in creating this reality. Things both in the world and in our education system really aren't going all that well; what we are doing, how we are educating our children—it's not working because in part we remain tied to the past.

> What is the good of learning if in the process of living we are destroying ourselves? As we are having a series of devastating wars, one right after

> another, there is obviously something radically wrong with the way we bring up our children. I think most of us are aware of this, but we do not know how to deal with it. (Krishnamurti, 1996, p. 92)

There have been many reactions, to what people see as the "problem" with education. We hear that schools need more funding, new curriculum, higher salaries, lower pupil-teacher ratios, increased opportunities for extracurricular activities, more technology, higher test scores, and so forth. But there is a danger in trying to focus, to take a specific area and make an argument for how it can solve problems within our education system. Perhaps the largest problem is that it is a system, a system that has too many masters and mistresses and that has forgotten what should be at the centre.

Despite education and research poverty, disease and violence define our world. Jared Diamond (2005) in *Collapse* outlines the potential tragedy that our world is facing. As Diamond notes, the usual response to these crises has been to look outside ourselves for someone or something to blame for the situations in which we find ourselves. We seem to have forgotten the power of individual action and we need to understand our biographies so that we recognize that what we do affects the world for better or for worse. Change in education, as in any realm, must start at the individual level—we have to acknowledge that what we think and do has an impact on the world. The system is made up of individuals who need to recognize that they are implicated in the ways in which the system works. Education needs to come to terms with the notion that living a good life means developing self-knowledge and understanding that the relationship of the self to people, to nature, and to things is the core of becoming an educated person.

How did we get here?

In the past, understanding of educational curricula have ranged from Foshay (1980) who suggested that the curriculum is all the experiences that a child has in school through to Tanner and Tanner (1975) who considered curriculum as systematically constructed and planned learning experiences. These notions combined with Tyler's (1957) advocacy of a planned and measured curriculum led to a conception of the curriculum and education as something that could be measured. This technical rational understanding of education suggests that if the curriculum were just ordered in the correct sequence then students would learn. When such explanations still did not produce universal learning, others, such as Michael Apple (2000), indicated that the so-called hidden curriculum was just as significant as the curriculum

itself and indeed could be the reason that not all students learned the material. Apple and others suggested that as the curriculum was taught, other aspects of societal imbalance were also systematically introduced and schools reproduced societal problems. As Madeleine Grumet (1988) succinctly noted: "Curriculum is what the older generation chooses to tell the younger generations" (p. 43). This idea of schools as defining what is worth knowing continues to inform the ways in which provinces decide what students are to learn. There is little room for learners in these world-views. There is little room for accepting individual responsibility.

More recently, perhaps because of the realization that education needs to change, some curriculum theorists have begun to reflect more broadly on education and its meaning. Researchers like Connelly and Clandinin (1988) note that:

> Curriculum is often taken to mean a course of study. When we set our imaginations free from the narrow notion that a course of study is a series of textbooks or specific outline of topics to be covered and objectives to be attained, broader more meaningful notions emerge. A curriculum can become one's life course of action. It can mean the paths we have followed and the paths we intend to follow. In this broad sense, curriculum can be viewed as a person's life experience. (p. 34)

Connelly and Clandidin in essence call for the individual learner to come forward to explore who and what they are and ultimately how they might be in relation to the world.

Today the questions that should be asked about schools and schooling are those that take into account the social context in which we live. We need to attend to the world outside of the closed context of the "system" and recognize the ways in which the world is interrelated. We need to understand that each and every student comes to the classroom with a biography and a way of being in the world. For today's young learners that world is a wired one in which social interaction can be conducted anywhere, any place, or anytime. A key challenge for educators is to adapt the institutions in which they work to meet the emerging reality of the connected environment. If we do not manage to make this adaptation, then the future of public education is bleak.

What do we need to know?

Educators at all levels must come to understand the reality that confronts the world and realize that it has changed as the West faces the rising economies of India and China. Globalization is real, important and has an impact on the everyday lives of citizens. Employers require fewer but more skilled workers as we move into a demanding cognitive age in which people must become better at absorbing, processing and combining information. The cognitive skills fostered by education should be those of problem solving that enables individuals to process information effectively and work within complex, ever-changing environments. Learners have to be prepared for difficult and uncertain situations and be able to adapt and develop personal autonomy and responsibility.

However, all too often today's students do not view school as the place in which one becomes educated. Many recognize that all too often schools are more about credentialing and making sure that test scores are high rather than real learning. Real lives are lived outside of the classroom in a world that is networked, wired and engaged in ways that schools have not acknowledged. Real lives and an authentic education involve hands and hearts as well as heads. Real lives need an authentic education that acknowledges the reality of the learner.

Today's learners are a part of multiple social networks and use these networks to negotiate much of their everyday lives, yet schools have been slow to come to the recognition that these different forms of technology are a significant factor and can be used to extend the limited borders of the classroom. Through capitalizing on these emerging technologies, schools can enable students to enter into an inclusive social dialogue in which individuals come to respect and understand the nature of the other. Rather than being education for democracy, this is education as democracy in which students from many disparate locations participate in a pluralistic community, talk, and make decisions together. Such an education will prepare people to change jobs at least two or three times during a lifetime rather than just training learners to become better students. Schools should be working to produce learners who will be knowledge-workers with the capacity to take initiative, organize work with others, solve novel problems and use technology. Schools that encourage students to merely recount facts do not prepare students for a changing future. Such schools prepare students for a society and a world that has long since passed.

Is there hope?

There are signs of hope. Recently some schools have begun to take up the

issue of learning communities or communities of practice. These communities provide an opportunity for situated cognition in which practical knowledge, knowledge that is valued in the world, is gained through participation in communities of practice. Such communities involve heart and hands as well as head because within the community, learners develop trust and work together towards a common goal. Further in such communities, the members often have to determine who they are as individuals with lives that have an impact on the community and its development. Such communities take learning beyond what schools do best—teaching learners how to be students—and direct them to become actively involved in the world as participants whose knowledge and skills are valued. In short, these schools are recognizing that if one wishes to learn how to be in the world, one should participate in it.

In these contexts where learning communities are created, situated knowledge becomes important and valued. Such learning communities reject psychological theories that reduce knowledge and learning to atomized bits of information and attend to the complexities of the world in which learners live their lives. Such communities create a learner who can fully participate in a changing global world. Learners in these learning communities view learning as a social, participatory practice for which they each have a responsibility. Engagement with a community or communities is something that most young people are familiar with as they participate in social networks. What schools (and teachers) need to learn is how to harness that engagement to bring students into acts of means creation, problem solving, reasoning, decision making, and evaluation. It means bringing together collaborative teams of learners from across the country to work on ambitious projects that are meaningful to those outside of the classroom.

Knowledge developed through engaged practice might arise in an online environment where constructed communities wrestle with problems set and solved in a context created by the interests of a specific community. Such situated learning reverses the privileging of one form of knowledge over another and emphasizes knowledge as constructed, practical, interdisciplinary and informal rather than knowledge that has the official imprimatur of knowledge created within the academy and distributed to learners. Located engagement in learning communities means that problems and questions can be addressed quickly and can circumvent more cumbersome problem-solving processes. This type of engaged, work-based practice offers learners a space in which they can make a difference, not only in relation to their own practice but also to that of others. The recognition that learners are connected with each other and with the larger world is perhaps the first step in making a real change in education.

Adoption of a learning communities approach that involve learners working together to solve real world problems engages learners and ultimately leads to transformation of education. Such communities better prepare learners for the modern workplace that demands skills in communication, planning, management and social skills in general. These communities represent a break from traditional schooling and schools that have focused on individual, independent learning and rely on standard accountability measures that do not measure soft skills. Particularly for those students who are at risk, collaboration in learning communities can increase motivation and facilitate working with others of diverse backgrounds. Learning communities that develop around real world problems intrinsically motivate learners to learn because the learning environment and activities are meaningful.

