Educational Reform and Public Engagement seen through a "Complexity" Lens

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What the best and wisest parent wants for his own child that must the community want for all its children. (John Dewey, School and Society, 1971, 7)

To any student in Alberta schools – when I think of learning in 20 years, I hope our education and learning systems allow you to achieve your fullest potential in all areas of life. (Red Deer - Inspiring Education - Participant, 2009)

Introduction:

Educational reform is a political reality in North America. Unfortunately in recent years 'reform' has become synonymous with an increased focus on system-wide standards and accountability measures. Such developments continue a trajectory initiated by Bobbitt (1918) and Tyler (1949) although contemporary curriculum discourse is also significantly grounded in a neo-liberal political and a neo-classical economic agenda. The most prevalent model of educational reform is a hierarchical 'top-down' approach where politicians and government bureaucrats dictate policies, pre-determined curricular objectives and mandatory assessment criteria. These educational 'reforms' are then implemented throughout the system, with a trickle-down impact determined by classical, bureaucratic models of governance. Mandated changes are executed by school boards and principals (middle management) and subsequently by teachers as the classroom 'managers'. These attempts at educational reform rely implicitly on applying business management principles to public institutions. This approach, known as 'managerialism', has permeated educational administration and dictated educational reform attempts for several decades (Goldspink, 2007) with the negative result of significant educational 'deform' (Pinar, 2011).

"Inspiring Education: A Dialogue With Albertans" (*Inspiring Education*) provides a contrast to this top-down, managerial approach towards educational reform. This initiative expanded and enhanced public engagement to foster greater commitment to public education and to consider a future that better meets the needs of learners. *Inspiring Education* (2009-2010) offers one concrete example of how conversations about 'curriculum visions' can be significantly improved by expanding "who" is asked to participate in educational reform, as well as addressing "how" these individuals engage.

New approaches are necessary to positively transform the conversation about education as there have been too many lost opportunities and failed efforts to genuinely reform the education

system. While the general public has historically been allotted a limited role in educational reform, it is a recent development to similarly disenfranchise the education community. This lack of engagement with those outside the political hierarchy is symptomatic of a serious systemic malaise. According to Pinar, it is unlikely that this failure will be addressed in the foreseeable future, "… as five decades of school "reform" have side-lined curriculum specialists as major players in US school curriculum improvement" (Pinar, 2011, xi). There is a similar problem of an increasingly exclusionary approach being adopted in Australia (Goldspink, 2007) paralleled in Canada by a trend towards neo-conservative administrative control and implementation (Tomkins, 2007).

So what steps can be taken to address educational reform? By decentralizing decision-making and encouraging greater support for a self-organizing dynamic system, two key concepts at the heart of complexity thinking, it is possible to envision an alternative. Using Doll's 5 C's (Complexity, Community, Conversation, *Currere,* and Cosmology) as set out in "Curriculum Visions" (Doll & Gough, 2002) as a framework, I consider how *Inspiring Education* was able to broaden the inquiry and engage a larger community. The 5 C's provide a theoretical framework to explore two questions: How should one build relationships? And why is it important to foster a network of inquirers and connect key stakeholders to the general public with the overall aim of expanding the curriculum conversation to a larger community?

In addition to the lens of the 5 C's, the article "*Rethinking Educational Reform*" (Goldspink, 2007) provides a dynamical systems perspective as well as a critique of 'managerialism' in traditional educational reform. This is contrasted with an alternative systems approach, more aligned with complexity theory, which emphasizes the need for a focus on people, relationships, and learning rather than on hierarchical structures and centrally determined standards and conformity. The "5 C" frame posited by Doll, is used throughout the paper as a both a lens and as a scaffold for analysis so as to explore *Inspiring Education* and demonstrate how educational reform initiatives can be based upon more inclusive and authentic public engagement.

"C" for Complexity:

> *When I think of learning in 20 years ... I hope that the wonder, mystery, curiosity, creativity, innovation and critical thinking and enjoyment about the world and life will still be central to learning.* (Fort McMurray Participant, May 13, 2009)

Complexity theory offers an alternate and more effective way to contemplate educational reform than referencing market analysis. While education is necessary for a growth economy, it also serves a more significant societal aim. Education is a public good where benefits are intended to accrue to the whole community and not just to the individuals who directly receive such services. This quality of education, in being a public good, was explicitly acknowledged by the Premier when he directed the creation of *Inspiring Education* to "heighten appreciation of the importance of education in the life of Albertans and its increasing contribution to a prosperous society and economy …" (Inspiring Education Steering Committee Report, 2010, 5)

However, it is difficult to garner a broad-base of public support for education if educational reforms are undertaken solely by politicians who seek only limited input from invited stakeholders. Although this is a common practice in a world of politicized education, it demonstrates a minimal level of connectivity. Combined with centralized decision-making and

communications restricted to top-down pronouncements within the education hierarchy, the lines of connection are few and input is severely restricted by such inadequate consultation processes. A full democratic engagement of the public in educational reform requires much greater 'connectivity' and strengthened relationships. Systemic change of a complex system needs more than a limited and linear network. Educational reform must also move beyond the technical/rational agenda set by 'managerialism' that aims only to improve the efficiency of organizations. When the goal of reform is narrowed to monitoring and attempting to control all aspects of the education system, targets are necessarily reduced to elements that are concrete and controllable. Complexities and questions of wider significance are avoided in such a reductionist analysis as they are impossible to submit to 'command and control' mechanisms. This vigorous pursuit of accountability reduces education to measureable 'items' and as a result the entire system, and particularly the interaction of teacher-student, becomes 'industrialized'. This reduces, rather than enhances, the overall quality of education.

