
Curriculum Redesign is one of the initiatives helping to bring Alberta’s vision of education to life. It is an opportunity to review Alberta’s provincial curriculum to see the extent to which it is engaging and relevant, and enables students to reach their full potential.


In this paper, the authors discuss issues related to the teaching and assessment of 21st-century skills and competencies in OECD countries. The paper presents a short discussion of the importance and relevance of 21st-century skills and competencies in the current policy debate and the definitions and conceptual frameworks that have been used in the literature. It proposes a new three-dimensional framework consisting of the dimensions of information, communication, ethics, and social impact.


Assessment and Teaching of 21st-Century Skills (ATC21S) is a research project that proposes ways of assessing 21st-century skills and encourages teaching and adopting of those skills in the classroom. According to the results of the research, learning to collaborate with others and connect through technology are essential skills in a knowledge-based economy. The project was funded with support from the European Commission.


General capabilities are a key dimension of the Australian curriculum, encompassing knowledge, skills, behaviours, and dispositions that, together with curriculum content in each learning area and the cross-curriculum priorities, will assist students in living and working successfully in the 21st century. The webpage describes general capabilities and provides key links.

In this book, the authors set out a “framework for action” that details the steps that should be taken for policy makers, schools, school-system leaders, and other key players to prepare for an assessment renaissance. In the 21st-century landscape, where the demands go beyond just knowledge and technical skills, there is a need for an “assessment renaissance” to allow for meaningful monitoring or measurement of the desired attributes. Barber and Hill suggest that “it will help secure high standards for all, remove current achievement ceilings and support a focus on …. skills vital for living and learning in the twenty-first century.”


This resource guide aligns with the calls to action of the Truth and Reconciliation Commission and the newly revised curriculum, emphasizing relevant, authentic inclusion of content regarding Aboriginal culture, language, and history. The resource guide supports educators and provides context as they incorporate the First Peoples Principles of Learning into their learning environments. It also aligns with the work currently happening around the province through Aboriginal Education Enhancement Agreements and networks of educators such as the Aboriginal Enhancement Schools Network.


This book explores the science, and sometimes the lack of science, behind different theories of how students best learn and teachers teach. The author draws from a wide range of recent and popular education theories and strategies to highlight how much of what we think we know in schools hasn’t been “proven” in any meaningful sense. Teachers are encouraged to decide for themselves what good and bad education really is.


This article concerns the evolution of educational assessment from a paper-based technology to an electronic one. Assessments delivered electronically can serve both institutional and individual-learning purposes. They are designed on the basis of cognitive principles and theory-based domain models and use complex simulations and other interactive performance tasks that replicate important features of real environments. They allow more natural interaction with computers, and assess new skills in more sophisticated ways.


This book offers a new way of thinking about assessment, through student-engaged assessment. This approach to teaching and learning equips students to understand goals for their learning and growth, track their progress toward those goals, and take responsibility for reaching them.

This article sets out the essential elements of an assessment system that meets the goal of creating better assessments, taking into account the necessary constraints of cost. This entails planning assessment, including high-stakes testing, as an integral part of a coherent system covering learning, teaching, and professional development. All are focused on the classroom and treating assessment as a design and development challenge, first to introduce high-quality instruments that serve both formative and summative purposes, and later to counteract the inevitable pressures for degrading that quality.


“Firm evidence shows that formative assessment is an essential component of classroom work and that its development can raise standards of achievement.” The authors offer an explanation of the meaning of educational assessment, as well as the different types of assessments and their intended purposes. The authors also suggest ways to make assessment meaningful and attractive to students in 21st-century learning so as to change their perceptions of assessment. They argue that just as effective teaching and learning need to change from the 3Rs, so does assessment need to change if it is to serve its moral purpose in 21st-century education.


This report draws together findings from new data and more than 10 years of research on current practice and futures-thinking in education. It discusses some emerging principles for future learning, how these are currently expressed in New Zealand educational thinking and practice, and what they could look like in future practice.


