

Leading Technology Enabled Transformation

“... if the *Learning and Technology Policy Framework* is to broadly achieve success and we are to realize the *Ministerial Order on Student Learning* across the province of Alberta, it is essential that all system leaders engage in a learning journey that establishes the system level conditions and the associated leadership necessary to best position technology for effective and innovative transformation of the student learning environment.”

Del Litke, CASS

How do we ensure that we provide optimum learning for all students?

The Alberta Context and Your School Authority

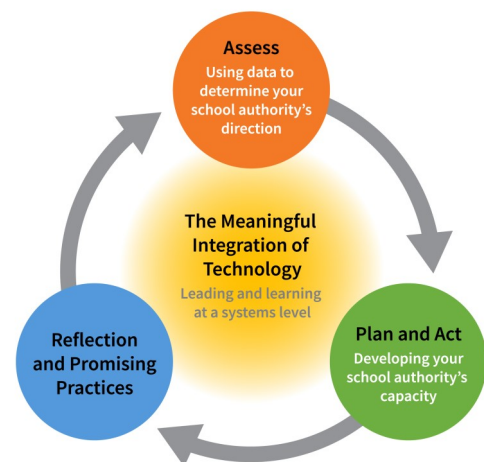
The Alberta Learning and Technology Policy Framework, or LTPF, (2013) describes Alberta Education's vision for the role of technology in education and establishes a set of policy directions for school authorities. The policy framework includes a focus on student-centred learning and is coherent with the intent of the Ministerial Order on Student Learning.

Alberta Technology Leaders in Education, or ATLE (<http://www.atle.ca/>) and the College of Alberta School Superintendents, or CASS (<http://www.cass.ab.ca/>) have collaborated, based on grant funding from Alberta Education, to set the stage for system work in leveraging technology purpose, policy and practice in support of student-centred learning. The purpose of this collaboration is to advocate for the collective work of information technology (IT) and education technology (ET) system leaders as well as other system leaders working together with the superintendent to collectively support student-centered learning. The intention of these learning guides is to support implementation of the intent of the Ministerial Order on Student Learning and your own school authority's journey in providing optimum learning for all students.

The Learning Guides are aligned with and support policy coherence relative to the provincial priorities identified in the Alberta Education Business Plan. Strategic leadership is required to ensure technology is leveraged in support of current and future key areas of focus, such as curriculum, improving First Nations, Metis and Inuit student success, and ensuring inclusive learning environments for all students.

The Learning Guides provide an adapted collaborative inquiry process that offers the opportunity to:

- **Assess:** Use data to determine your school authority's direction
- **Plan:** Identify your area of focus and plan for implementation
- **Act:** Implement strategies and tools to address your area of focus
- **Reflect:** Review and reassess in order to determine next steps



Most tools and resources are intended for system team participation while others are directed to IT or ET leaders to work through, with the assumption that data/learning will come back to a system table, specifically when the superintendent is engaged.

Superintendent Professional Practice

The learning guides also offer an opportunity for a collaborative process that addresses the superintendent leadership quality standard. (Alberta Education Draft July 2016)

Quality superintendent leadership occurs when the superintendent's ongoing analysis of the context, and the superintendent's decisions about what leadership knowledge and abilities to apply, result in quality school leadership, quality teaching and optimum learning for all students in the school authority.

The following competencies from the SLQS can be addressed by working through the processes suggested in these learning guides: **Modelling Commitment to Professional Learning, Visionary Leadership, Leading Learning, and School Authority Operations and Resources.**

References/Resources

A Guide to Support Implementation: Essential Conditions <http://essentialconditions.ca/>

Alberta Education Business Plan

<https://education.alberta.ca/business-plans/about-alberta-education-business-plans/>

Alberta Education Learning Technology Policy Framework <https://education.alberta.ca/learning-with-technology/overview/>

Alberta Regional Professional Development Consortia - Online Professional Learning Resources <http://erlc.ca/resources/>

Alberta Technology Leaders in Education (ATLE) <http://www.atle.ca/>

[Coherence: the Right Drivers in Action for Schools, Systems and Districts](#), Fuller and Quinn, 2015.

