

IT-Supported Learning and Networking



Recherche



Action



Innovation



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Objectives of the Study

- Identify current practices, needs and capacity of the Anglophone schools in Quebec with regard to the use of ICT in support of student learning and meeting the challenges of distance
- Prepare recommendations for consideration and potential action by major stakeholders in the Anglophone education community



Approach

- Review of current situation
 - Identify current and innovative practice related to the use of ICT in learning and networking
- Data Collection
 - Interviews with recommended people and observations of relevant sites
 - Review of web sites and documents
 - Interviews with personnel supporting the use of ICT in schools and distance education initiatives

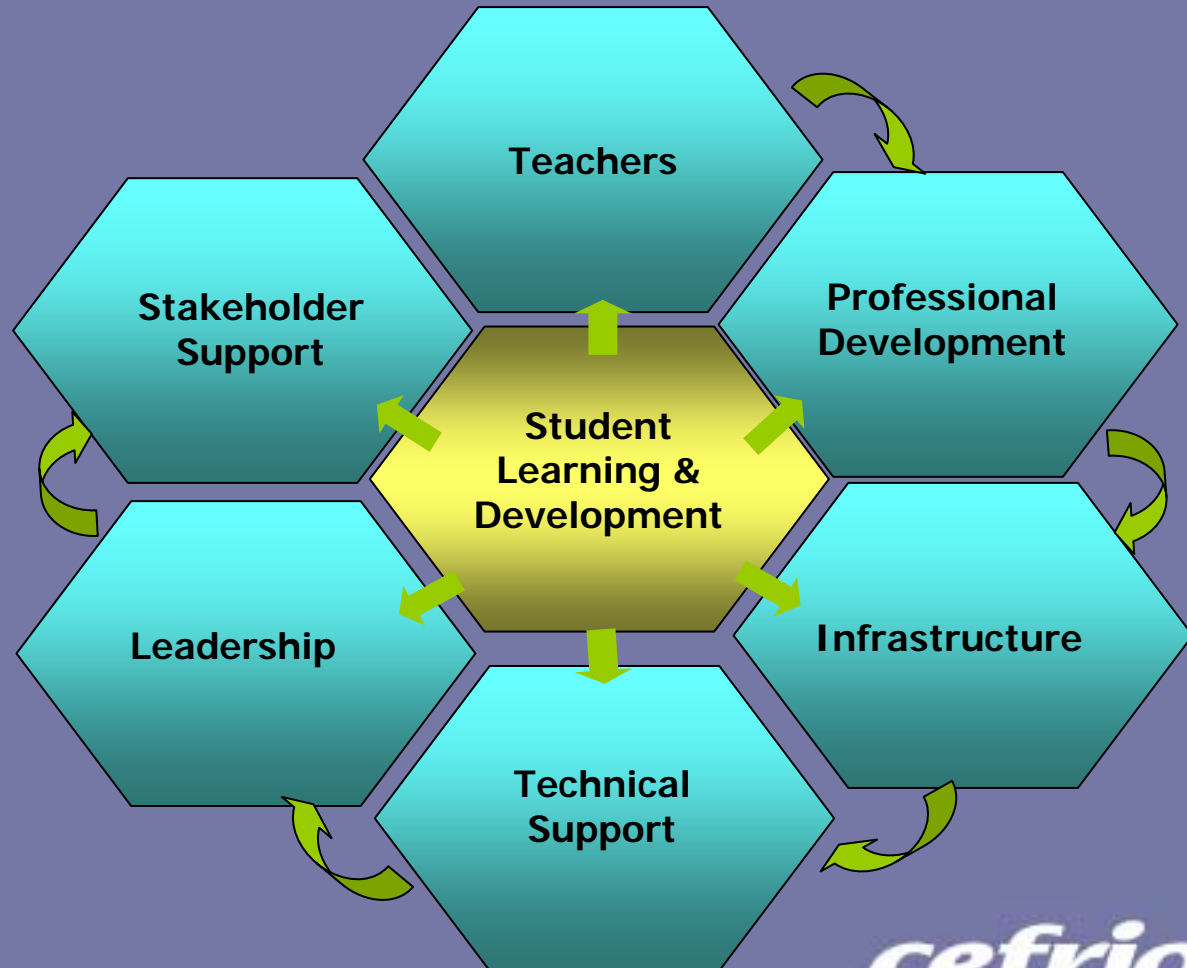
Findings

- Learning Conditions
- Challenges of Distance
- Facilitating a Culture of Networking
- Enabling Conditions



Framework

Learning Conditions





Student learning & development

Student engagement in learning was enhanced in IT-supported and effective learning environment

