

Changing Landscapes

ALBERTA 2015-2035



SHAPING OUR PREFERRED FUTURE



Join the public dialogue at learningourway.ca

Learning our way as aspiring Albertans

This publication is part of an ongoing commitment for engaging Albertans in a public dialogue about our shared future. The reverse side of this document identifies seven trends impacting four domains of our lives here in Alberta: individuals, relationships and community; work and the economy; governance and politics; and emerging technologies.

Background

How did this publication come about? Beginning in 2004, the Alberta Teachers' Association (ATA) hosted a series of public lectures and invitational symposia focused on the role that public education will play in co-creating the future of Alberta. These public lectures featured leading thinkers including Michael Adams, Gwynne Dyer, Andy Hargreaves, Thomas Homer-Dixon, Carl Honore, Stephen Murgatroyd, David Peat, Sir Ken Robinson, Pasi Sahlberg, Justin Trudeau, Sherry Turkle, Jean Twenge and Margaret Wheatley. These public lectures were also tied to the theme of advancing 'Real Learning First' in Alberta schools, an initiative that offered alternatives to the government's outdated standardized testing programs. reallearningfirst.ca.

At different times, these public dialogues have been co-sponsored by various community partners: the Creating Tomorrow Foundation, the faculties of Education of the University of Alberta and Calgary, Cambridge Strategies, Literacy Alberta, and various Locals of the ATA among others. learningourway.ca.

Strategic foresight needed at Alberta's crossroads

Over the past years, three questions have come to occupy these public conversations about the future of the province:

- **What is the Alberta that the world needs to see?**
- **What kind of Albertans do we need to become to get us there?**
- **How will leadership in learning help us become our best selves?**

These three questions, including the seven trends outlined on the reverse side, are points of departure for an engaging public dialogue as Albertans are poised to become leaders in learning and innovation in the world.

The ALBERTA OF 2030 finds itself in a new story. It is a narrative being written by Albertans, not by the forces acting on them. Alberta has moved beyond the scarred prosperity of its boom and-bust economy and its politics of division ... Most importantly, recognizing what the world needs from them, Albertans have turned to their new passion in meeting their fundamental design challenge for the future: sustained prosperity in a culture of learning and innovation.

– Preferred Futures of the ATA (2012)

For more background information about this publication and the ongoing partnership with forward-thinking Albertans, visit learningourway.ca or contact J-C Couture at jc.couture@ata.ab.ca or 1-800-232-7208.



Time for action – Creating a great school for all

For too long, Alberta's K-12 education sector has been over-managed and under-imagined.

Despite Alberta's internationally admired education system, its booming economy and growing population that is materially one of the richest on the planet, the province lives at a cross-roads. Alongside economic growth and our continued reliance on primary resources, we live with growing disparity and environmental degradation and growing uncertainty about the future – just a few of the challenges we face collectively as we learn our way to the next Alberta. With Alberta's population set to tip the 4 million mark and projected to reach 5 million by 2020 this demographic watershed will make strong public institutions and communities even more crucial.

The Alberta Teachers' Association in collaboration with a team of international experts and informed by its international partnerships with other leading jurisdictions, such as Finland, has developed a comprehensive blueprint to ensure the gifts and talents of all Alberta students are fully realized. This blueprint is detailed in the research study *A Great School for All – Transforming Education in Alberta* and outlines 12 dimensions of transformation that will help bring about sustained and equitable educational reform for the next generation of Alberta students.

The central thesis of *A Great School for All* is that the global educational reform movement (or GERM, as coined by Pasi Sahlberg) threatens to sidetrack meaningful change here in Alberta. This movement is characterized by a focus on standardization, growing bureaucratic interference in teachers' professional practice and zealousness for technology as the simplistic solution to the complex challenges school-communities face.

The road map outlined in the 12 dimensions in the accompanying panels offers a hopeful and bold vision for a great school for all driven by teachers leading transformation.

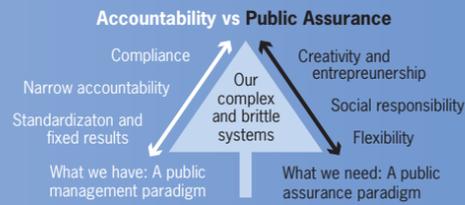


We are not an island here in Alberta. Public education and teachers are under attack around the world. Unless we recognize that the best education systems in the world trust and support teachers by offering professional control over practice and by having time, both essential to meeting the challenges of diverse students and their equally diverse learning needs – educational reform will fail to meet the needs of Alberta students.