Thousand Oaks, CA. Available with links to infographics and other resources via [Corwin](#) or through Michael Fullan at <http://www.michaelfullan.ca/>

College of Alberta School Superintendents (CASS) <http://www.cass.ab.ca/> (future link to SLQS section)

Galileo Network - LTPF Implementation Toolkit

<http://galileo.org/wp-content/uploads/2014/02/LTPF-Toolkit-2014-pdf> retrieved July 2017

Ministerial Order on Student Learning

<https://education.alberta.ca/policies-and-standards/student-learning/everyone/ministerial-order-on-student-learning/>

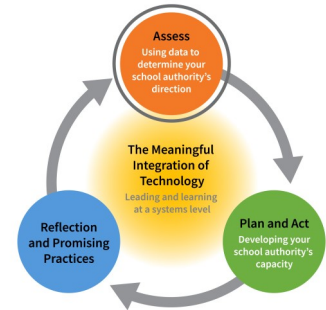
Steven Katz - Plan- Act - Assess - Reflect Inquiry process

<http://thelearningexchange.ca/videos/plan-act-assess-reflect/> retrieved July 2017

This Learning Guide provides Leadership Teams an opportunity to explore strategies and tools in developing a refreshed technology plan aligned to the provincial Learning Technology Policy Framework (LTPF) and local priorities.

General Synopsis

These tools and processes will support your team in determining your school authority's current state in relation to the meaningful integration of technology. The process will allow you to identify areas for growth in leveraging technology



Activities

Activity 1: Determining Your School Authority's Current State

Who should be involved:

- Superintendent
- Education Technology Lead (ET)
- Information Technology Lead (IT)
- Other system leaders (e.g. Assistant Superintendent of Learning Services)

Using the LTPF Self-Assessment Tool, which is based on the Galileo Implementation Toolkit (<http://galileo.org/ltpf/>), you will generate a visual representation of current practices in your school authority. The self-assessment is based on the Learning and Technology Policy Framework (LTPF) with the outcome being student-centred learning. This process will help you to access your current state and, based on your results, will allow you to determine potential areas to target.

Your approach to creating this collaborative analysis may be through a team discussion and completion of the Self-Assessment Tool, or you may choose to have individuals do a personal reflection with the tool and then bring it to a team meeting to share, compare and come to consensus.

Tools and Resources

[Steps to Complete the LTPF Self Assessment \(Heat Map\)](#)

Adobe PDF

[LTPF Self-Assessment \(Heat Map\) Tool](#)

MS Excel

Once you have completed this self-assessment you will use the data for the next steps - Plan, Act and Reflect. At this "Access" step ignore, for now, the columns labelled Plan - Act - Reflect on the self assessment tool.

LTPF Self Assessment and Planning Framework

	ASSESS Using school authority data to determine direction.					Overall Policy Average Score	PLAN Identify your area(s) of focus and plan for implementation	ACT Strategies and tools to address your area(s) of focus.	REFLECT Review and re-assess
	Item 1	Item 2	Item 3	Item 4	Item 5				
Policy #1: STUDENT-CENTERED LEARNING	3	3	3	3	3	3.0			
Policy #2: RESEARCH AND INNOVATION	2	2	2	2	2	1.7			
Policy #3: PROFESSIONAL LEARNING	2	2	2	2	2	2.0			
Policy #4: LEADERSHIP	1	1	1	1	1	1.5			
Policy #5: ACCESS, INFRASTRUCTURE AND DIGITAL LEARNING ENVIRONMENTS	1	1	1	1	1	1.3			

Activities

Activity 2: In-Depth Analysis of School Authority Capacity

Who should be involved:

- Education Technology Lead (ET)
- Information Technology Lead (IT)

In most school authorities an IT (Information Technology) and ET (Education Technology) lead are most responsible for guiding and facilitating the meaningful integration of technology. Superintendents rely on these and other system level leaders to provide expertise, experience and data to set the stage for the system level team to determine direction and focus.

The following tools will provide a more detailed analysis of your district's current state. They may be completed by ET and IT personnel to gather additional data to share with the superintendent and system level team who will collaboratively set the direction for the work to leverage technology.

Further analysis will take your district team through a more detailed review of promising practices associated with the LTPF policy directions. Your analysis will showcase your strengths and gaps in order to help move the conversation to possible solutions and support the system level team with additional data in moving forward.

Activity 3: Determining How Your District Allocates Technology Funding

Who should be involved:

- Education Technology Lead (ET)
- Information Technology Lead (IT)

The "Defining Grade & Classroom Technology Profiles" tool is intended for planning purposes to help capture a complete picture of your current technology budgeting and resource allocations. This will aid in identifying potential areas to increase efficiencies and/or in providing an overview of costs.