This book addresses cognitive, behaviour, literacy, and communication issues and offers instructional interventions to help teachers support students from culturally and linguistically diverse backgrounds within a Response to Intervention (RTI) framework.


In this book, the authors explore questions, such as: How can we help students develop the thinking skills they need to be successful learners? How does this relate to deep learning of important concepts? How can we engage and support diverse learners in inclusive
classrooms where they develop understanding and thinking skills? They offer classroom examples to help teachers develop communities where all students learn.


This literature review addresses the significant gap between the education and employment outcomes of Aboriginal and non-Aboriginal populations. It examines the challenges faced by Aboriginal youth in completing their education and the factors that impede or foster their successful transition from school to work.


In this book, the authors offer a five-step process for arriving at letter grades that moves away from collecting a string of marks and calculating a grade. They examine a wide variety of assessment tools and match the student evidence with a description of achievement.


The goal of C21 Canada is the integration of 21st-century competencies, instructional practices, and digital resources and services into Canada’s learning systems at an accelerated pace. C21 Canada believes achievement of this goal is essential to meeting the economic, social, environmental, and financial aspirations of Canadians. Shifting minds means understanding that we need to shift what we teach and how we teach to engage, empower, and position learners for success, and shifting Canadians’ attitudes to the imperative for 21st-century models of learning in public education.


In this book, the author provides the historical context for the shaping of human thought by “tools of the mind” — including the alphabet, maps, the printing press, the clock, and the computer — interwoven with recent discoveries in neuroscience. Carr makes the case that every information technology carries a set of assumptions about the nature of knowledge and intelligence. For instance, the printed book served to focus our attention, promoting deep and creative thought. In contrast, the Internet encourages rapid, distracted sampling of small bits of information.


In this article, the author states that critical thinking is a powerful method of teaching aspects of the curriculum — both content and skill. Inviting students to think critically about subject matter is effective in promoting both understanding of the content and mastery of the skills;
students are more likely to master the curriculum outcomes that they need to learn. Students who passively receive information are far less likely to understand what they have heard or read about than are students who have critically scrutinized, interpreted, applied, or tested this information. The article discusses two distinguishing features of this conception: a “curriculum embedded” approach and an emphasis on “teaching the intellectual tools” required for critical thinking.


This report from the CERI/OECD international conference “Learning in the 21st Century: Research, Innovation, and Policy” states that learning is central in knowledge-based societies and economies. In many countries there is a push to reflect this by ensuring that reforms of the education system focus more strongly on learning itself rather than simply changing structure and educational organization. The report aims to shed light on questions such as, what does “focus on learning” mean in concrete terms, why is it important, and is the knowledge base on learning strong enough to help policy makers shape their direction of educational change?


In this book, the author presents a thought-provoking critique of educational orthodoxy using her own experience of teaching in challenging schools. She demonstrates through a wide range of examples and case studies how much classroom practice contradicts basic scientific principles. For instance, she challenges some widely held myths about things that are believed to be holding back pupils and teachers. She explains exactly why each is a myth, with reference to the principles of modern cognitive science. She builds a case by explaining how governments and educational organizations around the world have let down teachers and pupils by promoting and even mandating evidence-less theory and bad practice.


The purpose of this paper is to present a summary of Aboriginal cultural constructs and worldviews relating to education that may have a direct bearing on the development and implementation of the core competencies that were developed for BC’s K–12 public education system.


In this book, the author attempts to anticipate and answer every question that any teacher might have about putting differentiation into action. There is a great demand for personalized learning — in part because too many learners are disengaged, and partly because international assessments have increased the need for more effective teaching. This book serves to provide insight for teachers who are in great need of clear, comprehensive, and effective instructional ideas that are engaging to the majority of diverse students.

In this book, the authors simplify, demystify, and shift thinking around assessment for elementary students. The book gives teachers tools to help students improve their learning.


The book focuses mainly on the work from cognitive psychology aimed at understanding the principles of knowledge organization that underlie people’s abilities to solve problems in a wide variety of areas, including mathematics, science, literature, and social studies.