Creating a new story

Learning communities seem to offer one way of beginning to make a difference in education and in the world. At the heart of any change in education will be the re-drafting, re-creation of a new story for education—a story that recognizes the ways in which people are interrelated and responsible for each other. This new story needs to have a plot line that seeks to include rather than exclude, that seeks to accept interrelationships rather than reject them, and that values collaboration and real problem solving. In order to create this new story, we need to reflect on our core cultural values so that our story recognizes that human beings need to nurture mind, body and spirit. The key for education to succeed is for it to attend to the whole person.

If education can capitalize on the wisdom gathered by separate learning communities, we may be able to re-write who we are and help our children and grandchildren understand that what matters most is living a good life that respects each person as a member of a sustainable, global environment.

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Bilingualism: A Canadian Challenge

Bernard J. Shapiro, McGill University

ABSTRACT

Bilingualism in French and English is a much-to-be hoped for common and shared characteristic of Canadian citizenship—even though to date the effect of forty years of the Official Languages Act has been most marked in government services and among various Canadian elites. Although it is important that Canada hold onto a goal of the widest possible bilingualism, more modest objectives are outlined for the years immediately ahead.

Most countries have national myths, understandings—often based on culture and/or language and/or shared historical experience—that enable citizens to distinguish themselves from citizens of other countries, rather especially from their closest neighbors. For Canada, with the exception of Quebec, the original national myth seems to have been the British imperial connection, i.e., that which distinguished us most clearly from the United States. By the end of World War II, the usefulness of this national myth had worn rather thin if only because it bore so little relationship to the realities of the Canadian street. Indeed, the development of one of our current national myths, multiculturalism, can be understood as a response to the realities of the Canadian streets.

Bilingualism in both of Canada's official languages, French and English, can be thought of as another of our national myths. I would argue, however, that bilingualism can also and better be conceptualized as both an appropriate recognition of Canada's founding European settlers and a much-to-be hoped for common and shared characteristic of Canadian citizenship.

The tension between Canada's French and English language communities is, of course, older than the country itself, and this tension is reflected in the vagueness of the 1867 constitutional arrangements which enable Cartier to focus on the obvious gains for Quebec (its own legislature, government, and so forth), while at the same time George Brown actually wrote that Confederation's great accomplishment was that French Canadians had been extinguished! It is against this unpromising background that I believe that the major effect of the Official Languages Act—along with Quebec's Bill 101—has, in fact, saved Canada for the English language community.

Although it is clearly true that there are many more Canadians bilingual in French and English than used to be the case, I have to admit that the effect of just over forty years of the federal Official Languages Act outside of the very special cases of Quebec and New Brunswick has been most marked in both government service(s) and/or among the various Canadian elites. Relative to these special areas, it has clearly become the case that the second official language is, in fact, the "langue d'ambition." In this respect Canada would not be the only country in which group differences are resolved not between the groups themselves but through the circulation of elites at the top.

This result, even if not sufficient, is clearly worth celebrating, and I am grateful for the progress that has been made. I would, however, hope for more with respect to Canada and bilingualism. This goal of bilingualism in French and English for all Canadians will be difficult to achieve if only because the reality of the street in so many Canadian communities has little to do with two official languages. Not only is there precious little opportunity for speaking French in Canada outside of Quebec and New Brunswick, but also in more than one Canadian community, there is a significant language community that is neither French nor English.

I would, therefore, be satisfied if in the years immediately ahead, we would adopt two more modest objectives. First, a greatly improved availability of all government services (federal, provincial, municipal) in both French and English. In this area, a great deal of progress has already been made, but it will require commitment and determination to sustain and build upon. Second, Canada's education establishments need, finally, to recognize their own opportunities and responsibilities with respect to the promotion of our two official languages. It is a national disgrace that our schools, our colleges and our universities do not insist on—or in many cases even bother to encourage—bilingualism in French and English as a criterion of graduation.

It is true that Canadian elementary and secondary schools have done a better job in this respect than either Canada's colleges or its universities. Canada's second official language is more widely taught in our elementary and secondary schools than was previously the case, and immersion programs in the second official language have been a very welcome development. Canada's colleges and universities are, however, a complete failure in this area. Not only have they not adjusted their curricular offerings to take advantage of the increased bilingualism of their entering students, it has also not seemed to occur to them the great national service they could perform by insisting on (or at least encouraging) bilingualism as a standard of a "Canadian" graduation. Citizenship has, after all, not only advantages but also responsibilities.

It is not only a question of linguistic competence. Canada needs from our schools, our colleges and our universities more widespread and much deeper teaching of second language and culture partly as a recognition of the challenges and value of this learning and partly as their contribution to the major investments that Canadians all must make in improving the relationships between the two official language communities at the local, provincial and national levels.

The challenge of forward movement in our schools, colleges and universities is considerable if only because so many Canadians have psychologically experienced the Official Languages Act and such legislation as Quebec's Bill 101 not as a potentially exciting opening to a commonly enriched future but rather as an act of government oppression if not, on an even uglier basis, of ethnic cleansing. The objectives of such legislation can, in fact, be seen and understood in such a negative light, but there is no need to do so. Whatever the initial motivation may have been, the challenge to our future, hopefully, our shared future, remains to be met.

In terms of the political future of Canada, my assessment is that we are very likely to have more of the same. All this is to say that conceptual neatness was never Canada's strong point, and, moreover, that this lack of conceptual coherence has its advantages as we navigate the difficult shoals of a future likely to be filled with challenges—many not, of course, related to official languages. These negotiations are not going to be either over or easy. We must, however, recognize that with respect to bilingualism in French and English, very real progress has been made. I believe that we would do well to hold on to a goal of the widest possible bilingualism.

We should not, however, be unrealistic in terms of the effects of our efforts. As Yaakov Shabtai (1985) put it in his novel, *Past Continuous*:

> Although there was something in men which he called the "redemption instinct," his life experience has taught him that there was no single act in public or private life, however right or revolutionary, which was redemptive in the sense that from a certain point onward, a new era would commence in which everything would be perfectly good and work out just the way people want it to and at the same time, despite this awareness, it was necessary to live as if redemption were possible and to strive for it. (p. 291)

We must, therefore, not retreat from our responsibilities as Canadians. A flight from responsibility is so often a flight into stupidity, for as Arthur Schnitzler once suggested, the flight into stupidity is unfortunately the most comfortable flight for the journey is not as long as we might fondly imagine. We do not need to take that flight. Sometimes good is good enough—at least for now.

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McGill University

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Teacher Education and Teacher Identity in Transition

Fern Snart, University of Alberta

ABSTRACT

Within current Canadian learning environments, learners bring sophistication in areas such as communication/technology, a wide diversity of learning needs, and often an orientation towards social justice. This commentary refers to the ongoing responsiveness of teacher education programs to these evolving learner attributes, using as exemplars the areas of global citizenship education and technology integration. A backdrop for this discussion is the observation that the knowledge and skills that contribute to successful adult lives are also evolving.

The role and impact of teachers in enhancing the curricular, social, and leadership skills of students, as well as influencing their perspectives in areas such as citizenship, globalization and ethics, is largely undisputed. Each of us can typically and readily acknowledge a handful of special teachers who have provided inspiration, personal attention, and transformational influence as we have taken our own life direction. However, the context of the teacher's role is changing dramatically as learners bring new strengths and complex challenges to the pedagogical relationship and as we experience a subtle but continuing shift in our society as to the attributes necessary for a successful adult life. The ability to provide inspiration and transformational input to students is now related to a teacher's understanding of the sophisticated skills of learners in areas such as technology/communication, the unique learning challenges that accompany students from war-torn countries and culturally diverse backgrounds and the common orientation of many young people toward social justice and equality. Teachers must also possess an understanding of the knowledge that a student will require to

succeed in a world very different than that when the teacher was a young learner. It has been suggested that current students are moving into adult lives of multitasking and multifaceted problem solving, in a diverse, technology-driven, and interconnected world. The implications of these suppositions about learners and teachers for teacher education programs are profound, and indeed many faculties of education within Canadian universities are currently reviewing and revising the curriculum and goals of their programs.