- Teachers select developmentally-appropriate material
- Students work collaboratively
- Students access and evaluate relevant information on the Internet, especially in remote communities

Student learning & development

- IT-supported settings provided enhanced support for students with special needs
- IT-supported learning provided access to relevant information and related knowledge; especially when teachers encouraged its critical use
- Create, share, and develop knowledge using IT





Teachers & ICT

- Teachers are central in the effective use of IT to support student learning for 21st century knowledge and skills
- Four factors affect the use of IT by teachers:
 - Belief: Do the teachers believe that IT will actually help students learn more effectively?
 - Expertise: Do the teachers have the required technical and pedagogical expertise?
 - Support: Do the teachers have sufficient technical and pedagogical support?
 - Time: Do the teachers have the time to learn how to integrate IT into their teaching and learning practices?



Professional Development

- A variety of professional development opportunities are needed
 - Techno-pedagogical support teachers to provide school-based coaching
 - Linking RECIT animators, school board consultants and classroom teachers for on-going support
 - Providing opportunities for collective competency building through face to face and online networking

Infrastructure

- Sufficient, accessible, reliable computing capacity is needed at the classroom and school level
- Efficient, user-friendly, and secure portals to facilitate access to resources and communication with others
- Reliable high-speed infrastructure





Technical Support

- Effective and efficient design of the IT system
- Supported by readily accessible, reliable and timely technical staff
- Part-time and supervised student support within schools
- Ongoing collaboration among pedagogical and technical staff to facilitate IT-supported learning



Leadership

- Central role of the principal:
 - Encouraging and supporting teachers to use IT
 - Including the increased use of IT within educational project and school success plans
 - Establishing Techno-Pedagogical Coordinating Committees
 - Modeling effective use of ICT
- Support of school board administrators in facilitating the use of IT and the sharing of knowledge and skills across schools and school boards
- Collaborative leadership by consultants RECIT animators and school-based techno-pedagogical leaders



Stakeholder Support

- Active and informed support of:
 - School commissioners
 - Governing Board members
 - Parents
 - Québec Provincial Association of Teachers
- Increased use of efficient home-school IT communication systems



Challenges of distance

- e-LEARNing Connections (DECN)
 - Equity of access to high-quality learning
 - Access to advanced level and option courses not available due to small number of students or lack of qualified teacher



e-LEARNing Connections

- Distance education courses
 - Reliable & flexible Web-based platform
 - Synchronous: online teacher interacting with students at set periods of time
 - Hybrid: synchronous online instruction supported by asynchronous resources
 - Clear information for all stakeholders on roles & responsibilities of students
 - High average grades and success rates



Networking conditions

● PIPES

- Purpose: Student and Teacher
 - Relevant QEP-related objectives
- Infrastructure
 - Accessible, reliable, high-speed
- Partners
 - Understand the commitments and expertise required
- Expertise:
 - Students and teachers have the required technical and pedagogical competence
- Support: Technical and Pedagogical
 - Timely technical and pedagogical support is available at the school level

Enabling conditions

Enabling Conditions

**Enabling
conditions**

**Research &
Development**

**Professional
Development
And
Collective
Competency
Building**

Funding

**Policy
Framework**

Research

- Increased amount of research on ICT and the challenge of applying it in schools
- Need to encourage more research on pedagogical factors influencing the use of ICT
- Need to consider stages of ICT integration & possible performance dips associated with change and innovation





Professional Development

- Need for increased school-based professional development
- Need for **collective competency building** for teachers, educational leaders, and techno-pedagogical support personnel :
 - meet, share, reflect on, and document their practice, knowledge, skills, and challenges