This press release describes how provinces and territories are addressing the broad range of skills that young people will need to be fully engaged workers and citizens in a 21st-century knowledge society.


The Critical Thinking Consortium is a non-profit association of educational partners. Founded in 1993, its aim is to promote critical thinking in primary to post-secondary classrooms through professional learning, resource development, and research.


This forum defines interdisciplinarity as creating something new by crossing boundaries and thinking across them. Society faces several social challenges, such as climate and environmental changes, demographic changes, demands for more and better welfare and health benefits, and increased globalization. The report suggests that solutions can be found by thinking across the boundaries of economics, technology, cultural understanding, natural sciences, design, branding, medical science, IT, language, and innovation.


This book is intended as a resource for those interested in the most current research about how to create valid and reliable performance assessments. It explains how educators can improve practice by developing, using, and scoring performance assessments.

In this book, the authors offer a clear, comprehensive, and engaging exploration of the most effective classroom practices. They use practical terms to describe teaching strategies that generate meaningful K–2 student understanding, and occur both within the classroom walls and beyond. They illustrate how students who are taught well are able to think critically, employ flexible problem solving, and apply learned skills and knowledge to new situations.


This report provides a set of criteria for high-quality student assessments based on the changing demands of today’s workforce, advances in other nations, and original analysis. These criteria can be used by assessment developers, policy makers, and educators as they work to create and adopt assessments that promote deeper learning of 21st-century skills that students need to succeed in today’s knowledge-based economy. The five criteria include assessment of higher-order cognitive skills; high-fidelity assessment of critical abilities; assessments that are internationally benchmarked; use of items that are instructionally sensitive and educationally valuable; and assessments that are valid, reliable, and fair.


In this book, the author combines ideas with practical strategies to implement quality classroom assessment. Teachers are encouraged to use assessment for learning to guide instruction, provide feedback, collect evidence of learning, present evidence of success, and produce accurate standards-based report cards.


This paper explores the concept of critical thinking as presented in recent literature. It examines the following questions: What is critical thinking? How does it develop over time? What conclusions can we draw about how critical thinking should be addressed in curriculum and assessment?


The author examines how one’s established attitudes affect all aspects of one’s life, providing an explanation of the differences between fixed and growth mindset, and stressing the need to be open to change in order to achieve fulfillment and success.


Scotland Education suggests that the purpose of the curriculum can be encapsulated in four capacities: to enable each child or young person to be a successful learner, a confident individual, a responsible citizen, and an effective contributor. The webpage provides a description of each of these capacities.

The author argues that teachers should embed critical thinking in the heart of the curriculum. Steps would include choosing a conception that is systematic, integrated, trans-disciplinary and based in intellectual but non-technical language; choosing a conception that fosters traits of mind, as well as intellectual abilities; committing to the very long run; and reaching for deep administrative commitment.


The authors explore two studies with a total of over 300 participants using the Epstein Creativity Competencies Inventory for Individuals. In the first of these studies, the test was shown to be a valid predictor of two measures of creative expression. The test is derived from empirical research on the creative process in individuals, which suggests that creative expression can be accelerated through the strengthening of any of four measurable, trainable competencies: capturing (preserving new ideas as they occur), challenging (taking on difficult tasks), broadening (seeking knowledge and skills outside one’s current areas of expertise), and surrounding (seeking out new stimuli or combinations of stimuli). In the second study, training such competencies improved test scores and led to a significant increase in creative output.


The author of this book suggests that when curriculum and instruction require students to process factual information through the conceptual level of thinking, they demonstrate greater retention of factual information, deeper levels of understanding, and increased motivation for learning.


The book describes a curriculum design for quality instruction and provides practical structures, planning tools, and specific classroom examples of effective teaching strategies to help students analyze and synthesize information for a deep understanding of big ideas.


