

21ST CENTURY LEARNING IN NEW BRUNSWICK

The world continues to change...


- From an industrial to information age
- New skills are required for a new global economy





K-12

NB Student Perception




**Students become less
engaged in learning as
they move through the
system**

**International crisis of
disengagement**

Goals for 21st Century Learning ...

Provide every New Brunswick child with an inclusive education system that empowers them to achieve their full potential, and prepares them to be successful global citizens in a knowledge-based economy

Foster personalized learning, higher-order, critical thinking and achievement more efficiently and effectively by leveraging emergent methodologies, supported by technologies



OECD's Characteristics of Effective Learning Environments

- Personalized learning
- Availability of diverse knowledge sources
- Collaborative group learning
- Assessment for deeper understanding



Council of Ministers of Education Canada



- The Ministers recognize the work of OECD and the identified 21st century competencies.
- The Ministers plan to explore what they could do together to advance the adoption of 21st century learning models in Canada.

Council of Atlantic Ministers of Education and Training

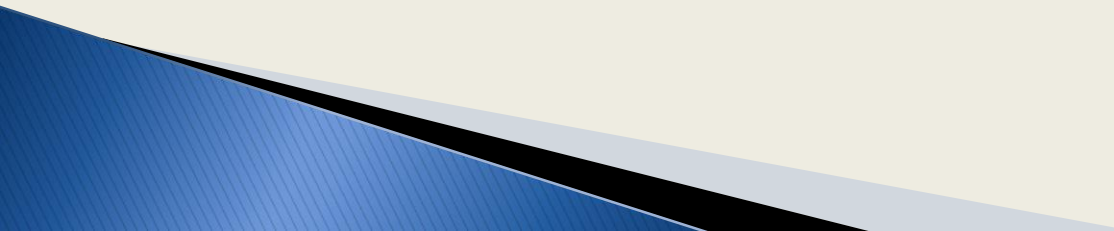


Council of Atlantic
Ministers of Education
and Training

Conseil atlantique des
ministres de l'Éducation
et de la Formation

There is a collective awareness of the need to support a 21st century learning approach.

Things to consider...

- How are children best prepared to be life-long learners, critical thinkers, and creative problem solvers?
 - What are the skills, understandings, and attitudes required of high school graduates?
 - How can physical design and organizational structure of schools support 21st century learning?
 - How is a provincial culture of learning developed and the potential of every learner maximized?
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21st Century Learning – Finding a Balance

Teacher-directed

Direct instruction

Knowledge

Content

Basic Skills

Theory

Textbook-based

Learner-centered

Interactive exchange

Skills

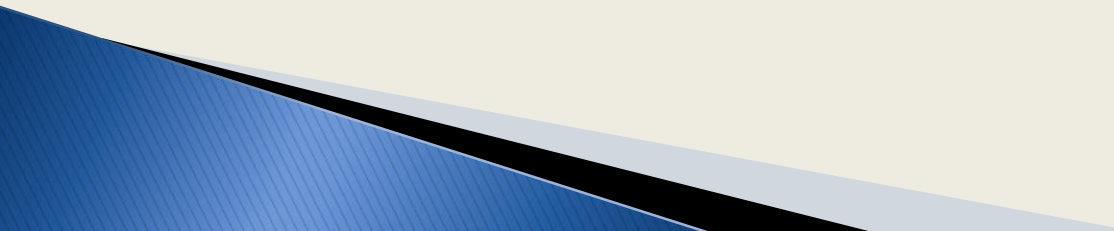
Process

Applied Skills

Practice

Web-based

Students need proficiency in...

- Literacy, numeracy and scientific thinking
 - Critical thinking and creative problem solving
 - Collaboration
 - Communication
 - Personal development and self-awareness
 - Global citizenship
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Components of 21st Century Learning



Curriculum

- ▶ Review grad requirements
- ▶ Review curriculum
- ▶ Incorporate the 21C Competencies

Instructional Practices

- ▶ To ensure instructional practice reflects engaging, personalized learning experiences and includes relevant cross-curricular connections