Traditional efforts at educational reform de-emphasize adaptation within the local context and disregard the needs of particular learners in order to privilege the emphasis on institutional requirements. A rigid, hierarchical systems' perspective, narrows the discourse concerning education. In particular the over-arching social purpose is displaced by a limited debate about accountability. Thus managerialism becomes a quintessentially modernist endeavor rife with assumptions that de-professionalize education and attack teacher/school autonomy. What is particularly egregious is the lack of any evidence of corresponding positive changes occurring in the education system under a 'managerialist' model. The increasing focus on tangible and measureable deliverables does not result in positive outcomes. Why? Well there is often no established or rational connection between an output that can be measured and the actual desired outcomes in education. Secondly, the emphasis on accountability destroys trust within the education system. By expending valuable resources to 'police' performance, ensure compliance or invoke punitive measures, the overarching societal aims for education which are broad and idealistic, are ultimately frustrated. The education system is notoriously complicated and challenging and legitimate accountability, in terms of education meeting the needs of society as a 'social good', requires a rich set of information. This is not be satisfied by the data from a handful of 'output' measures. Top-down decision-making, centralized policy control, close monitoring of implementation through reductionist accountability measures and the de-professionalization of educators, ultimately constricts institutional and systemic capacity to learn and adapt. This latter outcome is the result of stymieing information flow within the system and by restricting the number and quality of connections or functional networks that might help to foster flexibility and adaptability from within.

"C" for Community:

> The whale is the biggest animal. A school of sardines is the same size as the whale. When four or five sardines change direction, the whole school will change. If we continue to talk about this, sooner or later we can change the direction of education too.
> (Aboriginal elder: Red Deer Participant, June 10, 2009)

"Community" is essential to the other 4 C's of the 'curriculum vision' for a robust community network is the foundation of adaptive potential. Requiring an emergent and complex web of interactions is a feature aligned with complexity theory as establishing more intricate

networks of inter-connected relationships promotes system responsiveness and adaptability. Thus the "Community" is vitally important to ensure broader access to information and divergent perspectives. This provides greater responsiveness within the entire system to environmental inputs. In fact, the relational aspect of community and the degree of connectivity are key indicators of a more robust and resilient complex system. John Dewey's thoughts on the interaction of an organism and the environment are equally applicable to the education systems connection to its community. Arguably the praxis of experience, reflection and further action (Dewey, 2004) are the fundamental basis of the development of all human knowledge both from an individual as well as systems perspective. Dewey perceived all knowledge to be an essentially adaptive response to the 'environment. When considering educational reform, one can envision interactions taking place between the education system as a whole and the larger contemporary world environment and nested within that context, one's immediate community. Jayne Fleener, references the inquiry-based approach of Dewey to emphasize this dynamic relationship with the environment and how it readily fits within complexity theory (in Doll & Gough (eds), 2006). Reforming an education system therefore requires addressing the question of how best to utilize community inputs so as to respond to challenges within an ever-changing environment.

By applying complexity theory to the consideration of communications within the education system, it is possible to move the conversation beyond the traditional view of consultations wedded to Newtonian mechanics. For example, in explaining how the *Inspiring Education* initiative differed from the more conventional consultation processes the metaphor of cooking was used: Government often presents education proposals to stakeholders as if it was presenting 'three cakes' to the public with a minimal variation of flavor and appearance (chocolate, vanilla and a swirl of both) and then individuals are simply asked which cake they want to receive the icing ('to be sanctioned'). In contrast, the *Inspiring Education* dialogic process was intended to be an invitation for participants to come into the kitchen where they would help choose the ingredients, find the recipes and plan the menu with everyone engaging in a collaborative way. Embracing a 'complexity' paradigm requires extending an authentic invitation to the community to engage. And to be meaningful, the aim of such public engagement must be to connect deeply with others in a respectful conversation about curriculum and educational reform.

So what does such an extensive community engagement look like? In 2009, when the Honorable David Hancock, Minister of Education in Alberta provided some insight into this question by establishing *Inspiring Education* as a dialogue with Albertans about the future of education. Broad participation was encouraged by utilizing a variety of accessible venues and offering the public many ways to interact including social media. The cross-provincial public dialogue on education represented a pronounced rupture from traditional modes of engagement:

> **Inspiring Education: A Dialogue with Albertans** … represents a new way for Alberta Education to engage with its stakeholders, partners and all Albertans. It was established as an interactive conversation with Albertans and designed around the question of what characteristics an educated Albertan should possess twenty years from now. (Inspiring Action Discussion Paper, 2010, Appendix I, 25)

As community was considered fundamental to systemic change, participatory democracy was fostered through widespread public engagement. The government actively encouraged the

development of partnerships between various stakeholders as a basis for achieving change within the education system. Greater complexity of linkages was supported throughout the system based on the assessment that, "… complex problems need complex solutions and these can come from those who are confronting them at the local level (Goldspink, 2007) as sustainable change requires responsibility at the local level, and not through imposition from above.

Informing this approach was the recognition that a diversity of perspectives was important. This requires valuing everyone's personal experiences respecting the education system and reform. A focus on the particular, and the seeking of personal narratives rather than generalities nurtured greater complexity by providing a breadth of perspectives. The key to educational reform fostered by *Inspiring Education* was the emphasis on a model of co-development, rather than top-down. A collaborative approach acknowledges there is no one 'expert' whose knowledge base is sufficient to grasp the complexity of the education system. Nor is it possible to address the concerns about education expressed across diverse communities without the government establishing legitimate connectivity between, and with, stakeholders and the general public.