In this book, the authors demonstrate how, through concept-based curriculum, a teacher can move beyond superficial coverage and lower-level skills practice to effect intellectually engaging pedagogy, where students engage in problem finding and problem solving. Insights include how to design and implement concept-based curriculum and instruction across all subjects and grade levels, and why content and process are two different (but equally important) aspects of any effective concept-based curriculum.

The International Center for the Assessment of Higher Order Thinking (ICAT) was founded to help colleges and universities design cost-effective ways to evaluate students’ critical thinking abilities. ICAT provides assessment tools that 1) evaluate students’ critical thinking skills, and 2) evaluate course designs. The resulting assessment includes a profile of students’ reasoning abilities that can be effectively used not only as a benchmark against which progress can be measured, but also as a practical guide for critical thinking instruction.


In this book, the authors identify key contradictions and paradoxes and offer clear directions for bringing about meaningful change in schools in order to meet the demands of the 21st-century education. They offer a coherent response to the demands that teachers and administrators are facing.


This guide presents what research has to say about how to optimize learning in classrooms, schools and other settings. It aims, first and foremost, to inform practice and educational reform. It will be of particular interest to teachers, education leaders, teacher educators, advisors, and decision makers, as well as the research community.


This handbook provides specific inquiry tools, research evidence, and examples from practice in BC schools, to help shift thinking and practice. Created in association with the BC Principals and Vice-Principals’ Association.


This pamphlet (one in a series) aims to show how the final gateway to personalizing learning — school design and organization — brings the other eight gateways together, and sets out an approach to addressing the challenges of school transformation.


This article focuses on the nature of questioning and how the culture of questioning encourages creativity and leads to deeper understanding. The authors describe the initiation of the Community of Thinking school-reform program.

This book states that visible learning is not a recipe for success, not a new teaching method, not a professional development series, nor a band-aid remedy for what ails education in this new century. It is a way of thinking: “My role, as teacher, is to evaluate the effect I have on my students, to understand this impact, and to act on this knowing and understanding.” Visible learning requires teachers to gather defensible and dependable evidence from many sources, and to hold collaborative discussions with colleagues and students about this evidence, thus making the effect of their teaching visible to themselves and to others.


In this presentation, Hess outlines how to design developmentally appropriate grade-level expectations. From lessons learned in the design process, she notes some lessons learned that should be helpful to others who are engaged in the process for their individual schools or students. Lessons include the following: begin with some essential assumptions, validate the grade level development criteria, build protocols to support design, and notice how grade-level expectations change across grades.


This report outlines a process for developing project-based assessment. The team reviewed learning progressions and student work analysis to help teachers better understand how learning could be facilitated over time with targeted instruction. In the areas of reading, writing, language use, and complexity of text structures, research-based learning progressions provided guidance for planning instruction, developing formative tools and performance assessments, and interpreting student performance. Analyzing student work drawn from assessment evidence to understand how learning progresses is noted as a key factor in effective collaborative planning, more focused instruction, and targeted formative assessment use.


This guide was developed by the author for the Common Core Institute. It consolidates numerous tools that educators use to implement Webb’s Depth of Knowledge (DOK) for curriculum and assessment. The examples are drawn from several classroom-tested DOK tools.

In this article, the authors use two widely accepted measures of cognitive rigour — Bloom’s Taxonomy of Educational Objectives and Webb’s Depth-of-Knowledge Levels — to define cognitive rigour and present a matrix that integrates these models as a strategy for analyzing instruction and influencing teacher lesson planning.


This paper explores the nature of the five key competencies proposed in the draft of New Zealand’s revised national curriculum. The purpose of the paper is to contribute to the development of a shared understanding of the nature of the five key competencies: thinking; relating to others; using language, symbols, and texts; managing self; and participating and contributing, as they have now been described, by those who work in or with the school sector.