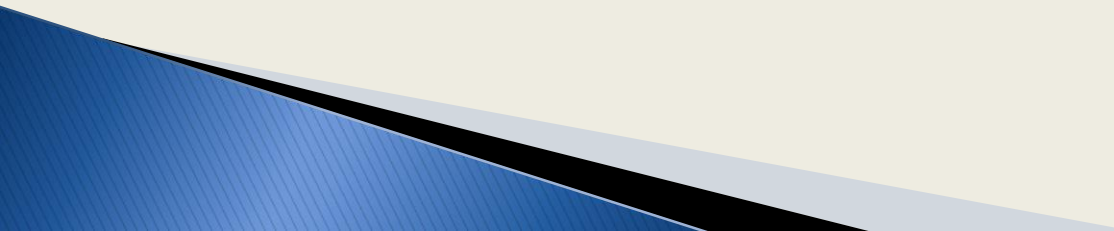
Assessment

- To incorporate authentic assessment

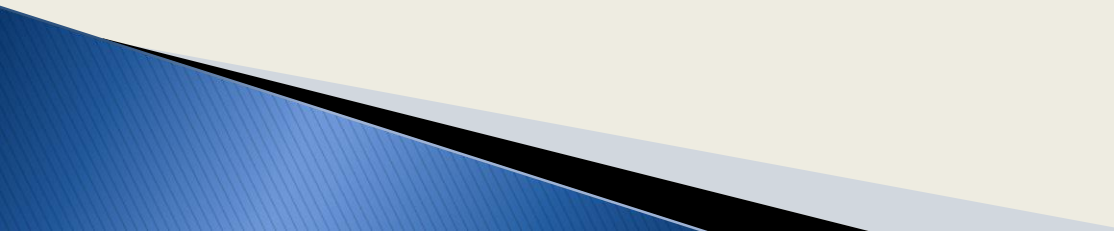
Accountability

- Schools are accountable for implementing the change

Professional Learning and Educational Leadership

- To ensure professional learning throughout the province is focused and personalized
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Learning Environments

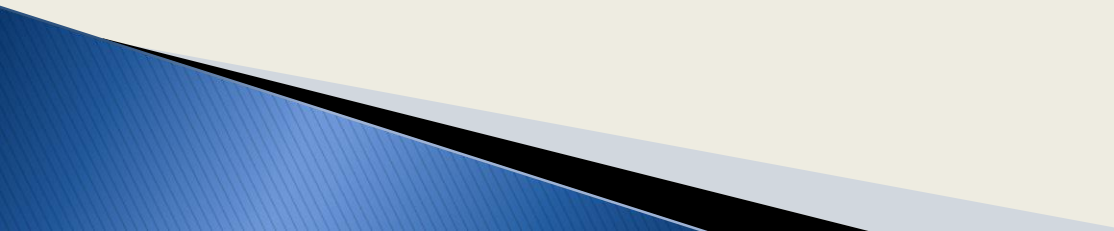
- ▶ To ensure schools have flexible spaces
 - ▶ Opportunities for personalized anytime–anywhere learning
 - ▶ That schools have adequate technical support and infrastructure
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A Research Driven Process...

Action research in designated schools

- Better and best practices (e.g. six steps)
- Resource efficiencies
- Change management strategies

Design-based research in partnership with NRC

- Quantitative and qualitative research studies
 - Personalized learning environments (BFHT)
 - Performance measurement frameworks
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Global Citizenship...



Students will be able to assess social, cultural, economic and environmental interdependence in a local, national and global context.

Students will demonstrate that they

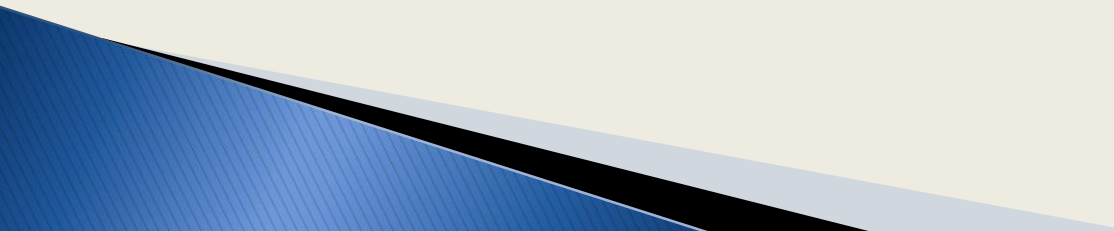
Comprehend...

- Canada's political, social and economic systems in a global context.
- the contributions of multiculturalism to society.
- cultural and societal diversity in local, national and global contexts.

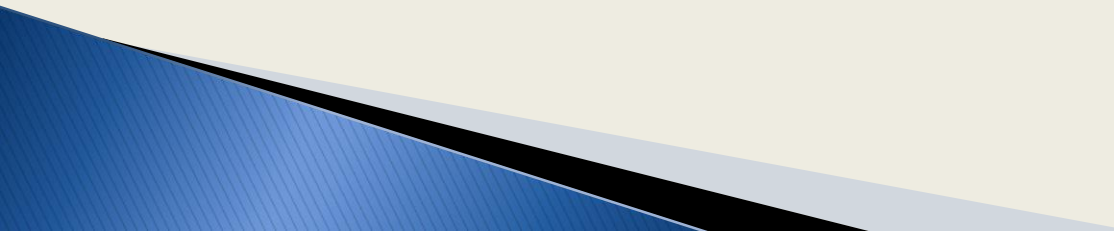
Understand...

- key ideas and concepts related to democracy.
- the dynamic interactions of Earth's systems.
- the dependence of our social and economic systems on natural systems.

Be able to...

- use creative and critical thinking to develop innovative solutions to complex societal and environmental problems.
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Currently...

- More time within the curriculum to do authentic project based learning
 - Revised the Environment Science course
 - Study of the ecosystem throughout the curriculum
 - Representation on the CMEC working group
 - A sustainable development contact in each school
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The Gaia Project...

Currently
working to
implement
alternative
energy
program in
nine high
schools





The Gaia Project...

Students are
collecting real time
data

Energy audits

Energy efficiency
structure
competitions



Questions / Discussion...