The government began establishing such linkages between communities across the province by inviting all participants to engage in an authentic curriculum conversation. The dialogue, to generate novel perspectives, needed new ways of thinking about how to engage. In fostering greater connectivity, it was recognized that an historic 'lack of trust' had to be overcome in establishing relations between the government, stakeholders and members of the public. Therefore, much thought was devoted to the preparation of these community conversations and how they would be structured as significant challenges exist in our 'usual' manner of conversing and the existing power imbalances between participants. According to Davis & Sumara (2006) many of the words and phrases we use in everyday conversation are based on mathematical concepts and have become an intrinsic part of our 'modernist' worldview. Our common discourse, with words 'tangled in a web of Euclidean linearity', creates a restrictive and non-neutral language of 'of regularity and oddness' which limits our thinking about educational reform. The linear metaphors used in daily speech lead to a linearity of thinking that constrains a more fulsome conversation and can privilege narratives of control, predictability, efficiency, and hierarchy (Davis & Sumara, 2006). Therefore for complexity to flourish, such discourses must be disrupted and challenged. Engagement processes that encourage creative and dynamic thinking require the creation of novel linkages and a willingness to be open and receptive to more organic and egalitarian narratives.

Inspiring Education therefore utilized both widespread engagement (broadening the outreach) and creative dialogic processes (new ways of communicating) to create a public 'space' where a vision of 'transformational' educational reform could occur. Doll identified that in a multifaceted world we need new understandings based on innovative ways of communicating, "In the complex, diversified, globalized, technologically-oriented society in which we live, we believe a new set of discursive practices are needed, ones which develop, embrace, work with, related to the complexity we find" (in Pinar, 2012). In answer to the question: How must Alberta's education system shift to make this vision possible? The Steering Committee identified broad-based community outreach as their first recommendation:

> First, our concept of education should expand beyond the school and make the community a true partner. The community can be a source of leadership, teaching, and support through the participation of experts, mentors, and elders. Leadership can be

found in a variety of organizations including the business community, post- secondary institutions, not-for-profit organizations, and cultural groups. (Inspiring Education Steering Committee, 2010, 6)

This is quite revolutionary as it recommends the dispersal of power throughout the system. While education, as a complex system would operate more adaptively if this was implemented, it would also be a remarkable departure from the centralized government control that currently exists. When partnerships are preferred, the existing 'managerialism' and top down decision-making are both dealt a significant blow! Targeting the industrialized model of instruction, where students are seen as an end 'product', was seen as urgently in need of reform according to both *Inspiring Education* participants and to committee members, as the following comments exemplify:

> *Most adults today grew up with an industrial model of education: This is especially true in high schools, where school systems base education on the principles of the assembly line and the efficient division of labour. Schools divide the curriculum into specialist segments: some teachers install math in the students; and others install history. They arrange the day into standard units of time, marked out by the ringing of bells, much like a factory announcing the beginning of the workday and the end of breaks. Students are educated in batches, according to age, as if the most important thing they have in common is their date of manufacture. They are given standardized tests at set points and are compared with each other before being sent out onto the market.* (Inspiring Education Steering Committee Report, 2010, 10-11)

> *The school system is based on the factory... Here we are in 50 minute blocks, just like in the past. We need to change... It's mind boggling that this (structure) came from the Industrial Revolution.* (Community Conversation, Grande Prairie)

The words of *Inspiring Education* participants, transcribed by from the conversations have been interspersed throughout the paper to illustrate the clarity and sophistication of the dialogue. The next two sections review the 2 C's of 'Conversation' and '*Currere*' and details of the processes used in Spring Conversations demonstrate how dialogue was used to create 'communications that matter'.

"C" – Conversation

As indicated, in order to establish vibrant 'connectivity' within the community, one needs to expand 'who' is invited. In addition, those who participate must be engaged in a meaningfully way. Otherwise the traditional modes of educational reform remain unchallenged and become the 'default'. In terms of inviting the broader community to participate in the dialogue, *Inspiring Education*, targeted students, teachers, parents, members of non-profit societies and for-profit business people, government bureaucrats, school leaders, elected officials, university professors, trades-people and professions as well as any person who had recently contacted the government on education issues. To highlight the importance of their involvement, individuals were provided with a direct invitation by letter whenever possible. All other members of a community were invited through extensive advertising in major (and local) newspapers. Outreach included "cold calls' to members of the public, to help ensure greater diversity so that participants would be

representative of the local community.

Unique dialogic processes had to be developed to realize the aim of the creating a 'curriculum vision' encompassing the 'hopes, dreams and aspirations' of society in respect to the education of our children in the next 20 years. The question of "Why did the Minister initiate a Dialogue with Albertans?" was considered in my blog on the *Inspiring Education* web-site:

> In previous blogs I wrote about how Albertans were asked to enter a meaningful exchange where multiple perspectives were respected. The intention was to start a shift in the conversation from the certainty of top-down authority to an exploration of collaborative co-creation. To shape education in the future for Alberta's children, everyone needs to engage in conversations that matter. So the answer to "Why Dialogue?" has to do with intention and expectations in these conversations. (Davis, 2009)

Adam Kahane's article entitled "*Changing the world by changing how we talk and listen*" was posted on the *Inspiring Education* website to inform the public about dialogic processes. To engage in authentic 'conversations that matter', it is not only necessary to 'cast the net widely', and to bring the public, stakeholders and the government together but it is also essential to foster 'reflective and generative dialogue'. Reflective dialogue calls on us to be empathetic—to see the world through the eyes of others and also to be self-reflective so we can better understand how we influence the world around us. Generative dialogue is an opportunity for groups to discover a shared purpose vital to the success of deep change initiatives (Kahane, 2009 3). Where conversations seek "new directions" for the common good, and when people are invited to work together on what truly matters to them, than there is a greater likelihood they will take ownership and responsibility in moving the issues identified, and the ideas developed, forward. Inherent in the process was a fundamental respect for the contribution individual participants could make to creating future-oriented action. There also had to be trust in an education vision built upon the collective 'wisdom of the crowds' (Suroweicki, 2004). People are engaging in 'conversations that matter' when their interactions demonstrate an authentic opportunity to:

- Share perspectives and connect in a meaningful way with others
- Take advantage of creative potential to develop great ideas
- Inspire increased commitment and collaborative leadership
- Ensure shared understanding before seeking a plan to move forward

Why is this important? "From my observations, the quality of the conversations people have is the most important indicator of whether they will succeed in effecting deep change" (Kahane, 2009, 1). As the Minister of Education recognized that neither he nor the Ministry had all the answers, guidance was sought from citizens in respect to the future of education. There was an authentic commitment to discover possibilities together so, based on Kahane (2009), the following elements guided a deliberative approach to the community conversations, aimed at sparking engagement, deepening understanding and ensuring the emergence of community leadership:

- Focus on questions that matter;
- Go into conversation by listening deeply to each other;
- Allow all voices to be heard so the collective intelligence can surface;
- Develop a collaborative process where everyone learns about themselves - each

other - and the purpose(s) of education; and
- •   Co-create the solutions we seek.

Inspiring Education posted a second article: "*A Case Study in Deliberative Democracy: Dialogue With the City*" as it provided a recent example of participatory democracy. The case study set out details about a dialogic process used in Australia to engage government officials, stakeholders and members of the public, all sitting as equal partners at the table. By posting this article as a PDF document on-line at the *Inspiring Education* website, it served as an example for the public to better understand and anticipate the aims and possibilities of the dialogue. Participatory or deliberative democratic processes are "…described as a nascent social movement (in) response to the perceived inadequacies of representative democracy" (Hartz-Karp, 2005, 1). Participants acknowledged and appreciated the difference between the approach taken in 'community conversations' and other consultation processes previously offered by government:

> I think openness and dialogue in any society is a foundation that strengthens a society that is democratic. The more we discuss and hear different aspects, the more we encourage change through the generations and have a more "honest" brokering of policy. (Provincial Forum Participant, 2009)

By connecting in a different ways, both laterally (with a broad range of people) and by pushing beyond superficial levels of conversation and deepening the dialogue, complexity can result. Such conversations can help move people beyond their 'habits' of the copied, and facilitate a focus on the creative. To this end, the new sciences of chaos and complexity may indeed provide an entrée into a world of possibility (Doll, 2006). Yet, this world of possibility is often precluded by limiting such conversations to education academics in theory and to government officials in practice. The result of such limitations has been the hierarchical setting of curricula, and the reform of education, with minimal community connections. Despite such common practices inquiry into what is desirable within the education system is not only a task for the educational researcher and practitioner, but extends to society at large (Biesta, 2007). In *Inspiring Education*, the deepening of community dialogue respecting the future of education was made possible through a process similar to "*currere*" Pinar (2004) and the following section explores this in greater detail.

"C" for *Currere*:

> *While curriculum as complicated conversation in the service of social and self-reflective understanding will transform the present, it will not do so in predictable ways, certainly not according to politicians' often self-serving and ideology-laden agendas.* (Pinar, 2012)

> *Design the education system to be more relationship-centred, taking children to deeper places of self-realization ...* (Calgary Participant, May 23, 2009)

Pinar states that the spontaneity of conversation and the dialogic encounter invite self-reflexivity. The method of *currere* can assist in re-invigorating the oral tradition of sharing with others through an autobiographical review of one's past and imagined future (Pinar, 2012). *Inspiring Education* used processes that mirrored the method of *currere,* and similarly found

public participants were thereby engaged in a way that deepened self-reflexivity. It created an atmosphere of trust and rapport between participants essential to fostering meaningful and generative discourse. Questions asked of participants in the community conversations helped participants 'tap into' their personal perceptions of the education system by connecting their own past experiences with a future focus and then integrating their personal stories with other participant's in a shared group narrative. The result was a positive experience of working with others to create a vision of hope for educational reform. Participants were able through reflecting upon the following questions to connect their personal and local experiences to larger cultural, economic, global and even 'cosmic' visions of education.

The *Inspiring Education* process used a number of photographs at the community conversations and a facilitator, working with groups of 4-8 individuals, asked the following questions. For the purpose of enabling the reader to consider how these processes fostered a deeper engagement in educational reform initiatives, explicit connections are drawn been the questions posed and the 4-step method of *currere*.

1.   Regressive:

The *currere* method begins with the 'regressive', where one considers past "lived" experience. The individual is encouraged to use 'free association' in order to re-enter the past, and to thereby enlarge—and transform—ones' memory. The purpose, according to Pinar is that 'reactivating the past reconstructs the present so we can find the future' (2012). Consider the similarly with the first question in the *Inspiring Education* process:

- **Take a moment to think about your past learning experiences. Choose one picture that best reflects your thoughts and feelings towards your past learning experiences.** *(Participants are asked to share with others why they choose the photo—to share one story from their past that illustrates their choice).*

2. Progressive:

In the next step, an individual is asked to consider the future, "In the second or progressive step one looks toward what is not yet the case, what is not yet present … meditatively, the student of *currere* images possible futures" (Pinar, 2004, 36). Once again the connection to the *Inspiring Education* process is immediately apparent based on the second question asked of participants in the Spring Conversations:

- **If you were born today, what hopes, dreams and aspirations would you have for your learning in the next 20 years?** *(Sharing narratives as to why they choose a particular photograph to 'best' represent their hopes, dreams and aspirations for future learning experiences, assuming they were born today).*

3. Analytic:

The next step of *currere* is the 'analytical' stage where an individual examines both the past (regressive) and the future (progressive) in order to create a subjective space of freedom. "The analysis of *currere* is akin to phenomenological bracketing; one's distantiation from past and future functions to create a subjective space of freedom in the present. This occurs in the analytic moment: How is the future present in the past, the past in the future, and the present in both? (Pinar, 2004, 36-37). There are strong parallels with the activity engaged in by *Inspiring Education* participants, where after being asked to explore their personal past experiences in education and their future 'hopes, dreams, and aspirations', they were asked to essentially

'disentangle' from their personal narratives and consider collectively a new narrative about education:

Creating and sharing a collective story about education. The facilitator encourages table participants to combine all of the individual stories into a group story that represents their collective hopes for future learning and then to share that story.

The **Conversation on Learning:** Community conversations deepened the conversation by re-considering the photos selected and the 'new collective narrative', by using questions based on the "ORID" focused conversation method (Stansfield, 2000).

Facilitator questions to participants:

- *What words, phrases or images do you remember hearing or seeing?*
- *Where did you hear a sense of sadness, frustration, anger or regret?*
- *Where did you hear a sense of hope, joy or satisfaction?*
- *What images might be missing from the group story you created?*
- *What did you hear that we had in common?*

4. Synthetical:

In the final step of *currere*, the individual is asked to engage in the 'synthetical'. At this point, the autobiographical stories are brought together with one's personal understanding as was discovered by reflecting upon and analyzing the experience. This is an opportunity to re-enter the lived present and to ask the question, "What is the meaning of the present?" Again, the similarity is evident, as *Inspiring Education* participants were asked, as their final 'step' to create their own personal "I Message". This was a way to 'synthesize' their experience in a letter directed at 'whomever' they choose. Some addressed their personal message to the Minister of Education, while others 'spoke' to their children, grandchildren, teachers or fellow community members. Some even directed their personal message to themselves:

Facilitator directions to participants - Table Activity: "I-mail":
You have an opportunity to send an "I-mail" ("I" for inspiring) message to someone of your choice about what is really important to you about learning in 20 years.

To: ...
When I think of learning in 20 years, I hope...

Participants may write their message on an index card to be collected upon completion.

To the Minister of Education - I hope that we can proudly say that we continued the journey we have started. That our students are global citizens with knowledge, critical thinking skills and wisdom grounded in a deep sense of social justice and responsibility.
(Edmonton Participant, April 29, 2009)

To curriculum developers – In 20 years, I hope learning will be more holistic… that education will more tangibly recognize the inter-connectedness of learning experiences.

(Edmonton Participant, April 29/2009)

According to Wang (2010) the autobiographical exploration of one's educational experience in *currere* is more than mere 'storytelling'. *Currere* is effective as a process by opening up space for self-reflection and transformative change. When engaging the public, the questions used in *Inspiring Education* were purposefully open-ended to unleash the inherent creativity of individuals. Mirroring of the *currere* method expanded participants' imagination and 'inspired' thinking. There was no pre-determined limitation on the discourse. The serendipitous similarity with *currere*, gave *Inspiring Education* a bond with autobiography and narrative, where the telling of one's own personal story interrupted the habitual linear, modernist, hierarchical and positional paths of thinking.

There were a number of other noteworthy aspects to the *Inspiring Education* processes. First, the establishment of trusting relationships between participants seemed to be fostered by the sharing of personal experiences and stories. As participants encountered each other in the sharing of their education narratives they forged deeper connections with each other and these links did not occur "in spite of the particularities of their lives but rather through them" (Pinar, 2012, 5-6). Second, the process seemed to encourage individuals to be more in touch with their 'holistic' self, in that they were more open about sharing feelings as well as thoughts about education. Finally, there was greater 'creativity' that emerged, along with a distinct willingness (and ability) to engage in expansive visioning. The centrality of using pictures and *currere*-like questions was effective in evoking personal narratives and it became a particularly generative process where participants drew meaning from their stories and the many paths they had travelled in their own personal learning. This enabled individuals to envision their 'hopes dreams and aspirations' for the future. Collectively participants imagined a transformation of education that was truly 'visionary' in nature. *Inspiring Education*, by utilizing a *currere*-like process, may have been the first large-scale initiative to encourage engagement of the public in a 'complicated curriculum conversation' as envisioned by Pinar (2004).

The perspective of complexity highlights how the processes utilized, as well as the connectivity in terms of the forming of relationships of those engaged in the dialogue will have long-term and unforeseen consequences. By adopting a new approach to public engagement in the course of educational reform, the next section on Doll's final "C"—Cosmology, explores the discoveries of *Inspiring Education* and speculates where this initiative may lead in the future.