The need and desire to address the evolving mandate(s) of education have been represented more broadly in postsecondary settings over the past decade. University of Alberta President Indira Samarasekera has been instrumental in developing and facilitating a Vision for the University of Alberta that reflects a new orientation and a rather deep paradigm shift in the context of education in North America and beyond. "To inspire the human spirit through outstanding achievements in learning, discovery, and citizenship in a creative community building one of the world's great universities for the public good" (University of Alberta, Office of the President, 2007) provides a somewhat stark contrast to traditional, historic mission statements from postsecondary institutions that stressed excellence in achievement only, and a competitive edge (we are the "best"). President Samarasekera's promotion of inspiration and citizenship, within a context of "contribution" and collaboration is responsive to a new generation of students, and a new way of defining success. In his book, *A Whole New Mind: Moving from the Information Age to the Conceptual Age*, Daniel Pink (2005) outlines a similar reflection of this paradigm shift as he suggests that the future of the world will rest in the leadership of persons who are able to think and succeed in creative, artistic, and holistic ways; those who can make meaning of the broad landscape. The notion of reductionist and analytical thinking as the primary foundation for economic and societal/political success is described as outdated. In the author's words, "the 'left brain' capabilities that powered the Information Age – are necessary but no longer sufficient" (p. 3). He argues that professional and personal success in the world of the future will rely much more on right brain qualities, including inventiveness, finding meaning in complexity, and empathy. Pink's assertions would not refute that teachers retain a level of responsibility to promote and nurture areas of learning that will influence their students' ability to be economically successful—but he would advocate that these areas must expand into those dominated by "right brain" functions. This suggestion, added to notions of citizenship and the public good that increasingly permeate our educational aspirations, has implications for teacher educators today; we must consider teacher identity and teacher knowledge in an expanded form. Exemplary areas for such considerations are global citizenship education, and education related to the integration of technology.

Global education and global citizenship education are evolving concepts that demand scrutiny as we consider learners with an orientation to social justice and ecological sustainability, in a world made smaller by technology, travel, and especially a more sophisticated understanding of issues such as climate change, health threats, and political and economic interdependence, all of which extend beyond national borders. Despite some continuing tension around a specific definition of global education, there seems little argument that it is beyond a monolithic notion of internationalism, of visiting in a tourist-like manner the world of the "other," or presuming the dominance of a Western cultural model. Authors such as Ali Abdi and Lynette Shultz (2008) suggest that the "best case" of global citizenship education is the organization of humanity to appropriately address critical issues in the world through just economic, political and social relations. Graham Pike (1996) has stated that

> global education, if it is to be education for globalism, needs to pursue models and methods that will enable us -- learners and teachers -- to readily conceptualize the cosmic chaotic character of the place where we live.... all our destinies are intertwined (p. 10)

and that "education must be acknowledged as part of an organic and healthy process of change in which young people play an active and vital role in shaping their own futures" (p. 10). The conversation is a vital one in distinguishing global citizenship from cross-cultural engagement, per se. To educate students beyond the superficial, we must engage them in transformational processes and deep thinking such that they understand the Western position of privilege that is often reflected in issues of diversity, power, and justice, and that they move to an internalization of responsibility related to this privilege. There are many encouraging examples that students of today are inspired by such learning opportunities and more than ready to accept responsibility and translate that into action.

Within the Centre for Global Citizenship Education and Research at the University of Alberta, both graduate and undergraduate students work together to gain theoretical and practical knowledge of global education that will inform and enrich their future teaching practices. Students have the opportunity to participate in community-service learning projects, wherein partnerships with community organizations and NGOs involve volunteer work and enriched understanding of issues at a global level, and action at a local level. The student team, with guidance from professors, directs its efforts to issues of equality and human rights, social justice and environmental justice. They participate in conferences and professional symposia, and provide awareness sessions for pre-service and in-service teachers. Students consis-

tently report an experience of growth into a new realm of citizenship and personal priorities.

Even as students of today are more socially conscious and perhaps ethically driven than ever before, the pervasiveness and advancement of technology in their worlds is evident and will influence the way their lives play out. The Internet continues to facilitate a range of communications including those that provide distance alternatives to formal learning and also those that provide for sophisticated forms of social networking. The educational system is under increased pressure to appropriately integrate emerging technologies into teaching and learning such that students can be relevant and succeed in a knowledge-based society. The Internet has established itself as the primary gateway for the 21st Century learner to study and collaborate, expand his or her knowledge and create. Students must be "digitally literate" to gather information and navigate the complexities of learning and living. Such literacy allows them to make use of technology tools for creative problem solving, and it can provide a vehicle to greater cultural literacy and understanding as well, thus finding a fit with the goals of global citizenship education. The integration of technology must be taught as a vehicle for critical thinking and innovation, and one that can support collaboration, and global as well as local communities. Once again, teacher education must respond to the needs of learners in terms of their preferred ways of learning and their skill levels. In a provincial dialogue with Albertans initiated by Minister of Education David Hancock last year, it was suggested that teacher preparation programs must champion the integration of technology and pedagogy to transform education within the province. This challenge rests with postsecondary institutions, and has gained prominence in current program reviews within faculties of education.

One could argue that the preparation of teachers must always be responsive to the politics, science and social realities of global society at any point in time. It is perhaps the rapidity of change in terms of advances in technology and communication and travel within the world that induce a sense of "running to catch up" within teacher education programs to ensure that graduates are provided with a context for deep understanding and transformation in becoming truly global citizens and creative problem solvers who use technology tools as pathways and not as ends in themselves. Toward these ends we continue to strive in developing and sustaining teacher education programs that are catalysts for teachers to identify as committed professionals who will ultimately make the world a better place.

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Educational Transformation With a New Global Urgency

W. Duffie VanBalkom, University of Calgary

ABSTRACT

Education, never value-neutral, continues to be a most powerful force for shaping the next generation of global citizens and influencing the course of global development and inter-ethnic relations. Global interdependence requires that schooling can no longer serve local needs without a deeper understanding and careful consideration of global dimensions. The internationalization of education calls for a fundamental shift in the nature of teaching and learning, from "imparting the truth" to a liberal, but critical exploration and deconstruction of perspectives and their implications. An analysis of the anatomy of perspective contributes to the development of a cosmopolitan worldview which seeks to understand others with open-mindedness and mindfulness. At a more profound level, it shapes the educational enterprise in service of a universal common good.

Introduction: The Roles of an Education

Education has always been a much valued pathway to personal and societal success, now perhaps more so than ever. I do much of my work internationally, and a nearly universal truth[1] exists that education is valued. Parents, the world over, want the best for their offspring and, by and large, they trust in schools and in professionals to serve their educational needs. Children themselves have a natural curiosity about their world and competent educators, responding to this innate desire to learn, make schools into learning communities whose value is recognized, even taken for granted, by students, parents and society at large.

Education is also a profound socio-political instrument that allows the authorities, legitimate or not, to replicate, preserve and shape societal values. It isn't an ideological accident that the "battle of the hearts and minds" is fought in the educational arena, from schools for girls in Afghanistan, to Tiananmen Square, to the University of Tehran, and Harvard University's John F. Kennedy School of Government. No institution has, by law, such complete and prolonged access to impressionable minds at a young age as public education has. Education is never value-free. Through control over curriculum, policy development, assessment, and teacher education and certification, governments attempt to instil common societal values and guide the development of subsequent generations into a healthy, educated and productive work force. Education is meant to serve community.

Not least, education is an economic act, and increasingly the narrative about the value of education centres on employment at the expense of arguable greater and more important goals to which I will turn my attention later. Compulsory schooling has immediate economic benefits as it allows parents to be engaged in remunerative work, while their children are looked after. The connection between educational attainment and economic well-being are widely recognized and almost universal. Societies want "an educated workforce," and in some ways we are hovering between an industrial/service model which demands predictably uniform workers, compliantly "profit-generation ready," on the one hand, and a knowledge society that demands creativity, innovation, risk taking and entrepreneurship, on the other. This dichotomy is reflected in wanting the latest innovative *i*-tool, but a uniformly, dependable Tim Horton's breakfast, served in a mere minute. It also supports the growing divide between the have and have-nots, both locally and internationally. Our education system's limited ability to reconcile the demands of the diverse aspirations, abilities, and preferences of different groups and individuals makes it complicit to societal tensions that lead to increasingly dangerous class conflicts.