Funding

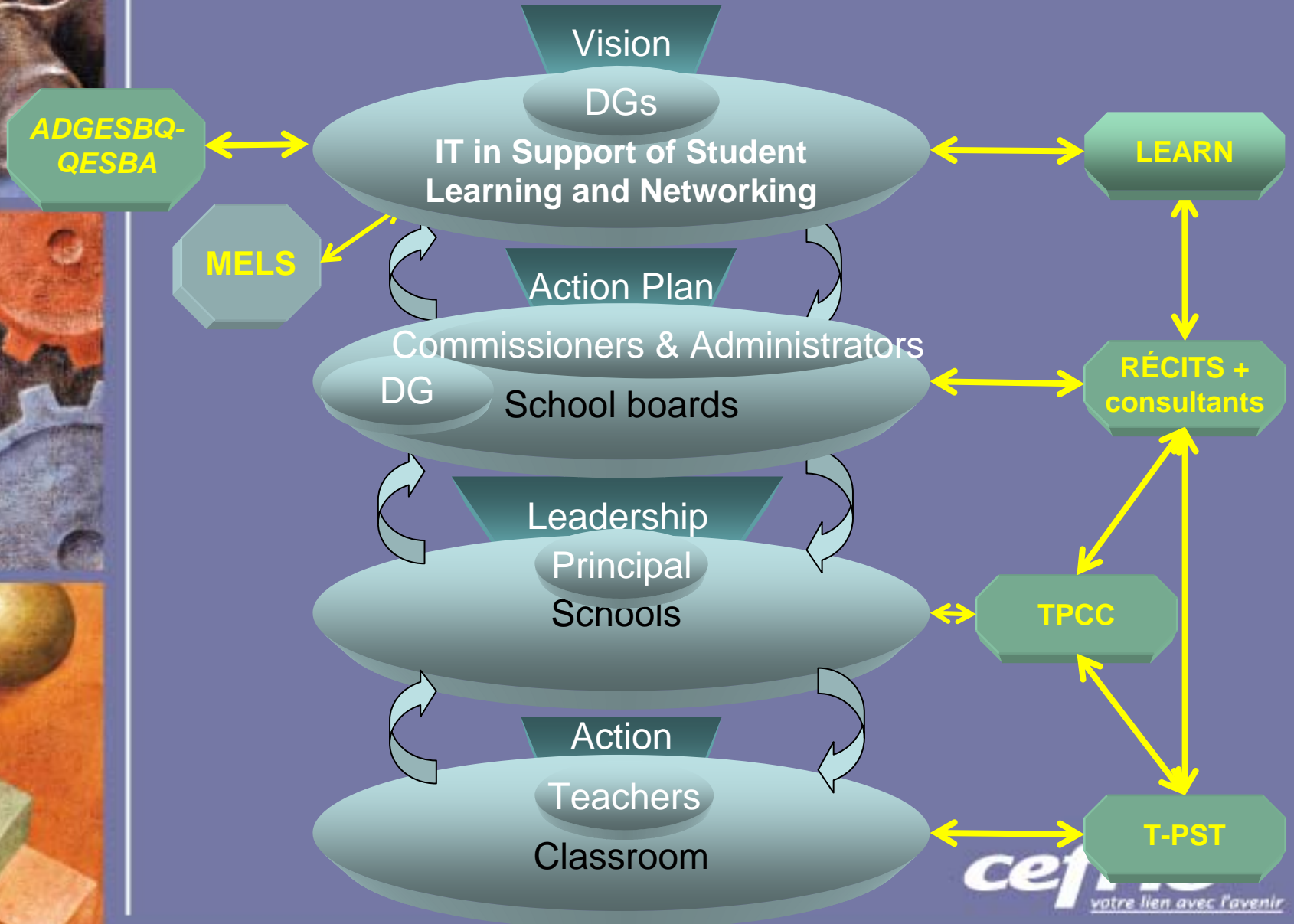
- The funding of LEARNing Communities, e-LEARNing Connections, and PDIG grants has had a positive effect
- LEARN is positioned to increase the efficient use of current funding
- Need for increased, recurring, and sustainable funding



Policy Framework

- The Quebec Education Program provides an appropriate framework
- However a clear set of guidelines is needed for developmental curriculum competencies related to the use of ICT in the classroom
- Comprehensive policies need to be adopted at the school and school board levels

Recommendations





Recommendations:

Operational Level - School Boards

- Infrastructure, technical support, and funding are secured
- Proactive leadership and collaborative action plan by principals
- Teachers have sufficient time to meet, share & develop competencies
- Techno-pedagogical Coordinating Committee
- Techno-pedagogical Support Teachers
- Professional development & collective competency building for teachers, principals, and consultants



Recommendations: Operational Level

● Principals

- Ensure pedagogically-relevant, reliable, and up-to-date infrastructure
- Provide pro-active techno-pedagogical leadership

● Teachers

- Consider the pedagogical and professional value of including ICT
- Address the most optimal means of using these resources



Recommendations: Strategic Level

● ADGESBQ-QESBA

- Enable the development of a common vision and a multi-year strategic plan for the use of ICT in support of student learning and networking

● LEARN

- Collaborate to develop the use of student networking and distance education initiatives
- Encourage professional development, collective competency building, and collaborative networking using resources from LEARNing Communities, school board consultants, RECIT animators, and techno-pedagogical support teachers.



Recommendations: System Level

- Funds to support IT infrastructure
- Funding guidelines to recognize differential costs of distance and remoteness
- Examine potential of using tax incentives to enable IT purchases
- Explore potential federal support for infrastructure
- Continue funding of LEARning Communities-RECIT and e-LEARning Connections
- Encourage strategic planning and techno-pedagogical support



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