> No program can be evaluated in its entirety. But we can increase our vision of whatever we are viewing through the employment of as many perspectives as we can find appropriate and utilize for our purposes. (Aoki, 1989, 7)

> *When I think of learning in 20 years, I hope that education will have responded to children in a whole way including their physical, emotional and spiritual well-being as well as their academic needs.* (Community Conversation Participant, Edmonton)

"C" for Cosmology:

"Cosmology" is defined as the discipline that deals with the nature of the universe as a whole. Philosophically it encompasses the world as the totality of space, time and all

phenomena. This "C" provides the broadest scope in considering educational reform. Albertans expressed the naissance of a cosmological perspective in a broad 'curriculum vision' based on their hopes, dreams, and aspirations for education in twenty years. This is illustrated by their comments and also in the culmination of themes drawn from their words as represented in a "word cloud":
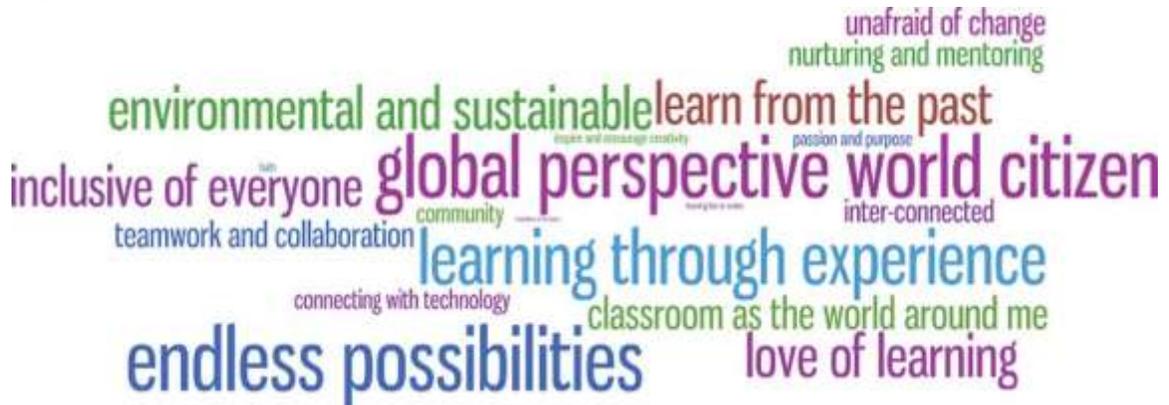
(Community Conversations Summary, Spring 2009)

> [To all students] *I hope you will love it! I hope learning takes you places, inspires you to ask questions, allows you to try many things, touch, taste, smell the world (globally & locally).I hope learning will ENGAGE & INVOLVE you.* (Lethbridge Participant, May 20, 2009)

> *To all our politicians – I hope that schools of the future would have no walls and be able to reach out to students from other cultures, communities, cities, countries, continents.* (Red Deer Participant, June 10, 2009)

> *To everyone – when I think of learning in 20 years I hope school is the place where families and the entire community live together to celebrate wonder, wisdom and responsibility in a global context*. (Calgary Participant, June 17, 2009)

A cosmological perspective in educational reform requires adopting a holistic perspective and engaging in big picture thinking. This is essential when the reform of a complex system like education is proposed. Complexity thinking encompasses a shift from trial and error thinking to 'meta-thinking' (Bennet, 2006). Whereas in simple systems, such as problem solving under a mechanical paradigm, one learns to think through a trial and error process in a linear path, until 'the' solution is arrived at and is considered 'error free'. Dewey (2004) expanded this paradigm by focusing on relationships and advanced the idea that knowledge was produced through active manipulation of the environment. One learns through a 'method of inquiry'. Reform of educational systems is particularly challenging as like other complex systems, it is subject to a multiplying of demands in recent years. The idea of trying one thing to see if it works, and if it does not then trying something else is simply ill-suited to present-day complexity. Multiple, simultaneous actions are often needed, recognizing that the outcome of such an approach is likely to be unpredictable as these multiple actions will entangle causality and complicate praxis by separating actions from consequences. However, despite these risks, and the possibility of unintended consequences, there is a need to engage in such action. This is

both the challenge and the difficulty for complexity thinking and 'cosmology':

> Not surprisingly, complex systems are often insensitive to a single action … Single point solutions to problems work fairly well in a deterministic, complicated system. In a complex system the understanding needed to deal with complex problems is nonlinear and context dependent. One may not be sure what the problem is in a complex situation, much less what the solution should be. Thus, different ways of learning must be available to the problem solver … (Bennet, 2006, 176).

The only way to address educational reform from a 'cosmological' perspective in a complex system is to remain open to non-linear possibilities and to ensure there is input from multiple of perspectives as was evident in *Inspiring Education*. This is important as groups can contribute a breadth of information and draw upon sources of knowledge far beyond what a single individual is capable of doing. This broader information and knowledge source becomes particularly relevant, as when coupled with a collaborative and dialogue oriented environment that enables the sharing of diverse perspectives, better insights and solutions are created to address complex challenges (Bennet, 2006).

In the introduction to "Curriculum Vision" (Doll & Gough, 2006) Doll articulates the challenge of adopting new approaches which break free from the roots of authoritarian control. This is complicated as both 'control' and a linear approach "…permeate our society and our culture, reaching deep into our metaphysical, cosmological, and theological beliefs. It has become paradigmatic". So, if educational reform is to succeed in addressing complexities, it is imperative to realize "Dewey's vision, one which integrates education, schooling, curriculum and community into a seamless whole, centers around … emergent control … in a sense, it emerges from the interactions happening within an event or set of experiences (2002, 18)". Thus the final "C"—'cosmology' returns us full circle to an awareness of our need for the other 4 C's.

Conclusion:

> *I can embrace change. I can model a positive attitude towards new and innovative practices. I can encourage others to challenge their thinking about change.* (Fort McMurray Participant, May 13, 2009)

> *To everyone–when I think of learning in 20 years I hope school is the place where families and the entire community live together to celebrate wonder, wisdom and responsibility in a global context.* (Calgary Participant, June 17, 2009)

Doll's 5 C's provided a 'complexity lens' to organize and analyze the *Inspiring Education* initiative and contextualize its importance in terms of public engagement and educational reform. Complexity requires greater interconnectivity with the community in terms of information flow and the generation of options by drawing upon a diversity of perspectives. This in turn creates greater resilience and adaptability within the system. The quality of connection and the development of trusting relationships are both of utmost importance. This is evidenced by the excellence of vision participants created when their conversation was deepened and the breadth of the engagement was expanded.