Our schools also screen youth for access to further educational opportunity on the basis of educational achievement and conformity. As the development of senior leadership for all sectors of our society generally takes place at university, this gatekeeping function and the teaching and assessment functions that support it, are educational but also profound political and cultural acts. Leaders, who during the next 25 years will need to solve such complex global problems as state terrorism and environmental degradation, are attending our local public schools now. What we teach them and how we teach them, matters. The all-important generation-shaping and leadership development functions of the public education system,[2] give rise to the perennial educational policy question, "*What values do we want to instil in our students; what do they need to know and be able to do, to prepare for their future?*"

Education and Community

Greater global interdependence makes it increasingly clear to many of us that events that happen elsewhere, impact all of us with a clarity and immediacy, that previously may have eluded us. For example, the impact of the 2008-2010 financial crisis was clearly felt around the world, leading to increased starvation in the most fragile areas of the globe, and drawing attention to the continuously increasing gap between the "haves" and the "have-nots".[3] Unbridled pollution from our natural resources extraction, our industrial heartlands and our love of the automobile are causing havoc around the world, robbing the poorest of their farmlands, and washing away towns and villages. A one-week crash course in Yemen can inspire a young Nigerian to foil the world's entire air transportation system,[4] and overfishing of the coast of Somalia has reintroduced piracy, with a sophistication and scope that would make Captain Hook envious.

We are indeed one global village, one ecosystem, with integrated financial, information, communications, economic, transportation and security systems. Education must still serve students and our community, but how we understand the scope of community is rapidly changing. The closely intertwined needs of our local neighbourhood and the world community have created a new co-dependency, suggesting that education can no longer serve local needs without a deeper understanding and careful consideration of global dimensions. The local and the global are fusing, and this reality needs to inform our thinking about educational priorities and practices, teacher education, and, at a very fundamental level, what it means to be educated.

Much of my work is internationally focussed, and I am particularly interested in the role of education in starting, mitigating, resolving or perpetuating conflict, and in shaping the conditions for peaceful coexistence. My work in South Africa, Nigeria, the former Yugoslavia, and elsewhere confirms the power of teachers to help students think deeply through issues of inter-ethnic conflict and reconciliation. Alternatively, teachers can also encourage, sometimes in subtle ways, the pre-conditions for the repetitive cycle of violence that has plagued the Balkans, the Middle East, Afghanistan and other global "hot spots" for millennia. I have come to realize that teachers, more than any other professional group including politicians and the military, profoundly influence issues of war and peace.

I am engaged in education reform in Bhutan, a small Himalayan kingdom whose first democratic elections took place in 2008. The country has adapted a Gross

National Happiness (GHN) index to guide its holistic development and to measure progress, based on four pillars:

- Equitable and sustainable socioeconomic development
- Environmental conservation
- Preservation and promotion of culture
- Good governance (Ura & Galay, 2004)

Teacher education, curricula and classroom practices are being redefined and redesigned so that formal education supports a greater capacity for compassion and national well-being, only partially defined by economic factors. In a recent address to school principals, prime minister, Jigmi Y. Thinley (2009) called GNH the "National Consciousness," and appealed to educators to help shape a common future based on compassion rather than greed.

We have much to learn from the challenges educators face in other contexts. They too are engaged in the noble work of "generation shaping" and leadership development. In their work, they too know that global issues are local issues, and our common, contemporary professional challenge lies in making connections between the local and the global in meaningful and constructive ways. How teachers around the world frame these issues, and help their students understand the complexities of a new global reality will profoundly influence our common future. The central premise of this paper is that an excessively locally focussed education no longer serves us well, and that an internationalization of educational content and practices is urgently required to prepare students for a global reality that is already upon us.

The Anatomy of Perspective

There is a need to help students develop a cosmopolitan worldview which seeks to understand other cultures, beliefs, other points of view with a genuine and respectful curiosity, indeed an *open-mindedness* and *mindfulness* that feeds lifelong learning and nurtures a sense of hope. Such development invites an analysis of the *anatomy of perspective*, starting with the realization that to others, our most deeply held views and values are also seen as another, and limited, perspective. I am not proposing a relativism that suggests that all points of view are of equal value or moral fortitude, but rather that perspectives offer, in the first instance, an opportunity for learning and critical reflection, rather than falsehoods or obstacles to be overcome so that we may impose our own views and achieve our own objectives.

This calls for a fundamental shift in the nature of teaching and learning, from "imparting the truth" to a liberal, but critical exploration and deconstruction of perspective. A study of history, culture, values, rhetoric, economics, politics, etcetera would inform our understanding of the developments of "points of view." Curricula would embrace rather than replace perspectives from around the world, and develop a greater tolerance for ambiguity in students, commonly encouraging the suspension of judgment until different perspectives can be more fully explored. To understand truth as tentative, perhaps even elusive, would invite science teaching, for example, to continue to examine the physical world but also to explore the *limits* of science. Gender issues would no longer be examined as women's issues, poverty as an issue of the poor, or racism as a black issue. An international social justice foundation would encourage much of our teaching and learning to move from what is to what could be and should be.

Internationalization of Education: Perception of Self in the Global Community

The intergenerational cycles of poverty that have plagued much of the world throughout history, including North America, increasingly give rise to violence. Improvements in global communications have made it clear that these are the result of structural imbalances that could largely be avoided. Marie Antoinette's "let them eat cake" attitude, now prevalent on a global scale, will cost us our heads too. Empathy grows as we feel personally closer. Canada's response to the recent disaster in Haiti was exemplary, in part, because a sizable Haitian community lives in Canada and our Governor General was born there; Haiti is part of an extended family of sorts.

The extension of community and the embrace of others as a means to educate ourselves is best articulated by Albert Einstein:

> A human being is a part of a whole, called by us 'universe', a part limited in time and space. He experiences himself, his thoughts and feelings as something separated from the rest... a kind of optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest to us. Our task must be to free ourselves from this prison by widening our circle of compassion to embrace all living creatures and the whole of nature in its beauty. (In Calaprice, 2005, p. 206)

The internationalization of public education requires, in the first instance, a shift in perspectives and attitudes of education professionals and, by extension, a re-examination of teacher education. Teachers need to be encouraged to critically examine their own ethnocentric beliefs about teaching and learning (Norberg, 2000) and about what holds relevance in curriculum. They have to develop intercultural competencies and become "comfortable in the world," to the extent that they can construct curriculum that comfortably incorporates international perspectives and guide students through the development of multiple perspectives (Leask, 2001, 2009). Such curricula seek to understand the basis for a number of pressing global issues, such as the growth of inter-ethnic and cross-cultural conflicts in light of "normative expectations; especially those linked to morally connotated concepts of religion, or fundamental values" (Wenderoth & VanBalkom, 2007, p. 43).

At a most basic level, the internationalization of curricula can draw on the world for case studies, information and examples. At a more profound level, it shapes the educational enterprise in service of a universal common good. This calls for an examination of our own cultural assumptions and Eurocentric values (Rivzi & Walsh, 1998). The internationalization of education requires a bold rethinking of educational content and practices, "to enable students to move between two or more worldviews" (Bond, 2003, p. 5). "This transformative process of personal truth seeking, finding one's way between dogma and ignorance, brain-washing and creativity, reproduction and innovation, invites a *critical* treatment of what is presented, by whom and for what purposes" (VanBalkom, 2010, p. 5). Hanson and Johnson (2009) remind us that "universities, as public entities, are values based organizations" that need "to attend to the personal 'subjective states'" (p. 176). The kind of global citizenship education that is needed to help us negotiate this complex, personal-global space, and consider our emergent interdependent global community, anew, calls for a paradigmatic shift in public education, from an emphasis on "truth" and the dissemination of that certainty to an exploration of perspectives and an examination of their implications.