– Gordon Thomas, Executive Secretary, ATA

Dimension 1: Assessing and reporting student learning

- Teachers' professional judgment is considered primary in responding to the individual gifts and talents of all students.
- School performance reporting reflects both the breadth and depth of Alberta Education's Goals of Education.



Dimension 2: Curriculum development and implementation

- Curriculum is implemented on an ongoing basis and is supported by provincial, national and international learning networks that enable teachers to collaborate and share their innovative practices.
- The high school curriculum provides multiple pathways for student success.



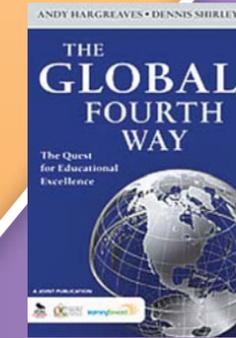
Dimension 12: Governance and vibrant communities



- Schools are the hubs of vibrant communities that engage citizens to become their best possible selves.
- Albertans recognize that visionary leadership, engaged citizenship and a commitment to equity are the key to effective community development.

Dimension 11: Early learning

- Alberta is recognized as a world leader in early childhood development research and programming that is committed to equity.



We need to establish platforms for teachers to initiate their own changes and make their own judgments on the frontline, to invest more in the change capacities of local districts and communities, and to pursue prudent rather than profligate approaches to testing.

– Andy Hargreaves and Dennis Shirley

Dimension 10: Teacher leadership

- Teachers are at the centre of educational reform, not on the sidelines.
- Alberta teachers are recognized globally as leaders in educational transformation.

Dimension 9: School leadership

- School leaders across the province have the resources they need at the school and district levels to support student learning.
- The Alberta Teachers' Association, in collaboration with other stakeholders, provides programs and services that support the development of effective school leaders.



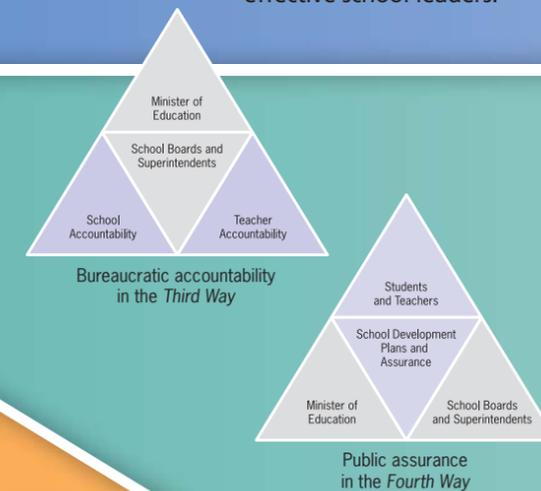
Dimension 3: Digital technologies and learning

- Teachers have primary responsibility for determining the appropriate role of technology in shaping students' learning environments.
- Alberta schools recognize that teaching and learning are highly relational activities.



We are as individuals and as communities, bundles of potential that manifests only in relationships.

Margaret Wheatley, *Alberta – So far from home? Learning Our Way Public Lecture*, 2012.

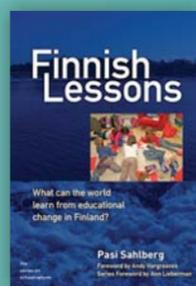


Dimension 8: Public assurance

- Alberta schools have implemented a locally focused public assurance model.
- The Alberta curriculum is relevant and responds to the needs of the local community.

Dimension 4: Inclusive education

- Schools have the funding they need to honour the right of all students to learn.
- Wraparound supports and services are available to help schools meet the unique needs of students.
- School administrators and classroom teachers have the time and resources necessary to maximize student learning and create a great school for all students.



The path to educational excellence is through equity. My dream is that every student will have access to a great school in their community.

Pasi Sahlberg



Dimension 5: Optimal conditions of practice

- Alberta schools are vibrant, creative working environments that enable teachers to grow professionally and personally.
- As professional employees, teachers view school authorities as progressive employers.

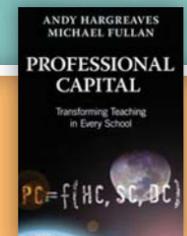
Dimension 6: Differentiation for learning

- Alberta schools offer creative learning environments in which all students feel connected to their teachers and are fully engaged in their learning experiences.
- Differentiated learning is driven by considerations of relationships and community engagement rather than by technology and business models of customization.