Drawing on the New Zealand experience, this paper outlines two possible implementation pathways for key competencies. The “skills” pathway could lead to modest improvements in teaching and learning but is unlikely to achieve longer-term goals such as strengthening citizenship, enhancing creativity, and fostering lifelong learning. The “participatory” pathway could support longer-term goals, as students are challenged to use knowledge, not just get it. Following this pathway requires a rethinking of how curriculum content is used, with implications for what is seen as evidence of learning. The paper draws on several common science topics and two of the key competencies as they were developed for the New Zealand curriculum (Thinking; Using Language, Symbols and Texts).


To make interdisciplinary teaching and learning accessible for all, the authors describe a variety of curriculum integration options. They offer suggestions for choosing proper criteria for successful curriculum integration, dealing with the attitudes of key individuals and groups, and establishing validity. They also present a step-by-step approach to integration, proceeding from selection of an organizing centre to a scope and sequence of guiding questions to a matrix of activities for developing integrated units of study. The book also illuminates the value of higher-order thinking and learning skills and provides a vehicle for their integration into curriculum. The author’s practical approach provides a valuable resource to help educators successfully integrate interdisciplinary learning.
This book makes a powerful case for overhauling, updating, and injecting life into the K–12 curriculum to transform schools into contemporary learning organizations. It includes the collective wisdom of 10 educational content and assessment experts — leaders who provide insight into program structures, technology, media literacy, globalization, sustainability, and habits of mind.


In this book, the author presents the view that schools need a thinking curriculum that teaches students important reasoning skills and that engages students in activities worth doing. She suggests that the core of a thinking curriculum should be the use of inquiry and argument to investigate complex problems, since these activities are engaging and develop skills that will be valuable for the rest of a student’s life.


This paper reviews a study that examined the language and interactions that occurred in classes where teachers felt they were providing an environment that fostered the teaching of reasoning skills as part of their coursework. In each discipline, the teachers’ instructional styles differed, with one placing more emphasis on the content and the other on the students’ ways of thinking about that content. Results indicated that (1) reasoning was taught and learned in academic classes; (2) such reasoning was subject-specific and embedded in the pragmatic routines of subject-driven lessons; (3) the specifications of such reasoning were implicit and therefore unavailable for overt use in lesson planning or as strategic knowledge to be taught; (4) this kind of discipline-specific reasoning may or may not be sufficient for successful participation in disciplinary learning; and (5) certain types of pedagogical approaches or styles may inhibit or support such discipline-appropriate thinking.


In this book, the author states that education should be structured around communities of inquiry in order to teach students the skills of reasoning and good judgment. Lipman argues that these communities of inquiry should be built around questioning and problem solving in order to actively engage students in exploration and learning.


In this paper, the authors offer a five-dimensional definition of formative assessment. The paper suggests a theoretical underpinning for defining and assessing creativity, and provides a number of practical suggestions as to how creativity can be developed and tracked in schools. Two clear benefits of assessing progress in the development of creativity are identified: 1) teachers are able to be more precise and confident in developing young people’s creativity, and 2) learners are better able to understand what it is to be creative.

This curriculum document outlines how student learning outcomes may elaborate on connections with other areas of learning, such as other subject areas or community/home experiences. It also includes specific suggestions for connections.


This book brings together the ideas and recommendations of many internationally renowned leaders in education working to help students make achievement gains. The authors provide a conceptual framework and offer strategies for improving instruction.


This article reviews research into assessment, especially in schools. It analyzes the pivotal role of assessment in learning and argues for its reconceptualization by practitioners and policy makers to better support learning.


This paper describes the arguments, justification, and reasoning for using interdisciplinary approaches in school curriculum. The main focus is on frameworks, justifications, and reasons that may be built in part on empirical evidence but also on assumptions about teaching and learning.


In this book, the authors explain how posing “essential questions” helps teachers target standards as they organize curriculum content into coherent units that yield focused and thoughtful learning.


In this book, the author states that effective, intentional teaching begins with a strong set of beliefs. Many teachers struggle to make sure that their classroom practice consistently reflects their core convictions, so they are encouraged to develop their own belief statements about teaching and learning. She reminds educators that truly transformative teaching is built from the ground up, and is rebuilt every year, by every teacher, in every classroom, with every new group of students.

