



ASSESSMENT STANDARDS:

Making Learning Personal, Barbara Bray and Kathleen McCluskey, Differentiates between personalized, differentiated and individualized instruction with a focus on the “What, Who, WOW, Where and Why” of Personalized learning and using Universal Design for Learning principles to create a powerful shift in classroom dynamics by guiding learners to become self-directed, self-monitored, and self-motivated.

The Great Canadian Skills Mismatch: People without Jobs, Jobs without People and MORE, Rick Miner, March 2014, [http://www.minerandminer.ca/data/Miner_March_2014_final\(2\).pdf](http://www.minerandminer.ca/data/Miner_March_2014_final(2).pdf) (Google title to download document)

A relook at the shifts that have occurred since the 2010 and 2012 reports published investigating the labour shortages and mismatches in the way of supply-demand, geography, under-employment and over-skilled and under-skilled and over-employment for Canada.

A Rich Seam: How New Pedagogies Find Deep Learning, Michael Fullan & Maria Langworthy, January 2014 http://www.michaelfullan.ca/wpcontent/uploads/2014/01/3897.Rich_Seam_web.pdf (Google title to download document)

This report describes a rich seam of insights into how education systems are changing and how new pedagogies and pockets of innovation can be expanded to achieve large-scale deep learning. Digital tools, resources and new teacher-learner relationships enable powerful models of learning to accelerate student-driven inquiry into deep and personally engaged learning.

What Students Know and Can Do Student Performance In Mathematics, Reading And Science

Volume I Revised edition, February 2014, PISA, OECD <http://www.oecd.org/pisa/keyfindings/pisa-2012-results-volume-i.htm>

This report presents results of PISA 2012, assessing the competencies of 15-year-old students in mathematics and science in 65 countries and economies.

Engineering of Learning: Conceptualizing e-Didactics, Mourat Tchoshanov, 2013

<http://iite.unesco.org/pics/publications/en/files/3214730.pdf>

This study describes an e-Didactic social constructivist learning cycle of engagement, exploration, explanation, extension and evaluation and introduces Learning Sciences as an interdisciplinary field to understand the engineering of learning, digital content and assessment in an ICT era.

The App Generation: How Today's Youth Navigate Identify, Intimacy, and Imagination in a Digital World, Howard Gardner and Katie Davis, January 2013.

With the current generation deeply engaged in digital technology, authors explore what it means to be “app-dependent” versus “app-enabled.” Innovative research suggests that the power of apps can be a springboard to greater creativity and higher aspirations.

Innovative Teaching and Learning Research 2011 Findings and Implications, James Bernard and Maria Langworthy, November 2011 <http://www.itlresearch.com/research-a-reports/2011-itl-research-findings>

ITL Research is a multinational research collaboration focused on innovative teaching practices that were shown to have strong relationships with 21st century learning outcomes and including multiple types of data from 7 countries, 159 schools and their leaders, 4 038 teachers, 3 367 student work samples along with interviews and observations, student focus groups and an analysis of learning activities. Michael Fullan provides an afterward describing 4 “wrong” drivers of system innovation along with 4 “right” drivers, i) capacity building and teacher appraisal over punishment, ii) team versus individual strategies, iii) high-yield pedagogy (Hattie 209) which drives technology and finally, iv) coherent national systemic support towards innovation, currently missing in action.

COMMUNICATION:

Digital Learning in Ontario Schools The “new normal”, Bodong Chen, Kelly Gallagher-Mackay and Annie Kidder, 2014

<http://www.peopleforeducation.ca/research/school-surveys/> <http://www.peopleforeducation.ca/research> → [school surveys](http://www.peopleforeducation.ca/research/school-surveys/)

The *People for Education*, an independent organization of parents supporting public education in Ontario’s English, French and Catholic schools provided survey results on how and how widely technology is being used in Ontario along with

recommendations for schools in Ontario to: develop a working definition of digital literacy, establish a framework for evaluation of the quality and value of ICT investments, support professional development, bridge the digital divide and develop policy to ensure quality learning resources.

The Future of Principalship in Canada, 2014, Alberta Teachers' Association, <http://www.teachers.ab.ca> newsroom → **New Association Publications**

A summary and analysis of data gathered on the changing role of principals offers 5 ways forward: 1. teach and learn for diversity, 2. collaborate and build professional capacities in school staff, 3. build family and community relationships, 4. use technology for creative learning and good citizenship, and 5. Promote continuous leadership learning.

EXEMPLARS OF INNOVATION:

A New Vision for Education: Unlocking the Potential of Technology, 2015, The World Economic Forum, Geneva Switzerland, <http://www.weforum.org/reports/new-vision-education-unlocking-potential-technology>

Innovations in education are showing the potential to lower cost and improve the quality of education by closing the skills gap when complemented with emerging pedagogical approaches. In addition, technology can be uniquely deployed to facilitate the teaching of 21st century skills such as communication, creativity, persistence and collaboration.

Schools for 21st Century Learners, Strong Leaders, Confident Teachers, Innovative Approaches, 2015, Andreas Schleicher, International Summit on the Teaching Profession, OECD Publishing, <http://dx.doi.org/10.1787/9789264231191-en>
The report summarizes evidence from the OECD Teaching and Learning International Survey (TALIS) and the Programme for International Assessment (PISA) that underpins the three themes of the 2015 International Summit on the Teaching Profession: school leadership, teachers' self-efficacy and innovation in education.