Dimension 7: Professional development and autonomy

- Teachers actively improve their teaching practice by collaborating and participating in communities of practice.
- The Alberta Teachers' Association governs the teaching profession in ways that ensure the growth of the profession and inspire public confidence in teachers.



Teaching is usually performed in imperfect conditions, in the face of conflicting expectations and demands. Sustained system improvement can never be done to or for teachers; it can only be done by and with them.

– Andy Hargreaves and Michael Fullan

TREND 1 **Primary resource dependence**
 Alberta's wealth continues to depend on primary resources and commodities in spite of the growth in many new enterprises and the decades-old emphasis placed on economic diversification. *What are the implications of this dependence for the future of Alberta?*

Individuals, relationships and community

Ready to learn?
 ● Alberta, along with the rest of Canada, is at the bottom of the 25 economically advanced countries with respect to children's readiness to learn by age 6.
 – UNICEF 2009

Work and the economy

Energy superpower or marginal player?
 Western Canada is the largest independent energy area in the free world.
 Wal van Lierop, President and CEO of Vancouver-based Chrysalis Energy Venture Capital

Governance, governments and politics

Rollercoaster economics
 Volatile revenues from resources have contributed between 19% and 42% of Alberta provincial revenues since 2000 – this is not sustainable.
 "Shaping Alberta's Future" 2011 report of Premier's Council for Economic Strategy

Emerging technologies

Geo-engineering
 ● Large scale environmental engineering projects are attempting to mitigate the effects of global warming.

TREND 2 **Environmental crises**
 Public awareness and concern are growing as governments struggle to effectively respond to current environmental crises. Aside from the obvious implications of these critical environmental issues, in the context of our wealth and obvious advantages, we are faced with the question, *what should Albertans expect of themselves and what should the world expect from Alberta?*

Who gets a voice in our communities?

An inconvenient truth – Alberta grizzlies extinct by 2050?
 The Alberta government reports there are only 744 Alberta grizzly bears remaining, with 300 to 400 capable of breeding, and states the population would have to increase by about 300 to 400 to be "sustainable". Although Alberta's grizzly bears have now been labeled as "threatened" the government will not establish any new conservation funding.
 Globe and Mail, June 3, 2010

Canadian governments at all levels disregard Aboriginal treaty rights, contaminate and deplete water, expropriate resources.
 Schindler et al. www.actionforpeace.ca/the-alberta-tar-sands



A new single family home is now 2,500 square feet – up from 1,000 in 1950 meanwhile the average household has shrunk from 3.4 to 2.6 people.
 Time, April 3, 2007

Constitutional rights for nature?

● Ecuador – the first country to recognize natural communities and ecosystems as possessing an inalienable and fundamental right to exist and flourish.



Is there peak oil, and so what?

● The World Energy Council predicts: "a possible 'peaking' of conventional oil in the coming 10-20 years and of conventional natural gas before 2050." But by 2011, new technology meant new reserves of shale gas flooded the market and viability of renewable energy is in doubt without new ways to value the environment.

Greenwashing vs the politics of hope
 ● Short-term tweaking through biofuels and the Alberta government's \$2 billion carbon capture and sequestration program remain marginal in reducing ecological footprint.

TREND 3 **The impact of globalization**
 Whether it is Brazil for lumber, Texas for oil or the University of Phoenix for students, the world increasingly operates as a deeply interconnected, economic, cultural and political entity. There is only one planet. *How are we being impacted by our growing global interdependence?*

Global struggles for a rethinking of power and authority

In the Middle East, this means struggles to both establish and sustain democracy. In Asia, it is about finding balance between national authority and local autonomy. In Europe, it is about finding the balance between technocracy, multinational control and nationhood. China could become the world's largest economy by as early as 2013 overtaking the US for global dominance.



China and India – our new friends?

The rise in their middle classes to 50% of the total means a consumption boom the rest of the world will feed.
 "Shaping Alberta's Future" 2011 report of Premier's Council for Economic Strategy

Working hard – growing disparity of income and opportunity
 The income of the top 20% of wealthiest Albertans is 5,600 times that of minimum-wage income earners.

Economic disparities in Alberta and Canada are growing, 10% of Canadian households hold 58% of the wealth.
 Canadians spend 277 minutes per day working or studying – the fourth highest of OECD countries.

The corporatization and marketization of research

● Educators, along with universities, are caught up in the drive to "academic capitalism" that limits research in priority areas such as mental health, community development and the environment.