NEA developed this guide to encourage more members and leaders to incorporate critical thinking, communication, collaboration, and creativity into their own K–12 instruction.


This paper adds to the discussion about 21st-century learning in British Columbia.


Research over the past 100 years clearly shows that grade retention does not benefit students experiencing academic or social adjustment difficulties, compared with similar students who are not held back to repeat a grade. In fact, grade retention has consistently been associated with negative outcomes, such as students who are required to repeat a grade being more likely to drop out of high school and less likely to attend post-secondary education. Grade retention is one of the most powerful predictors of dropping out of high school, regardless of when retention occurs, and retained students experience lower self-esteem and lower rates of school attendance. While some parents and teachers continue to believe retention is a viable option, no studies have been able to predict accurately which students will benefit from being retained, and the overall evidence is strongly against retention. Researchers advocate alternatives to grade retention, such as early intervention when students experience difficulties, reading programs, summer school, and tutoring, while working closely with parents.


This document summarizes the results of the OECD’s “Definition and Selection of Competencies” project, which provides a framework that can guide the longer-term extension of Programme for International Student Assessment (PISA) assessments into new competency domains.


This draft framework provides the theoretical background for the 2015 PISA mathematics assessment. It includes a definition of mathematical literacy and how this construct will be assessed.

This report compares the experience of 28 OECD countries, analyzes the strengths and weaknesses of different approaches, and offers policy advice on using evaluation and assessment to improve the quality, equity, and efficiency of education. It draws on a major study, the *OECD Review on Evaluation and Assessment Frameworks for Improving School Outcomes*.


This report presents research findings (the theory, quantitative and qualitative studies, and promising and innovative practices) from Alberta, Canada, and around the world related to curriculum and its development.


This framework presents a holistic view of 21st-century teaching and learning that combines a discrete focus on 21st-century student outcomes with innovative support systems to help students master the multi-dimensional abilities required of them in the 21st century.


This book elaborates on the essential idea that intellectual discipline and rigour are at home with originality and productivity, and also that these supposed poles of thinking (critical and creative thought) are inseparable aspects of excellence of thought. As one engages in high-quality thought, the mind must simultaneously produce and assess, both generating and judging the products it fabricates. Therefore, sound thinking requires both imagination and intellectual standards.


This report looks at classroom and large-scale assessments as they are used for the purposes of assisting learning, measuring individual achievement, and evaluating programs. The authors argue that it is essential to understand that one type of assessment does not fulfill all purposes. They offer three pillars supporting all assessments: a model of how students represent knowledge and develop competence in a subject domain, tasks that allow observation of students’ performance, and a method for drawing inferences from students’ performance.

The Committee on Defining Deeper Learning and 21st Century Skills defines 21st-century learning and its educational implications, stating that in the face of economic, environmental, and social challenges, education is even more critical. Children can meet future challenges if their schooling and informal learning activities prepare them for adult roles as citizens, employees, managers, parents, volunteers, and entrepreneurs. To achieve their full potential as adults, young people need to develop a range of skills and knowledge that facilitate mastery and application of English, mathematics, and other school subjects. Business and political leaders are increasingly asking schools to develop skills such as problem solving, critical thinking, communication, collaboration, and self-management.


In this chapter, the authors explain the process and value of creating performance-level descriptors to support the development of assessments that can discriminate across performance levels.


This book introduces a practical and research-based framework for teaching. The author describes how teaching any subject at any level can be made more effective if students are introduced to the “whole game,” rather than isolated pieces of a discipline. Perkins explains how learning academic subjects should be approached like learning baseball or any game, and he demonstrates this with seven principles for making learning whole: from making the game worth playing (emphasizing the importance of motivation to sustained learning), to working on the hard parts (the importance of thoughtful practice), to learning how to learn (developing self-managed learners).