To develop the compassion for the entire human family, that Einstein made reference to, and that is central to a Buddhist philosophy, requires for children to get to know the world as *their* extended family. The internationalization of education is our best vehicle to accomplish this, locally, and supporting educational development for the most marginalized populations in the world, is our best chance to have our extended family welcome us. There is an urgency to do so. It used to be simple: if you wanted the best for your children, you made sure they received a good education. Today, if we want the best for our children, we better make sure that children elsewhere receive a good education too.

Notes

1. Girls' education, in particular, is not valued or allowed in some parts of the world, and constitutes a notable exception.

2. These are sometimes determined and directed through broad consultation and with the collaboration of professional groups, as is generally the case in Canada, and at other times and places, are simply decreed by the prevailing power elite.

3. This gap is evident internationally—between nations—as well as nationally. For example, in Canada, between 1998 and 2008, the highest paid 100 CEOs' average compensation outpaced inflation by 70%. Canadians earning the average income lost 6% to inflation over that period (Mackenzie, 2010, p. 5).

4. On December 25, 2009, twenty-three year old Nigerian Umar Farouk Abdulmutallab was overpowered by passengers on a Northwest Airlines flight from Amsterdam to Detroit, preventing the detonation of a bomb hidden in his underwear. He received his training and indoctrination in Yemen in the preceding 5 months.

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How Science Clubs Can Support Girls' Interest in Science

Larissa Vingilis-Jaremko

ABSTRACT

Enter any classroom across Canada, ask children to describe a scientist, and you will likely hear about brilliant, but crazy old men in lab coats and goggles doing dangerous experiments (the mad scientist). Stereotypes such as this, however, can affect an individual's likelihood to take science courses, and the attention he or she gives to the studies of the sciences. The Canadian Association for Girls in Science (CAGIS) attempts to break the scientist stereotype, and to facilitate interest and confidence in science, technology, engineering, and mathematics (STEM) by holding regular events with fun, hands-on activities led by women and men in STEM-related fields.

One Saturday afternoon, Alison and Sarah were faced with a puzzle: they had a lemon battery in front of them connected to a small, red LED that would not glow. They were learning about electricity at a monthly event of the Canadian Association for Girls in Science (CAGIS). The girls checked their battery; they had inserted a penny, their positive terminal, into one end of the lemon, and a nail, their negative terminal, to the other end of the lemon. Both of their small jumper cables were correctly connected to the input and output leads of the LED. They looked around at the other girls in the room: all were engrossed in their batteries, double-checking connections, and trying other LEDs to find one that would glow. Ayesha, the young electrician running the event leaned between them, "maybe you don't have enough voltage in your lemon." The two girls looked at each other, puzzled. Alison looked back at the other girls fiddling with their lemon batteries. Suddenly, it came to her: if one lemon doesn't have enough voltage, what about two

lemons!? She and Sarah grouped with the girls beside them, connecting penny to nail, positive to negative. They connected their two lemons to the LED and saw a faint flicker. Minutes later, the room was abuzz with excitement as the entire room of girls worked together, applying what they had learned to connect all of their lemons together in a series circuit. They waited in eager anticipation as the last lemon was connected to the LED. Eureka! A bright red glow! The girls at this event not only learned about electricity, but they also understood it; they experienced the excitement of discovery, had fun, and made new friends!

The Canadian Association for Girls in Science (CAGIS) is a science club for girls aged 7-16 with several chapters across the country. Our mission is to promote, educate and support interest and confidence in science, technology, engineering and mathematics (STEM) among girls. Members meet monthly at the workplaces of women and men in STEM fields to get a "behind the scenes" view of science in action, and do fun hands-on activities. In warm and supportive small group environments with a high ratio of volunteers to members, girls explore a variety of STEM topics. Members are as likely to meet with a civil engineer to build and test model bridges as they are to meet with an artist to learn the chemistry of art restoration. As the understanding is in the doing, much of the time at each event is dedicated to hands-on activities, which helps the girls understand, builds their confidence, and creates positive associations with the sciences.

I founded CAGIS at age 9 when I noticed that the girls in my class hated science and mathematics. I was surprised to hear my friends describe the sciences as "difficult," "boring," and "more of a guy thing." I had a very different view. Through my mother, a research scientist, and my father, an engineer, I had met many STEM professionals of both genders, had visited science centres, and had done fun experiments and activities at home. I thought STEM was fun and interesting, and I wanted to be a scientist! Indeed, my observations as a child were a common phenomenon; children and adolescents of various ages have repeatedly been found to have stereotypic, often negative views of scientists (for a review, see Finson, 2002). These stereotypes typically portray old men wearing lab coats and glasses, doing dangerous experiments in a lab (Finson, 2002). There are additional beliefs that scientists like to work in seclusion, have limited social lives, and have IQs in the genius range (Finson, 2002). Needless to say, many children and adolescents have misconceptions of what scientists actually do, who scientists are, and what they are like.

Stereotyping of STEM as a male domain is pervasive. It can be seen: in the media (the "mad scientist" makes frequent appearances on kids' shows and cartoons);

in the home (something as subtle as a mother voicing that she is not good at technology, and deferring to dad for help with the DVD provides an example to children); and within social groups and friends (what is "cool" or "geeky"). Accordingly, girls are exposed to few female role models engaged in STEM-related activities. It may be of interest to note that gender-role stereotyping occurs early in life. Children have clearly defined gender-role stereotypes of what is appropriate by age five (Eccles, 1994), and sex segregation in careers goals emerges before age five with boys exhibiting greater interests in STEM professions than do girls throughout their childhood and adolescence (Weisgram & Bigler, 2006). Within mixed-gender classroom environments, boys often take the active roles during science experimentation, while girls take on more passive roles such as note taking (Kahle et al., 1993; Burkham et al., 1997). These roles tend to become consolidated throughout grade and high school, and confidence and interest in STEM declines among girls (Ware & Lee, 1988; Miller et al., 2006).

Stereotypes can additionally affect an individual's attitudes, and even performance in a particular domain (Acker & Oatley, 1993; Steele, 1997; Steele et al., 2002). An individual's perceptions of scientists, for example, may affect the attention he or she gives to his or her studies of the sciences (Finson, 2002). An individual's self-efficacy in a given field is linked to his or her likelihood to pursue a career in that field (O'Brien et al., 1999). Individuals who have negative views of the sciences, then, are unlikely to take science courses, and subsequently pursue scientific careers (Finson, 2002). This leads us to the expression of the problem: an under-representation of women in many areas of STEM. Although we have seen advances with more women entering scientific courses in universities in recent decades, many fields remain male dominated. While women's enrolment had risen to 58% of the Canadian undergraduate population in physical and life sciences in 2003, it was 25.3% in mathematics, computer, and information technologies (CAUT, 2008). In engineering, Canadian undergraduate enrolment increased throughout the 1990s from 16.1% to 20.6% female in 2001, but it has steadily declined since then, to 17.1% female representation in 2008 (Engineers Canada, 2009). According to the 2006 Canadian Census, the percentage of women in the workforce in a variety of STEM fields including physical sciences, computers and information technology, technical occupations, and engineering ranged from 12.2% in engineering to 36.7% in the life sciences (CCWESTT, 2008). Women remain under-represented in many STEM fields.

In the current era of globalization, however, Canada must have a strong and sustainable knowledge-based economy. As reported at the Fifth Canadian Conference of Women in Engineering, Science, and Technology (1992), "Canada needs

an educated workforce, particularly a workforce that is trained in the sciences, engineering, technology and trades. Half of all Canadians are women: ergo what Canada needs are more trained women in these industries."