INSPIRING EDUCATION, Alberta Education, <https://inspiring.education.alberta.ca>

The Alberta Education website provides a collection of exemplars of innovative practice along with Alberta's recommendations for 21st Century Learning.

"When knowledge is a free commodity, we need to innovate" Tony Wagner - WISE 2014 [Special Address], November 2014 <https://www.youtube.com/watch?v=6l6S6bDn31s>

Wagner speaks to the importance of creativity and innovation and their requirements in a knowledge-free community. Innovative problem solvers, interviewed world-wide did not credit schooling in spite of educational experiences, but noted that a teacher outlier who had taught them fundamentally differently, such as Montessori or Reggio Emilio, inspired them for life. Team teaching and coaching, interdisciplinary practices that foster innovation occurring at the boundaries of disciplines, empowerment to failure, reflection and trial and error and of the intrinsic value of engagement were noted enablers.

BLENDED, October 2014, Michael Horton and Heather Staker <http://www.christenseninstitute.org/publications/blended/>
A practical field guide for implementing student-centered blended learning techniques in K to 12 schools.

Achieving Excellence: A Renewed Vision for Education in Ontario, April 2014 <http://www.edu.gov.on.ca/eng/about/renewedVision.pdf>

Ontario ministry response to educational reform is built on goals of achieving excellence, ensuring equity, promoting well-being, and enhancing public confidence by defining specific plans of action highlighting innovative and precise pedagogy, flexible e-learning and further investments in technology infrastructure.

PUBLIC POLICY:

Learning and Technology Policy Framework, Alberta Education Policy and Videos <http://education.alberta.ca/admin/technology/policyframework.aspx>

The *Learning and Technology Policy Framework (2013)* is a major step towards realizing one of the four policy shifts identified by *Inspiring Education*. When digital technology first emerged as a classroom resource, it was primarily a tool for teachers to present information and to communicate with students and parents. Policy Shift 4 describes the need to move towards classrooms in which students, themselves, are using technology to support their learning. *Ultimately, the power of technology should be harnessed to support innovation and discovery, not simply to aid teaching. We need to engage learners to use these new technologies as designers and creators of knowledge.*

BC's Education Plan Focus on Learning, January 2015, <http://www.bcedplan.ca>

The plan describes a timeline of changes to curriculum and assessment so that the key focus can be on personalized learning and developing competencies that students need to maintain high standards in foundation learning in reading, writing and numeracy and engage more opportunities to pursue their passions and interests.

Education at a Glance 2014, OECD Indicators, OECD (September 2014), *Education at a Glance 2014: OECD Indicators*, OECD Publishing. <http://dx.doi.org/10.1787/eag-2014-en> <http://www.oecd.org/about/publishing/at-a-glance.htm>

International data points to the critical role that education plays in fostering inclusive social progress by promoting the acquisition of skills in an equitable manner that supports meritocracy and social mobility. The report draws on the 2012 Survey

of Adult Skills together with 2012 data on learning outcomes from 15-year-olds on PISA 2012 and data on lower secondary teachers from the Teaching and Learning International Survey of 2013 creating the richest evidence base on education and skills ever produced.

Equinox Blueprint Learning 2030, Michael Brooks and Bob Holmes, April 2014, <http://www.wgsi.org>

Children born in 2013 will graduate from high school in 2030. The living blueprint provides a comprehensive foundation summary charting a pathway to change of rationale, goals, recommendations and innovative solutions for 21st Century Learning immediately and into the future. The Equinox Summit presented by the Waterloo Global Science Initiative provided the vision and recommendations for the blueprint.

Shaping a New Vision for Public Education in Nova Scotia, Nova Scotia School Boards Association, April 2014

<http://www.nssba.ca>

A discussion paper shaping a new vision for education is based on foundation papers on what we know about student engagement and how to spark it, qualities, skills and knowledge needed by students in the 21st century and the proposal of a radically different model of education.

Shifting Minds: A Vision for 21st Century Learning in Canada, 2013 www.c21canada.org

Shifting Minds calls for the acceleration of 21st Century Models of learning along with all enablers of best practices, led from all sides by all stakeholders, including the business sector and non-education sectors

10 Guiding Principles for the Use of Technology in Learning, 2012, Ontario's Distance and Education Training Network,

http://contactnorth.ca/sites/default/files/contactNorth/files/pdf/publications/ten_guiding_principles_for_use_of_technology_in_learning.pdf (google title to download document) <https://www.youtube.com/watch?v=-LgomkoxqVI>

This document provides a set of guiding principles for technology in learning: adding value, pedagogical focus, quality, sustainability, access, scalability, sharing, choice, lifelong learning and customization.

Transforming Education: The Power of ICT Policies, 2011, UNESCO

http://www.unesco.org/new/en/education/resources/online-materials/single-view/news/transforming_education_the_power_of_ict_policies-1/

This publication provides useful information about the challenges for and approaches to public policies in the field of ICT in education by considering the policy experiences of a range of developmental countries and their implication on policy, change and transformation.

UNESCO ICT Competency Framework for Teachers, 2011, <http://unesdoc.unesco.org/images/0021/002134/213475e.pdf>

The framework is intended to inform educational policy makers, teacher-educators, providers of professional learning and working teachers on the role of ICT in educational reform. The framework is organized by three stages of teacher development: Technology Literacy, Knowledge Deepening and Knowledge Creation and is founded on linking ICT, education and economic growth.

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