We must ensure that the global market is embedded in broadly shared values and practices that reflect global social needs, and that all the world's people share the benefits of globalization.
 Kofi Annan, Secretary-General of the United Nations 1997-2006

The next disruption

● Work is in progress to find new ways of powering vehicles and ending our reliance on oil. Just as downloading has disrupted the music industry, so too will the hydrogen economy disrupt the oil-gas economy.

Key drivers of work intensification are technologies like BlackBerries, which create the expectation that employees will be available 24/7. That probably explains why 43% of women say their partners work too much. More than a third of men say the same.
 The Telegraph, Jan. 21, 2011

– Linda Duxbury, Carleton University

TREND 4 **Broadening learning opportunities**
 Expanded and instant access to "point and touch" digital technologies and the need to be connected to others in both the virtual and the physical worlds, are expanding the interest and capacity to offer broadened learning opportunities. *How will Albertans address issues such as core learnings, commodification of content and student assessment as these opportunities unfold?*

Business, cities, learning partnerships

● The City of Calgary currently has the highest post-secondary education rates per capita among the general adult population (73%); yet, only 63.5% of high school graduates go on to post-secondary education.

When we all embrace learning in our daily lives, it will enhance our role in the community, our performance in the workplace, as well as our personal development and physical well-being.
 Don Iverson, 2013 City of Edmonton Mayorality Candidate

The intensification of childhood

● One third of Alberta parents have hired a tutor for their child. Typically, the child is already an honours student.
 ● 88% of parents expect their children to attend post-secondary – 57% expect university attendance.



Barred options

● Public response to isolated incidents of violent crime committed by youth is not an effective basis for changing public policy.
 – Canadian Council of Child and Youth Advocates
 ● Canada incarcerates more convicted youth than almost any similarly industrialized country.
 ● Two out of three people in the youth justice system have two or more mental-health disorders.
 – Globe and Mail, July 18, 2011
 ● California currently spends 45% more on prisons than on higher education.
 – afhimelfarb.wordpress.com

Cyber Charter Schools

● What are the implications for public education and society if learning is to be enacted any time, any place and at any pace in boundless environments?



TREND 5 **Rethinking citizenship and civil society**
 Governmental efforts to assess public mood using current public consultation models are being met with scepticism and mistrust. Opinion polls and focus groups are becoming less effective as measures of public opinion on complex issues in a democratic society. *How will the rise of social media and ubiquitous connectivity among opinion-leaders and 'influentials' shift policy deliberation and public accountability?*

Climate change – leaders or followers?

● 77% of Canadian thought leaders rate Canada's efforts at addressing climate change as poor or very poor, while 75% say the same about Canada's performance at developing a greener economy. 68% rate Canada's efforts to expand renewable energy as poor or very poor.
 ● Thinking globally and acting locally to make sure that Alberta becomes the place the world needs to see – environmental stewardship, a strong democracy, vibrant industry, excellent education, resilient health and a strong innovation culture.
 – Participant, Learning Our Way to the Next Alberta

Privateering: privatization and profiteering meet

– George Lakoff
 ● The rise of P-3s: The Alberta government implements privatization through public / private partnerships for public infrastructure (including schools) and home care services.
 ● Through technology-leveraged initiatives, increasingly corporations such as Pearson and News Corp are marketing the personalization of learning through school reform efforts including curriculum, learning resource development and testing programs.

Shifting power relations

● Social media and peer-to-peer communications such as YouTube have become a platform for online engagement and political action.

Whose transparency? Whose accountability?

● WikiLeaks as simultaneous social good and social evil.
 – Joshua Noble (Dalton Camp Award winner)

A revolution about a revolution

● The blocking of MSN and Internet sites in China and Iran have been unsuccessful – Twitter and other applications for connectivity triumph.
 ● Social media is personalizing engagement like television did in the days of the Vietnam War.
 – Ken Chapman, Cambridge Strategies



Canada needs a national strategy on poverty
 ● 4.2 million Canadians, including 967,000 children live in poverty.
 ● The average child poverty rate for all Indigenous children is 40% (15% for non-Indigenous children).
 ● 47% of Alberta children living in poverty have at least one parent working full time.
 – Public Interest Alberta

If Alberta increased its taxation revenues by \$11 billion per year the province would still retain its position as the lowest tax jurisdiction in the country.
 Poverty Costs 2.0: Investing in Albertans, 2012



The new agora – the media is a public space
 ● 29 million votes for Canadian Idol contestants before the final in 2008 while 13.9 million of 23.6 million eligible Canadians voted in 2008 federal election.