Educational reform, similar to any endeavor where systemic change is sought, must include a future focus and a 'utopian belief'. In the dialogue around *Inspiring Education* both

aspects were invoked, as people were asked to imagine education in 20 years (future focus) and then invited to share what their 'hopes, dreams and aspirations were' for this future (a utopian vision). Winter (2006) sets out that 'utopian discourse' includes inherent contradictions:

> Utopia is a discourse in two contradictory parts. First it is a narrative about discontinuity. It is a story though which men and women imagine a radical act of disjunction, enabling people, acting freely and in concert with others, to realize the creative potential imprisoned by the way we live now. But secondly, since the narrative is written by men and women rooted in contemporary conditions and language, it inevitably shows where they are, even as it describes where they want to be …. (Winter, 2006, 3)

Inspiring Education is a dialogue that could, under Winter's definition, be considered a 'utopian discourse' as it explored both the personal and systemic past and envisioned the future. It was both "… haunted by our past; (and) ... our imaginings of what curriculum could be" (Doll, 2002). Arguably all educational reform efforts are utopian, so what distinguishes *Inspiring Education*? As an approach it rejected the rampant modernist fascination with 'managerialism' of our current age and embraced Doll's 5 C's: complexity, community, conversation, *currere* and cosmology. *Inspiring Education* sought greater breadth and depth of public engagement in educational reform and in the creation of a new 'curriculum vision'. Most participants agreed that transformation is necessary, for in the words of one Alberta Cabinet Minister, "If the classroom of 2030 looks the same as it does today, we will know we have failed" (Inspiring Education Steering Committee Report, 2010, 16).

> *It has become very clear that the paradigm that has dominated the past century of school education has to be transformed. We are not tinkering, we are creating a system that will have some fundamentally different assumptions.* (Inspiring Education Online Conversation)

The need for, and the possibility of, change, was confirmed upon completion of the local community conversations. At the province-wide gathering in the fall of 2009, the vast majority of participants polled, agreed that a transformation of education was both required and possible.

Scale of change in the education system

■ How much is required?   ■ How much is possible?

	No change	Incremental evolution	Informed transformation	Complete overhaul
How much is required?	0%	8%	63%	28%
How much is possible?	1%	26%	54%	19%
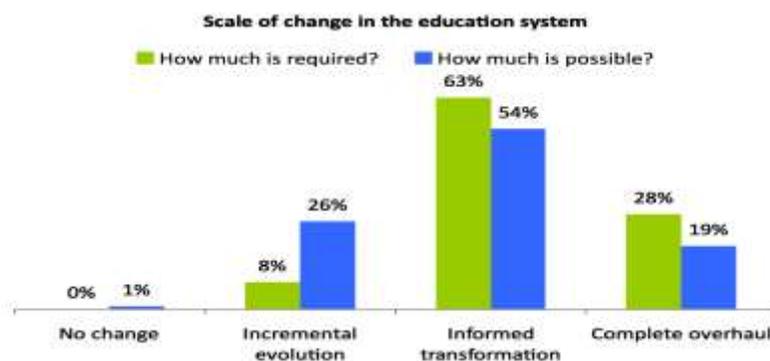
These sentiments were reflected in the Steering Committee Report (Inspiring Education, 2010) delivered to the Alberta government in 2010.

> *Inspiring Education* is transformational in nature. It provides direction for new practices, institutional arrangements and human interactions … *Inspiring Education* transforms the way we think about possible learning experiences and the way we

address the learning needs of tomorrow. (Inspiring Education Steering Committee Report, 2010, 14)

In conclusion, the need to expand engagement of the public in educational reform initiatives is essential.

The change required is so necessary and profound that we need to look at a whole different way of doing things. The way we are going—we will never get the change we need in the time we have without big changes now. (Fall Forum Participant, 2009)

Complexity thinking and the 5 C's have provided a means to analyze a recent initiative, *Inspiring Education*, in a way that challenges old ways of thinking about educational reform and the often politicized, managerial control that is typical in such processes. This initiative provides one example of a new way forward in terms of engaging the public in curriculum conversations. The results are significant, although the long-term impact of the dialogue is yet to be determined as it is still a 'work in progress'.

I viewed this initiative as an opportunity to be part of history in the making. I will be 80 years old in 2029. I hope I will (a) be alive, (b) remember this event, and (c) have seen the fruits of the labour. (Fall Forum Participant, 2009)

In the words of the Minister of Education while it is important to acknowledge our accomplishments, we must continue to move forward … to a new and better place.

We have an excellent education system today where people come from all over the world to take a look at what we're doing now, but we cannot rest on our laurels. We need to build the education system for tomorrow. (Education Minister Dave Hancock)

The Alberta Government is currently considering 'next steps' arising out of the dialogue, now with the added support of Jeff Johnson, the co-chair of *Inspiring Education*, who was recently appointed the Minister of Education in May, 2012. So the conversation continues…

Note

Inspiring Education: A Dialogue With Albertans

Phase One began in early 2009 and included personal conversations in small groups, regional and community conversations and online discussions. During the spring of 2009, approximately 2,000 people shared their vision of what an educated Albertan might look like in 20 years.

Phase Two was the Provincial Forum held in the fall of 2009. The Forum enabled more than 1,400 additional participants, both present and online, to contribute their voice to the dialogue and be challenged by internationally-renowned speakers. The participants examined 6 key values as well as themes related to policy and governance that had emerged in the spring conversations.