In this book, the author explains that the secret to high performance and satisfaction in today’s world is the deeply human need to direct our own lives, to learn and create new things, and to do better by ourselves and our world. Drawing on four decades of scientific research on human motivation, he exposes the mismatch between what science knows and what business does — and how that affects every aspect of our lives. He argues that while the old-fashioned approaches worked in the 20th century, they are precisely the wrong way to motivate people for today’s challenges.


In this paper, the author explores the notion that no matter what systemic enhancements are made to improve planning, implementation, and assessment processes as a part of striving for more precision, we must remind ourselves that it is the individual learner who learns. Integrating learning requires educators to consider both content and learning processes for individual learners. Contextualized and connected learning includes capitalizing on real-world
contexts for learning and integrating emerging technologies as appropriate. The author also
states that it is helpful to reflect on what has been learned from a considerable body of work
regarding brain-compatible learning, as integrated learning and brain-compatible learning
increasingly appear to be one and the same.

Main Press.

This book provides a practical view of Eric Jensen’s 10 principles for teaching and learning:
uniqueness, assessment, emotions, meaning, multi-path, brain-body, memory, nutrition,
cycles and rhythms, and elimination of threat.

and Curriculum Development.

In this book, the author discusses the role that formative assessment can play in transforming
education into a more powerful and positive process. He clarifies what formative assessment
really is, why it’s right for a school or classroom, and how to use this approach to improve
teaching, learning, classroom climate, teacher professional development, and school
performance. He describes what a learning progression is and what it isn’t and shows how
learning progressions are integral to formative assessment.

PTC_vision%20for_education.pdf

According to this report, traditional skills like literacy, numeracy, and critical thinking need to
be applied in different ways and supplemented with new skills and attributes in order for
students to become full participants in a knowledge-based society.

Raptis, H. (2012). *Conceptualizing creative thinking and innovation* [Paper written for the BC
Ministry of Education].

This paper outlines contemporary conceptions of creative thinking and innovation. In addition,
it examines the varied ways in which researchers have probed these, the key components
that have been identified, and the nature of developmental stages across the lifespan. The
paper closes with a brief discussion of implications for schooling.


In this report, the author states that throughout the history of schooling in British Columbia,
large-scale student assessment outcomes have traditionally served to inform broader
societal goals. Realistically, “assessment of” group learning (as opposed to classroom-
based “assessment for” individual learning) will continue as the government’s key focus.
The authors raise several unanswered questions, such as the scope of assessment
practices that include only numeracy and literacy, and the achievement of elementary
versus secondary students between 1976 and 1999, questions to move the decades-old
debate beyond its current stalemate.
The Circle of Courage is a model of youth empowerment supported by contemporary research, the heritage of early youth work pioneers, and Indigenous philosophies of child care. The model is encompassed in four core values: belonging, mastery, independence, and generosity. The central theme of this model is that a set of shared values must exist in any community to create environments that ultimately benefit all.


This case study considers research on how to tackle complex problems facing humanity that extend beyond a single disciplinary perspective and require interdisciplinary thinking and research for their resolution. It applies the model of the interdisciplinary research process outlined by author Allen F. Repko to a wide spectrum of challenging research questions. Self-contained case studies, written by leaders in interdisciplinary research and utilizing best-practice techniques in conducting interdisciplinary research, show students how to apply the interdisciplinary research process to a variety of problems.


The authors of this chapter describe evidence-centred design and provide a framework and an example to support the use of an evidence-centred design in developing valid and reliable assessments about student learning.


In this book, the author examines how other countries create “smarter” kids. She gets beneath the surfaces of several cultures where virtually all children are learning to make complex arguments and solve problems they’ve never seen before. They are learning to think and thrive in the modern economy. She follows three American students embedded in a foreign culture for one year. Through these young informants, Ripley meets battle-scarred reformers, sleep-deprived zombie students, and a teacher who earns $4 million a year. Their stories, along with groundbreaking research into learning in other cultures, reveal a pattern of startling transformation: none of these countries had many “smart” kids a few decades ago. Things had changed. Teaching had become more rigorous; parents had focused on things that mattered; and children had bought into the promise of education.