TREND 6 **Fluid personal identity**
 Personal identity, once "set for a lifetime", is now more fluid and increasingly a matter for personal exploration, conviction and commitment. *How will the expectation we each have to find our own identity and meaning impact relationships, organizations, learning and institutions? How will we know that meaning has been found in our lives?*

Rekindled narratives for Albertans and Alberta

● **Finding** – One in six marriages are based in internet matching. Those seeking partners are increasingly having difficulty finding partners that match their expectations.
 ● **Separating** – Some 8,000 couples divorce in Alberta each year. Their marriage failed to meet the needs of one or both partners.

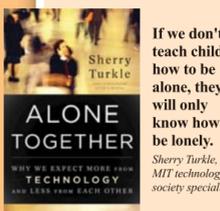


Shifting identities in the workplace

● The average worker entering the work force in 2010 will have up to 35 job changes in their working life.
 ● The average woman in the workforce is delaying having children until age 31.

Alberta's democratic paradox?

Only 44.5% of Alberta's 2,252,104 eligible voters cast ballots in the 2008 provincial election down from 60% in 1993. Only 52% of Albertans voted in the last federal election, yet:
 ● 79% of Albertans wanted the right to be able to petition for and receive a referendum on an issue important to them, and
 ● 77% of Albertans wanted the right to recall their politicians. Alberta once had a citizens' initiative law.



Blurring the line between connection and connectivity

● There are currently over 500 million registered Facebook users. 75% of all social media traffic is driven by this one site.
 ● There are 50 million Tweets sent each day.

We want to be interrupted, because each interruption brings us a valuable piece of information... And so we ask the Internet to keep interrupting us, in ever more and different ways.
 Nicholas Carr, The Shallows: What the Internet is Doing to Our Brains

TREND 7 **Blurring boundaries and emerging technologies**
 Albertans of all ages are tangling with the promises of technology that expand into new creative, social and work relationships while dissolving the boundaries between person and machine, inner and public lives, information and entertainment, and domains of knowledge. Increasingly, technologies once adopted by a society are seen as much social as natural. *What challenges and opportunities do emerging technologies and hyper-reality offer in our efforts to sustain vibrant democratic communities in Alberta?*

● From the moment this generation met technology it was the competition. In many ways children see technology as a main competitor for their parents' attention.
 – Sherry Turkle, MIT professor

Growing screen time
 ● Among Canadian youth in Grades 6-10, screen time on weekends was 7 hours and 25 minutes per day, while weekdays amounted to 5 hours and 56 minutes per day.
 – Active Healthy Kids Canada

Recommendation
 No screen time for children under two years of age and a maximum of 2 hours for children older than two years of age.
 The Canadian Paediatric Society

While the Internet promises more connectivity, the number of meaningful personal connections an individual can have remains fixed at 125.
 – 95% of blogs are abandoned after 120 days.
 technocrats.com

Remote access is all WET

A recent study of 33,000 workers illustrates work extension technologies (WET) have removed communication etiquette and increased work and stress levels.
 – Linda Duxbury, Carleton University

● Smartphones add 10 days every year to workloads in the UK.
 – Nectar Business Study

On the horizon

● The distinction between us and robots is going to disappear.
 – Rodney Brooks
 ● Three parent baby born in the U.K. – consumer genomics is biology's parallel to the computer revolution.
 – Dr. Lone Frank, The Genome Analysis Centre, UK

Our naked data and digital footprints

In Canada, the average digital footprint begins around six months of age with 9% of newborns being given an email address.
 – 85% of Canadian mothers post photos of their children online before age two and 8% have created social networking profiles for these infants.
 – More than a third of Canadian mothers post their pre-natal sonograms online.
 Vancouver Sun, Oct. 7, 2010

'New' is already old

Facebook lost users in 2010 in North America & EU. While email use dropped 60% for 12-17 year olds in favour of other social networking sites.
 Time Magazine, Feb. 2011

The Internet of Things

● The thingernet: by 2020, almost 27 billion uniquely identifiable objects (vending machines, cars, devices) will be connected to the Internet.
 ● The creative industries now account for 4% of the EU's GDP.
 – The Economist, The World in 2013

Big (Brother?) Data

● The location settings on our cellphones, credit card purchases, medical records and social media connections generates 2.5 quintillion bits of data each year.
 – IBM 2013