2013

Learning and Technology Policy Framework

QUICK GUIDE

Policy Direction 1: Student-Centred Learning

Technology is used to support student-centred, personalized, authentic learning for all students.

Outcomes

Students use technology, online learning and digital learning to:

a. access, share and create knowledge

b. discover, develop and apply competencies across subject and discipline areas for learning, work and life, as described in the *Ministerial Order (#001/2013) on Student Learning*, to enable students to:

- know how to learn: to gain knowledge, understanding or skills through experience, study, and interaction with others
- think critically: conceptualize, apply, analyze, synthesize, and evaluate to construct knowledge
- identify and solve complex problems
- manage information: access, interpret, evaluate and use information effectively, efficiently, and ethically
- innovate: create, generate and apply new ideas or concepts
- create opportunities through play, imagination, reflection, negotiation, and competition, with an entrepreneurial spirit
- apply multiple literacies: reading, writing, mathematics, technology, languages, media, and personal finance
- demonstrate good communication skills and the ability to work cooperatively with others
- demonstrate global and cultural understanding, considering the economy and sustainable development
- identify and apply career and life skills through personal growth and well-being

c. develop and apply digital citizenship and technological skills

d. demonstrate what they know and are able to do through effectively using a range of resources and media

e. monitor their learning progress and inform decisions through the use of data and evidence-based reasoning

Actions

School Authorities:

a. establish a vision for technology-supported, student-centred learning and attainment of competencies for all students in an inclusive K-12 education system.

b. develop a coherent alignment for the use of technology across curriculum (i.e., programs of study, assessment, learning and teaching resources), instruction and online and digital learning

The Ministry of Education:

a. aligns curriculum (i.e., programs of study, assessment, learning and teaching resources), workforce planning and professional standards, digital resources, technology investments and other key initiatives with the five policy directions

b. ensures coherence across initiatives, programs and policies of the provincial government regarding technology for learning, teaching, administration and management

c. provides guidance and support for online and digital learning

The outcomes and actions from each of the five policy directions are interdependent.

Alberta Government

Policy Direction 2: Research and Innovation

Teachers, administrators and other education professionals read, review, participate in, share and apply research and evidence-based practices to sustain and advance innovation in education.
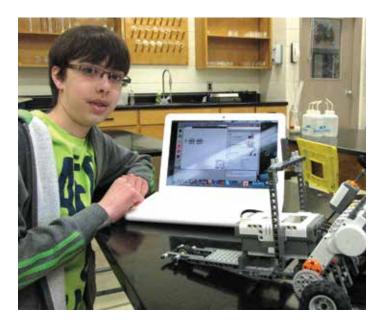
Outcomes

Teachers, administrators and other education professionals:

a. stay current with educational technology research
b. participate in and apply research to learning and teaching
c. use data systems and evidence-based reasoning to monitor and support personalized, student-centred learning

In Alberta's education system:

d. educational technology research is supported
e. decision-making related to technology is informed by data and research
f. technology investments are targeted to areas of greatest effectiveness and need

Actions

School Authorities:

a. create cultures of innovation in the use of technology for learning, teaching, management and administration that are informed by research and evidence-based reasoning
b. review policies and practices to ensure they support the use of research-based pedagogies, digital resources, support systems and digital learning environments that enable student-centred learning in all schools
c. encourage, build the capacity of and support teachers, administrators and other education professionals in their review, participation in and application of research related to technology, online learning and digital learning

The Ministry of Education:

a. facilitates collaborative development of research among school authorities and research institutions
b. facilitates research-based educational technology innovations among school authorities, post-secondary institutions and the provincial government
c. supports province-wide exchanges and collaborations related to research and research-based models and practices related to educational technology, online learning and digital learning
d. hosts an online provincial resource for educational technology research

The outcomes and actions from each of the five policy directions are interdependent.

Policy Direction 3: Professional Learning

Teachers, administrators and other education professionals develop, maintain and apply the knowledge, skills and attributes that enable them to use technology effectively, efficiently and innovatively in support of learning and teaching.