Notes

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References

Alberta Education, Ministry of Education. 2009. *Inspiring education: A dialogue with Albertans—community conversation kit*.

Aoki, T. 1989. Toward curriculum inquiry in a new key. *Occasional Paper* No. 2, Curriculum Praxis, Department of Secondary Education, University of Alberta.

Barrow, J. 2007. *New theories of everything*. Oxford University Press.

Bennet, D. 2006. Expanding the knowledge paradigm. *VINE* (The journal of information and knowledge management systems), 36, 2, 175-181.

Biesta, G. 2007. Why "what works" won't work: Evidence-based practice and the democratic deficit in educational research. *Educational Theory*, 57, 1, 1-22.

Bobbitt, F. 1918. *The Curriculum*. Accessed on March 22, 2012 at
http://archive.org/details/curriculum008619mbp

Davis, B., D. Sumara & L. D'Amour. 2012. Understanding school districts as learning systems: Some lessons from three cases of complex transformation. 2012. Springer *Science and Business Media B.V*. Published online 28 February 2012.

Davis, B. & D. Sumara. 2006. *Complexity and education: Inquiries into learning, teaching, and research*. New Jersey: Lawrence Erlbaum.

Davis, B. April 16, 2010. *Inspiring Education Blog* (Brenda Davis) accessed February 20, 2012 at http://www.inspiringeducation.alberta.ca/Blog/Contributors/Brenda/tabid/116/Default.aspx

Dewey, J. 2004/1916. *Democracy and education*. New York: Dover

Dewey, J. 1971/1900. *School and Society*. L. Carmichael Intro. University of Chicago Press.

Dewey, J. 1938. Logic: *The theory of inquiry*. New York: Henry Holt.

Doll, W. Jr. 1993. *A post-modern perspective on curriculum*. New York: Teachers College Press.

Doll, W. Jr. 2008. Complexity and the culture of curriculum. *Educational Philosophy and Theory*, 40, 1, 190-212.

Doll, W.Jr. 1989. Foundations for a post-modern curriculum. *Journal of Curriculum Studies*, 21, 1, 243-253.

Doll, W. Jr. 2006. Method and its culture: An historical approach. *Complicity: An International Journal of Complexity and Education*, 3, 1, 85–89.

Doll, W. Jr. 2008. The four R's: An Alternative to the Tyler Rationale. In D.J. Flinders & S. J. Thorton (Eds.), *The curriculum studies reader*. London**:** Routledge.

Doll, W. Jr. & N. Gough (Eds.). 2006. *Curriculum Visions*. New York: Peter Lang

Doll, W. Jr., Fleener, M., Trueit, D., St. Julien, J. 2005. *Chaos, complexity, curriculum and culture*. New York: Peter Lang.

Goldspink, C. 2007. Rethinking educational reform. *Educational Management Administration and Leadership*, 35, 1, 27-50.

Hartz-Karp, J. 2005. *A case study in deliberative democracy: Dialogue with the city*. Article submitted to Journal of Public Deliberation, Manuscript 1002. Available in the Documents at the *Inspiring Education* website and accessed on April 1, 2012 at http://www.inspiringeducation.alberta.ca/Documents/tabid/124/Default.aspx

"Inspiring Education: A dialogue with Albertans" Steering Committee. 2010. Steering Committee report to the Honorable Dave Hancock, Minister of Education, Government of Alberta, April 2010.

"Inspiring Education: A Dialogue with Albertans" website accessed February 20, 2012 at http://www.inspiringeducation.alberta.ca/

Kahane, A. 2002.*Changing the world by changing how we talk and listen*. (Originally available on *Inspiring Education* website) Accessed on April 2, 2012 at http://www.c2d2.ca/sites/default/files/Kahane%20on%20talking%20and%20listening.pdf

Palmer, J. (Ed.) 2001. *Fifty major thinkers on education: From Confucius to Dewey.* New York: Routledge.

Pinar, W. 2011. *Allegories of the present: Curriculum development in a culture of narcissism and presentism*. Paper presented at the Pinar Lecture Series at the University of British Columbia on November 18, 2011. (No page numbers).

Pinar, W. 2012. *Pragmatism, post-modernism, and complexity theory: An introduction to the "Fascinating, imaginative realm" of William E. Doll, Jr.* Paper presented at the Pinar Lecture Series at University of British Columbia on March 9, 2012.

Pinar, W. (2004) *What is curriculum theory?* New Jersey: Lawrence Erlbaum.

Sharmer, O. 2009. *Theory U: Leading from the future as it emerges*. San Francisco: Berrett-Koehler.

Stanfield, R. 2000. *The art of focused conversation*. The Canadian Institute of Cultural Affairs.

Strong-Wilson, T. 2012. *Phantom traces: Contiguity, coincidences, autobiography and currere in W. G. Sebald's Paul Bereyter and Canadian curriculum studies.* Paper presented at the Pinar Lecture Series at University of British Columbia on January 27, 2012.

Surowiecki, J. 2004. *The Wisdom of Crowds: Why the Many Are Smarter Than the Few and How Collective Wisdom Shapes Business, Economies, Societies and Nations*. New York: Doubleday.

Tomkins, G. 2008. *A common countenance: Stability and change in the Canadian curriculum*. Vancouver: Pacific Educational Press.

Tyler, R. 1949. *Basic principles of curriculum and instruction*. University of Chicago Press.

Wang, H. 2010. The temporality of *currere*, change and teacher education. *Pedagogies: An International Journal*, 5, 4, 275-285.

Winter, J. 2006. *Dreams of peace and freedom: Utopian moments in the 20th century*. Yale University Press: New Haven.