Despite the under-representation of women in STEM fields, it is possible to promote girls' interest and achievement in STEM. We can do this in a variety of ways that work to break down stereotypes, provide social supports, change learning environments, increase exposure to STEM fields and hands-on activities, and increase exposure to female role models. For example, girls generally have less peer support for their STEM interests and activities than do boys (Brickhouse et al., 2000; Stake & Nickens, 2005). However, in enrichment classes where peer relationships were encouraged, students reported having positive STEM peer relationships, and had more positive expectations of the possible personal self as a scientist (Stake & Nickens, 2005). Changes in learning environments can also promote and support girls' interest in STEM. Girls like to learn in cooperative and supportive small group environments that encourage peer engagement (Brickhouse et al., 2000). Facilitating these types of environments can help to develop girls' interest and confidence in STEM. As boys often dominate science classes and activities (Schacter, 1998), one way to facilitate these types of environments is to provide single gender learning opportunities in STEM. Several studies have additionally found that girls are motivated by hands-on activities (Lee & Burkam, 1996; Burkham et al., 1997; Brotman & Moore, 2008). Lee and Burkam (1996) recommended that parents encourage girls to participate in science clubs and fairs because they responded well to the cooperative, small group environments. Finally, increasing exposure to female role models in STEM fields can improve attitudes towards scientists and can decrease stereotypical descriptions among elementary school students (Finson, 2002).

A variety of interventions can be effective in breaking stereotypes of the sciences, and increasing girls' interest in STEM fields. CAGIS attempts to use all of the methods listed above to encourage girls' interest and confidence in STEM. At our regular chapter events, members have the opportunity to meet other girls who are similarly exploring the sciences, which facilitates positive peer relationships. We provide supportive, small group learning environments that encourage interaction and peer engagement. Our events are full of fun, hands-on activities, which enhance learning, and build positive associations with STEM. Finally, our girls are exposed to many female role models in STEM, as many of our chapter volunteers are science and engineering students, as well as other members of the community. Additionally, many of the presenters and hosts of our regular events are women in STEM fields. Our girls, thus, have exposure to a wide variety of female role models in many areas of STEM.

I am very proud to report that many of our past members have emailed us to let us know how CAGIS had a positive impact on their lives, and to inform us that they are now studying engineering, biochemistry, medicine, and physics, and trades such as welding (to name a few). Nothing is more rewarding than to see some shy, quiet CAGIS member come to life and become excited by the fun and discovery side of science. My hope is that CAGIS will give girls the confidence, the skills, and the knowledge to feel comfortable with science, technology, engineering and mathematics, and pursue their interests, whatever they may be.

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Larissa Vingilis-Jaremko is founder and president of the Canadian Association for Girls In Science (CAGIS), a not-for-profit science club for girls aged 7-16. In a girls-only, supportive environment, CAGIS members explore science, technology, engineering, and mathematics topics with women and men in those fields. With lots of time devoted to fun, hands-on activities, the ultimate goal is to make girls comfortable with STEM and to break down fears and gender stereotypes. Larissa holds an Honours BSc from the University of Toronto, and is a PhD student in the Department of Psychology, Neuroscience, and Behaviour at McMaster University.

Larissa was named in 2006 as one of Canada's Top 100 Most Powerful Women (in the Globe and Mail by the Women's Executive Network), and she received the highly competitive TD Canada Trust Scholarship for Outstanding Community Leadership. She has participated and advised science roundtables such as the Canadian Space Agency Roundtable and the NSERC Science Colloquium.

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Life Lessons From the Arctic

Sheila Watt-Cloutier

ABSTRACT

Sheila Watt-Cloutier grew up in Kuujjuaq, a small village in Northern Quebec. In this interview she relates how growing up in a traditional Inuit hunting culture gave her a deep sense of connection—an essential element for the work she does today as a climate change awareness advocate. She applauds the environmental efforts of individuals at the grassroots level but feels very strongly that governments and policymakers must come on board to effect true, lasting change. She believes that our educational system has a key role to play in helping to reduce climate change and she is encouraged to see young people becoming "natural" conservationists. She says that the future of education lies in providing a more holistic approach so that people can develop this sense of connection with a focus on humanity and sustainability instead of just economics. Finally, she offers a quick preview of what to expect in her upcoming book.

Sheila, I understand you grew up in Kuujjuaq, a small village in Northern Quebec. What is it about your education, either formal or informal, that helped you to become the human rights and climate change advocate that you are?

It all starts back to the very foundation that I had as a young child growing up in the Inuit hunting culture, which gave me I think the basis of an appreciation and respect for all that is around me, which of course then throughout my entire life has been the focus and the strength coming from that very remarkable resilient culture. I grew up travelling on the ice and snow, travelling only by dog team in the winter and canoe in the summer, and we lived quite traditionally in those years. So the appreciation of the land and the ice and the bounty of the land and the ice in terms of the connection to our country food, the wildlife that we hunt, gave me that

start in terms of the connection—the environment, the weather, the wildlife, the nature—all of those things are just the most remarkable places in which one finds oneself I guess very young, and the connection to family and connection to community also is a very important aspect of the education and how all that connects because there's a real difference of course, as we know, between formal schooling and education, and education is very much an all-encompassing way in which we teach our children and I will certainly get into that in a few minutes.

What are the most important things that need to be done to preserve the Arctic and reduce the pace of climate change?

There is a lot to be done and even though civil society today seems to be, often times I would say, ahead of our own governments around the world, I think because of the Arctic story, because of many other vulnerable places in the world that are being negatively impacted by climate change and how people are starting to see this issue so much more as a human issue rather than just an academic or scientific or economic issue—people are starting to connect to that. At the grassroots level, I think there is a huge movement that is happening as the result of that "connect" that people have started to make with the vulnerable peoples of the world including, of course, the Arctic. But monumental change or the great change has to happen at a much grander scale, meaning it is on the scale of governments and industry that policies have to be developed, whether they are economic, industry and so on.

I think civil society in what they are doing is just tremendous. I'm not minimizing what people are now starting to do in their homes, how differently they are starting to deal with issues even at their home level, at their municipality level, but I think the bigger issues here at hand have to be done where people have to start to vote differently in terms of leadership for leaders that are really committed to these issues, so that policies at the bigger scale of industry and policies at governmental levels in terms of environmental policies have to kick in. And that really hasn't been able to happen even though the intention has been good in our previous governments here in Canada, certainly in the United States now the presidency and the administration have changed and there's a real commitment to make change. But there are still a lot of challenges at play where most people are not willing to take the huge steps that are required to make the changes in lowering greenhouse gas emissions.

In all of what I'm saying there is positive movement but there has to be so much more that needs to be done, and that is in how we vote for leaders and how

those leaders have to become much more committed to the longer-term and larger picture in terms of what is happening in the Arctic because the Arctic has huge global significance and most people have not understood that very well, that the Arctic indeed is the cooling system, the air conditioner so to speak for the globe. And so if that starts to go, then there are going to be major problems that we already see evidence of that around the world in terms of what is happening with more and more intense hurricanes, more and more floods, more and more droughts. All of these issues are all extremely connected to what is happening here in the Arctic.

How can our educational systems help to reduce climate change?

I think education systems and the schooling systems in fact have a huge responsibility to play, because in the work that I have been doing in terms of connecting with schools, whether they are even sometimes at the elementary level, but most times it is at the university level, that I am speaking, either at convocations or at events that universities have initiated in terms of addressing these issues of climate change, but there is a lot of hope in our schools, there is a lot of hope in our education system.

The students and the children are our future, and I see a real evidence particularly in those groups of young people who are staunchly becoming very good natural conservationists so to speak and also great environmentalists. I think the schools have great potential to start to teach and create some really strong curriculum in these areas, because I'm finding that the more the students learn the more they put pressure on their own parents and their own leaders to do the right thing, and so I think there is a great responsibility to be had in our education system in terms of changing this whole thing around.

What do you believe should be done in elementary schools by the teachers to raise awareness about the environmental state of the world?