This book offers educators research-based solutions for creating a culture of thinking. The book unravels the mysteries of thinking and its connection to understanding and engagement. It describes diverse learning environments to show how thinking can be made visible at any
grade level and across all subject areas through the use of effective questioning, listening, documentation, and facilitative structures called thinking routines.


Based on her extensive work with students who have excelled against great odds, the author shares the principles and practices that help all students and teachers reach their full potential. She shows teachers and principals how to build an efficient and joyful practice — for example, by designing and implementing lessons and activities in a meaningful context; articulating high expectations for every student, including ELLs and struggling learners, and ensuring that they meet them; and implementing a school-wide coaching model for higher achievement and a more fulfilling collaboration with colleagues.


This document introduces some of the main themes and conclusions in the final report of the Royal Commission on Aboriginal Peoples. That report is a complete statement of the Commission’s opinions on, and proposed solutions to, the many complex issues raised by the 16-point mandate set out by the government of Canada in August 1991.


This book provides teachers and school administrators with a simple and accessible framework for getting started with assessment for learning.


This book outlines specific steps your team can take to transform grading and reporting school-wide. While the transition to standards-based practices may be challenging, it is essential for effective instruction and assessment. Examples include grading dilemmas, vignettes from teachers and administrators, and ideas for bringing parents on board with change.


This article unpacks two professional development initiatives that describe how inquiry co-constructed by and with teachers can take up diversity as generative. For instance, the Aboriginal Early Literacy and Curriculum for All projects involved iterative and critical examinations of practice and opportunities for educators to collaboratively consider and create practices that address contextual and social factors.

This paper begins with definitions of the SEL competencies as defined by the Collaborative for Academic, Social and Emotional Learning (www.casel.org). The paper provides definitions for the BC Ministry of Education competencies and includes a discussion of why these matter in today’s educational and societal climate, along with some of the latest scientific findings that provide an evidence base for the promotion of SEL in classrooms and schools. Recommendations are provided on how the promotion of students’ personal responsibility and well-being, and social responsibility can be successfully implemented in BC classrooms and schools are provided.


This report is a product of Education Sector’s Next Generation of Accountability initiative. The initiative seeks to strengthen public education by examining key elements of accountability — for instance, who should be responsible for student success and how they should be held responsible. Their work seeks to build on the strengths of current school accountability systems; more fully and effectively measure the depth and breadth of students’ educational experiences; and encourage educators, parents, policy makers, and the larger public to pursue educational equity and excellence for all students.


This draft document illustrates the use of an evidence-centred design to guide the development of a summative assessment.


This report discusses three broad categories of 21st-century competencies and provides guidelines for selecting assessments that measure these competencies. It also provides some examples of existing assessments.


This book provides information from the field of neuroscience about memory systems, brain organization, how the technology explosion can affect the brain, and the power of transfer, and includes information on topics such as how learning in the arts enhances cognitive processing and creativity.


This book shows how to use assessment to accurately reflect student achievement and how to benefit — not merely grade — student learning. It focuses on integrating assessment with instruction through student involvement in the assessment process.

This book offers opportunities to learn about problem-based learning (PBL) from a variety of perspectives, including assessing education in and through PBL, with examples from elementary, secondary, and university levels.


In this book, the author explores the complex issue of monitoring, assessing, and grading students’ thinking and performance with fairness and fidelity. She describes the systems and structure she uses in her own classroom and shows teachers how to use assessments to monitor student growth and provide targeted feedback that enables students to master content goals. The recommendations are realistic and practical.


The authors of this book discuss how to create a rigorous and engaging curriculum that focuses on conceptual understanding. The book guides educators in the design of curriculum, instruction, and assessment. The authors also explain the rationale for “backwards design” and explore such key ideas as “essential questions” and “transfer tasks.”


This paper describes what is required to provoke deep understanding and conceptual change in learners. It suggests ways to have students question their inherent conceptual knowledge and to correct misconceptions.