Outcomes

Digitally confident teachers, administrators and other education professionals:

a. are well prepared to use technology and digital resources innovatively and effectively for learning, teaching, leadership and administration

b. use technology and research to design personalized, authentic and student-centred learning opportunities to meet the diverse needs and interests of all students

c. engage in professional growth opportunities that are broadened and diversified through technology, social media and communities of practice

Actions

School Authorities:

a. use data and research to inform the design of professional programs and to ascertain and increase the effectiveness of such programs in making progress toward local goals and priorities

b. use technology to provide options in the type, duration, pedagogy, location, medium and formality of professional development and to differentiate, within professional development offerings, to meet teacher-participants' needs while also achieving local goals and priorities

c. position the school as an innovative learning community that uses technology to engage students, teachers, administrators, other education professionals and their community in 21st century learning

The Ministry of Education

a. ensures that the professional standards for teachers and administrators reflect the five policy directions in the Learning and Technology Policy Framework

b. works with post-secondary institutions and teacher preparation programs to achieve alignment with the Learning and Technology Policy Framework across the province

The outcomes and actions from each of the five policy directions are interdependent.

Alberta
Government

Policy Direction 4: Leadership

Education leaders establish policy and governance structures, cultivate innovation and build capacity within the system to leverage technology in support of student-centred learning and system efficiencies.

Outcomes

Education leaders at all levels champion effective and innovative uses of technology for all schools. As a result:

a. government and school authorities have clarity and coherence in the policies and procedures that govern educational and administrative uses of technology in all schools

b. teachers, administrators and other education professionals use technology innovatively, effectively and efficiently

c. economies of scale that achieve cost effectiveness and efficiencies in educational technology are realized

d. up-to-date guidelines and standards on uses of technology inform school authority education plans

Actions

School Authorities:

a. incorporate into their planning systemic, innovative and effective uses of technology to support learning, teaching, administration and management, and regularly assess progress in this regard

b. update technology plans for systemic, community-based approaches to student-centred, personalized, authentic learning and support implementation in all schools

c. seek out and participate in partnership opportunities (e.g., cross-jurisdiction, cross-institution, community, industry) that support innovative use of technology

The Ministry of Education:

a. provides support for school authorities in revising education plans and technology plans to reflect the five policy directions

b. guides capital planning in such areas as school construction, modernization, purchasing and infrastructure investments to ensure that technology innovations are considered vehicles to achieving local goals and priorities

c. facilitates and participates in partnership opportunities (e.g., cross-jurisdiction, cross-institution, community, industry)

d. establishes and updates guidelines and procedures for technology uses, such as online learning and digital resources/content, in order to create opportunities for school authorities to jointly develop, exchange, aggregate and share online offerings

e. provides opportunities for consultation, dissemination of information, and collaboration on educational and information technologies

The outcomes and actions from each of the five policy directions are interdependent.

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Policy Direction 5: Access, Infrastructure and Digital Learning Environments

All students, teachers, administrators and other education professionals have access to appropriate devices, reliable infrastructure, high-speed networks and digital learning environments.

Outcomes

Students, teachers, administrators and other education professionals have support for and equitable access to:

a. devices and peripherals

b. digital learning environments

c. facilities designed to maximize learning with technology

In Alberta's education system:

d. reliable infrastructures exist that support safe, secure, efficient, interoperable and sustainable networks

e. technology and network governance, policy and procedures ensure access essential to achieving the vision of *Inspiring Education*

f. appropriate technology is available and supported

Actions

School Authorities:

a. ensure equitable student access to devices, other technologies and, as appropriate, to assistive technologies to support student learning

b. provide students, teachers, administrators and other education professionals with access to well-designed, high-speed, reliable and sustainable networks and technology infrastructures

c. consider opportunities for community partnerships that expand access to technology-supported learning experiences

d. ensure the administration of safe and secure networks, infrastructure and technologies

e. provide students, teachers, administrators and other education professionals with access to high-quality digital learning environments

f. provide and maintain timely technical support and services

g. adopt and maintain effective practices and up-to-date technological standards with respect to Information Technology (IT) governance, IT management, and information security management

Ministry of Education:

a. supports access to a safe and secure, high-speed network for school authorities

b. seeks out and implements strategies that result in more affordable and sustainable access to technology and networking

c. considers community and private-sector partnerships to support access and system efficiencies

d. develops and periodically updates technology/networking standards

e. tracks and reports emergent technology trends

The outcomes and actions from each of the five policy directions are interdependent.

Alberta Government