Well, I have always said that when you learn what is going on in the Arctic, it becomes the place in which all things then connect. And so I always say that if you can create an awareness in students and create good information, a good science, the good human stories that will allow them to connect to this as a real human issue, not just a scientific issue, not just of ice and polar bears, but of the actual people who live in the Arctic and who live in other places around the world because as the Arctic is

melting we're keenly aware that other places in the world are sinking. That's how connected we are because you can't get any clearer than that in terms of understanding connectivity when you know that Greenland is melting and the ice sheets are melting, that other places in the world are sinking. And most of the time it is the poor, the vulnerable and the indigenous peoples who are coastal peoples who remain extremely connected to a nature and to their food source that are most negatively impacted and who have the least sophisticated mechanisms to deal with and adapt to these monumental changes that are happening.

So I think when we get students to understand these connections through strong, good curriculum, then that's the way to go. Kids understand these connections very quickly, and I think it's through developing those kinds of programs in schools that this will be a great start. Of course, the other issues at play which I have said earlier is that kids start to become their own really good strong environmentalists and become keenly aware of what is working and what is not, what is waste, what is not, and how to be much more cautious about their daily lives. All of these things put together are ways in which teachers and education systems, schooling systems can start these things and put them into process.

Do you have any additional thoughts about education for the future?

Well, I have a lot of thoughts on education for the future in terms of how disconnected the world has become. I have always said that I think in terms of education, for us, first of all, the Inuit culture is based on a very holistic way of teaching your children. It is not just about the technical aspect; we are a hunting culture, but it's not just about the technical aspect of the hunt. It is very holistic in the sense that when children are taught to go out onto the land or onto the ice into nature, you're taught the holistic way in which life is. In fact, you are taught not just to aim the gun and skin the seal and cut up the meat and so on, which is a very important part of the hunt of course, but at the same time while you're out there you are taught the character-building skills, and that is just as important, if not more sometimes, in the sense that it's very holistic but it's not just to teach you how to survive the environment up here in the Arctic, but these skills are very transferable to the modern world. What I mean by that is when you go out, automatically as you're waiting for the snow to fall and the ice to form, you are taught patience. When you're out there waiting for the animals to surface in some way, you are taught patience immediately. You are taught how to be courageous and bold under pressure when you need to. You are taught all of the survival skills that are just so important, yes to survive, but these are very trans-

ferable as I said earlier, and you are taught how to be courageous at the right time and to take these kinds of survival base skills which are just so important in developing the confidence and your sense of self-worth and your sense of real keen judgment that one requires to survive these kinds of conditions up here in the Arctic.

Ultimately, it's sound judgment and wisdom that you are taught as you are out there on the land and the ice. These are the very skills that often times are separated from the formal institutions of learning, and often times, character is not part of the course. Whereas, for us in the holistic way, it is very much a part of the course and it really needs to be there because if you have bad judgment or if you're impulsive, for example, one of the things that we're discovering is that the land if you're impulsive, you just are going to be that way in your life and when things come up where you have peer pressure and you have all kinds of things coming at you in stressful situations that you have this impulsive need to either end your pain or do something but not with good judgment. So we're also learning with all of these problems that we face in the Arctic where we've had tumultuous change in a very short period of time, we've had historical traumas that have affected us in terms of forced relocation and all of these tremendous changes that have happened so quickly from going from a traditional way of life to this modern world and not being able to deal and cope with some of these stresses. We're realizing that impulsivity is also at the root of some of the high suicide rates that we have in the Arctic.

These are really valuable life skills and character skills that are taught on the land and the ice, which have been severed when we moved into formal education. We're starting to see that the holistic way in which we have taught our children is really the way that we need to continue if we want our children to survive the modern world because when you are taught the kind of patience and the right judgment and how not to be impulsive and how to be bold under pressure and how to withstand stress out on the land, then that gets integrated into one's ability to withstand all of these other stresses in the modern world. It's a very holistic way, so I think as we're getting into these issues of environmental degradation of the Arctic, we're finding that it is because of these disconnects that the urban settings have had and continues to have in terms of their own connections to each other, to themselves, to their neighbours, to their municipality and certainly to their environment, that we are dealing with this disconnect. That's why we're debating this issue of climate change in the first place because not everyone in the urban setting in the larger world connects in this way as we continue to as Inuit of the Arctic—and not to say that we're the only ones, that because I'm coming from that perspective I'm giving you that story from my perspective and what we're going through here. It's so much more than meets the

eye in terms of climate change that when people talk about the protection of the ice and the snow and the polar bears and so on, it's so much more than that. It's about our youth who are not necessarily effectively making it in this new world order of globalization.

I understand you are in the process of writing a book. Could you tell us a little bit about that?

I have been promising this book for some years now but it's because I have remained rather busy in terms of speaking engagements and being quite busy being active doing this advocacy and speaking work around the world in the last four years since I left elected politics with ICC [Inuit Circumpolar Council] that it has taken this long. It is a book that has certainly been wanting to emerge and be written, certainly from a larger place in myself. As I've always said this work is so much bigger than myself, and I have felt very compelled to write this book based on all of these things that I talk about but in a much more in-depth way, not just at a 50-minute keynote talk, or a 20-minute article or whatever the case may be. I want to write, and I've started to write, and I will finish by next summer because I am now off to Bowdoin College to teach for a short period of time per week. I've been invited to be a visiting scholar there, but in a sense it's a writing retreat for the year and I will finish it and it is about connectivity.

It is about the human story: it is about making these kinds of connections of how very important Inuit culture is to the rest of the world, that we are not just powerless victims over these matters. Also, I want to try to get people to start thinking about this whole rush to the Arctic now. You know no one cared about the Arctic so much as long as it remained ice and cold and snow. But now that things are warming up—and now that there's a possibility of the Northwest Passage opening up, and the resources, the rich resources that lie beneath the melting ice are starting to open up—there seems to be this keen, keen interest in coming up now once again to exploit the Arctic and explore it. For me, the Arctic is not some frontier, it's not wilderness, it is our homeland and again for me it's just the most precious place—of course I'm biased—in the world, and I think we all need to come together to protect this. I think people have to understand that the very thing that the Arctic is now challenged with in terms of the greenhouse gas emissions and all of the pollutants that end up here in the Arctic, and so on. Even with all of that and because of the incredibly irresponsible way, I would say, our own governments have dealt with us, that has now led to, of course, the highly dependent people that we have become, whether it's to

substances or to institutions or processes, because of all the historical trauma, the dependencies really are at the root of the dispiritedness that is happening in our communities. So, for me, the understanding has to be, if we are getting into this whole area once again of exploiting and development—the very thing that is creating havoc with our climate—because we're in this place of vulnerability in the Arctic, that even the worst things that could possibly make the tipping point happen here, is the very thing that we now think might be the solution.

Sheila Watt-Cloutier is an advocate for climate change initiatives and is influential among development groups and policy leaders around the world. Based in Nunavut, she is a political spokesperson for the Inuit, who feel the fall-out from climate change more immediately and dramatically than most.

From 1998 to 2006, Watt-Cloutier was the International Chair of the ICC (the Inuit Circumpolar Council), which represents the more than 150,000 Inuit of Canada, the United States, Greenland, and Russia. Her negotiations in this role led to a global treaty banning POPs (persistent organic pollutants). For this historic signing, she received the inaugural Global Environmental Award from the World Association of Non-Governmental Organizations. In addition to her environmental work, she was the Corporate Secretary of Makivik Corporation, which looked after the funds from the 1975 James Bay and Northern Quebec Land Claims Agreement.

Sheila Watt-Cloutier is a recipient of a UN Lifetime Achievement Award for Human Development, the Global Green USA Award for International Environmental Leadership, and is also an Officer of the Order of Canada.

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An EDUCATION Letter

John R. Wiens, University of Manitoba

ABSTRACT

Drawing on some well-known educational thinkers, this letter[1] to grandchildren argues that education is primarily a human ideal and activity aimed at helping all of us become better, or "educated people." Grandfather further argues that, in our world, all of us are on a lifelong journey to a somewhat illusionary but worthwhile destination, democratic citizenship. He then provides them with some "wayfinders" to aid them on their educational journey, those being virtue, relationships, responsibility and judgment which he claims are the achievements and obligations of educated people. He then promises to help them on their way.

My dear grandchildren, Anais, Nico, Chandler and Raven,

When you read this letter you will notice that it is meant for all of you and, also, that it is meant for each of you. I am writing this letter because I was asked by some friends to write a commentary about "education." When I think about education I always think about people first, and I think about what a good friend of mine named Hannah Arendt wrote. She said, "education is when you love children enough …" I can think of no young people whom I love more than you, and I can imagine millions of people the world over who love their children and grandchildren as much as Grandma and I love you. And, like Arendt, I am very excited every time a new child is born, and I was especially happy when each of you was born. Grandma and I want to help with your education—we know that is part of our special relationship to you. This letter contains two things: an invitation to you to talk to us about education and some suggestions to help us think together about education.

John Dewey, a man who some time ago was also a Dean of Education, said this about education, "Education is not preparation for life, it is life itself." What he meant was that to live well we must continuously educate ourselves or let ourselves be educated, in other words learn from others and the things around us every day. We might also say that we are never completely educated—the job is never over as long as we're alive. There are always other things we can and should learn to become better people, and there are always things we can help other people learn to help them make their lives better. So like another person, Richard Peters, who spent a lot of his time thinking about education, said, "education is like a [lifelong] journey" which starts when we are born and doesn't end until we die—kind of like a never-ending field trip.

For most journeys, we know where we're going and how to get there, and when we're unsure we use maps and a GPS. But even these are of little use unless we have a clear idea of where we hope to end up. If I ask your parents where they want you to end up, they say things like they just want you to be happy and to make other people happy. My good friend, Gary Fenstermacher says happiness is like the North Star—it guides our educational journey but it is more about pointing us in a certain direction than getting there. That's the frustrating thing about this idea we call education—as I shall show later we are never really educated but we can use wayfinders like we do with a GPS to keep us on track. The wayfinders I like are virtue, relationships, responsibility and judgment.

Education has always been about learning how to live a better life. Years ago a man called Aristotle said that in order to live well everyone had to achieve certain virtues, which are habits of the mind and ways of being. He said one had to be humble and courageous, patient and kind, curious and thoughtful. If we are humble we are not boastful or dishonest—we accept that there are lots of things we don't know and that we can learn things from other people. If we are courageous we are open to learning new things and trying to do things differently. If we are patient we know that for something truly important to happen usually takes time. If we are kind we give others the benefit of the doubt even if we disagree, but having thought of what would serve others best, we do offer our thoughts freely without jealousy or anger. If we are curious we try to understand why things are the way they are and how they came to be that way, and if we are thoughtful we try to imagine how they might be better for each person and everybody, including ourselves. For Aristotle, an "educated person" was virtuous, and democracies required educated, in other words, virtuous people.

What I want for each of you is to be an "educated person." What I want for all of us is to be "educated people." But how do we become virtuous? Jean-Jacques Rousseau, a wild and crazy guy, thought we should live our lives in tune with nature. First, children can be considered "educated" for their age if they "act their age." Children are not adults, and should neither be expected nor forced to think or act like adults. Second, he thought that as we get older we must have a natural right to learn and contribute the way we want to. Third, the natural world is an important part of human lives and, if we hope to live better lives, we must honour and care for it … and sometimes follow it. An "educated person" has a relationship with his or her own nature, and respects the nature of those around him or her and the nature of all of us put together on this planet, as well as nature itself.

However, we've learned that following nature alone is not good enough—we must also have relationships with people. Before we learn to read and write we already learn that people expect us to do some things on our own. By watching our parents, teachers and others and listening to their advice (sometimes their scolding), we learn manners, the right way to do things like eating, what clothes to wear when and things like that—in other words, we learn how we do things "so we get along better around here." Because we live among a lot of people, we need to learn to control natural reactions like temper tantrums, selfishness and jealousy. Therefore, sometimes overcoming our nature so that we can have good relationships is what it means to be an educated person.

About the time we become teenagers, we realize that more than ever we don't always want to do what adults tell us or want us to do. We want to make up our own minds and our own rules … we want to be our own boss. This is a very hard and confusing but important time of life—we make decisions that aren't good for us or others. It is hard not only for us but also for others around us. We test our parents' and teachers' patience. We do awful things to our brothers and sisters, and sometimes to our friends. By being unreasonable we are hopefully learning to be reasonable. By being hard to get along with we're learning how to get along with others on our own terms, something which will become very important later in life. It is the time when we hope that the relationships we formed earlier will see us through. It is also the time when we begin to understand that each of us has personal responsibilities which go beyond just getting along with others. Those responsibilities we might call civic responsibilities like being good democratic citizens contributing to making our communities and our world better.

When I was a high school teacher the teenagers in my classes were very dependent upon who I was, what I stood for and how I could communicate that I wanted them to be like me in virtuous ways. But my responsibility had another face which, according to another good friend, Jean Bethke Elshtain, was to pass on the best things in the world to the next generation. She said "education is always about what society deems to be meaningful and worthwhile." She also said that if we want to live in a democracy we must take seriously our part in making it reality. Both democracy and education are better when it is considered everybody's business and everybody's responsibility. My good friend, Nel Noddings talks about this as living an ethic of care—actively caring for ourselves, others and the world of nature and people. Democratic citizens as "educated people" take responsibility for the way the world is and try to make it better. Education is about being ready to accept our responsibility in keeping democracy alive and healthy.

Please allow a little aside—today our responsibility to the world is even greater than it was when I started teaching, because technology allows me to imagine myself speaking to absolutely everyone else on earth even though I may never meet them any other way than online. So, to be "educated" now I not only have to live a responsible personal life, but I also have to take into account everyone else's life and how I might help them become more "educated." It's a tough act to get right—it takes all my time and energy … but I would not have it any other way.

The last "wayfinder" I use in my life GPS is judgment—judging how to live a moral life and contributing to a world where we can all live moral lives. Judgment is doing the right thing at the right time in the right way for the right reasons—virtuous responsible relationships with others and with our society. We can learn how and what to judge by listening carefully to people like Aristotle, Arendt, Dewey, Peters, Fenstermacher, Elshtain, Noddings and, yes, even Rousseau because as Arendt says, "Education is [also] about loving the world enough." I think to be "educated" is to be a good judge, one who cares about others, oneself and the world, who is open to being judged by caring others and who all the while imagines how his or her life and the world could be better. A good judge tries to make sure that no one is left out and that everyone is treated fairly. Of course, these are ideas which need a lot more discussion. Fortunately, in a democracy we can discuss these things freely, and our education hopes to make us ready to engage wisely in these discussions when the opportunities present themselves or, even more importantly, to give us the courage and confidence to create those moments ourselves.

You may have noticed that I have not talked a lot about school. That's because, while I think school is an important part of your education, it so often is talked about as if it's your whole education … which it is not. The fact is that schools only take up a small part of your life, and sometimes schools forget that education is their first responsibility. But that's a topic for another letter.

Anyway, that's a lot of words to get to what I really wanted to say. I promise each one that, as long as Grandma and I have our wits about us and it's OK with you, we will walk by your side and that of your parents as you make your own sense of your own educational journey. This is an invitation to each of you and all of you to talk to us about the things in this letter. We also hope and pray that you will also do the same—walk and talk—with and for each other as cousins. There is nobody who is not meant to be educated, and there is no one who is never in need of more education than he or she has, and there is no one who doesn't deserve the support and help of those who love him or her.

May you enjoy the journey!

Love always
Papa

Note

1. In order to maintain the authenticity and integrity of the epistolary format used here, the author and date references do not appear in the body of the letter itself. However, the full reference citations are provided below.

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John R. Wiens is completing his 45th year as a teacher. He has been a classroom teacher, principal, superintendent and is now a dean. He is a past president of MTS, CEA, MERC, ACDE and a past chair of the Universities Grants Commission. His academic interests focus on democracy and peace as central human concepts. John recently co-edited a book, *Why Do We Educate? Renewing the Conversation*, with longtime friend and colleague, David Coulter. Most importantly, he is the father of two teachers and the grandfather of four "pre-teachers," relationships which have inspired his latest involvement as vice-chair of the Canadian Centre for Child Protection.

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