Tools and Resources

[Digging Deeper—Further Analysis of LTPF Policy Directions \(Quick Scan\)](#)

MS Excel

[Steps to Completing the "Digging Deeper" analysis](#)

How to Video

MP4 Video (15:05 Min.)

[Technology Data Collection Template](#)

MS Excel

[Steps to Completing the Technology Data Collection Template](#)

How to Video

MP4 Video (18:52 Min.)

[Technology Environments to support District Strategies and Priorities](#)

This video will outline key elements and key considerations in designing your technology environments to support Learner Success across student-age groupings.

MP4 Video (37:45 Min.)

[Defining Grade and Classroom Technology Profiles?](#)

MS Excel

[Steps to Completing the Activity](#)

How to Video

MP4 Video (21:16 Min.)

Learning and Technology Policy Framework - Alberta Education

The Alberta Learning and Technology Policy Framework (2013) describes Alberta Education's vision for the role of technology in education and establishes a set of policy directions for school authorities.

This table provides an overview of the 5 policy directions and suggested indicators of the Learning Technology Policy Framework. Additional support materials are available at: <https://education.alberta.ca/learning-with-technology/overview/>

1: Student-Centred Learning	2: Research and Innovation	3: Professional Learning	4: Leadership	5: Access, Infrastructure and Digital Learning Environments
<p>Students use technology, online learning and digital learning to:</p> <ul style="list-style-type: none"> a. access, share and create knowledge b. discover, develop and apply competencies, as described in the <i>Ministerial Order on Student Learning</i>, to enable students to: <ul style="list-style-type: none"> • know how to learn • think critically • identify and solve complex problems • manage information • innovate • create opportunities • apply multiple literacies • demonstrate good communication and cooperation skills • demonstrate global and cultural understanding • identify and apply career and life skills 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 	<p>Teachers, administrators and other education professionals:</p> <ul style="list-style-type: none"> 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 <p>In Alberta's education system:</p> <ul style="list-style-type: none"> 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 	<p>Digitally confident teachers, administrators and other education professionals:</p> <ul style="list-style-type: none"> 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 	<p>Education leaders at all levels champion effective and innovative uses of technology for all schools. As a result:</p> <ul style="list-style-type: none"> 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 	<p>Students, teachers, administrators and other education professionals have support for and equitable access to:</p> <ul style="list-style-type: none"> a. devices and peripherals b. digital learning environments c. facilities designed to maximize learning with technology <p>In Alberta's education system:</p> <ul style="list-style-type: none"> 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 <i>Inspiring Education</i> f. appropriate technology is available and supported

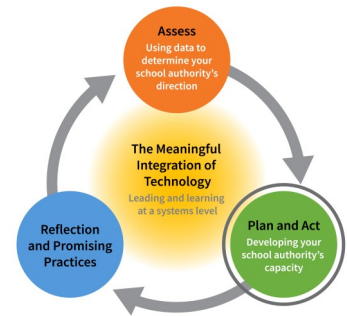
Learning and Technology Policy Framework Outcomes

“One of the key roles technology can serve in K–12 education is to shift the focus from the system, school and content toward learning and the learner, building competencies and enabling the learner to create and share knowledge. Technology is recognized as playing an integral role in creating student-centred, personalized, authentic learning environments.” (*Alberta Education Learning Technology Policy Framework, 2013, p. 14*)

This Learning Guide provides Leadership Teams an opportunity to explore strategies and tools in developing a refreshed technology plan aligned to the provincial Learning Technology Policy Framework (LTPF) and local priorities.

General Synopsis

These tools and strategies will support your system in developing a plan and identifying actions to support implementation and your system's capacity for change. The outcome will focus on leveraging technology systemically to enhance student centered learning.



Why Planning Matters

“Programmes, practices and interventions delivered in real world service settings such as schools and classrooms often look fundamentally different from what was originally intended by their developers. Principals and teachers may decide to adapt elements of a programme; barriers in the school system may prevent a programme from being fully realised; students or their parents may reject a programme and not support its application. What these examples have in common is that outcomes achieved from an educational intervention relate to the quality of its implementation rather than of the intervention itself.”

Centre for Evidence and Implementation. *Implementation in Education - Findings from a Scoping Review*. April, 2017: retrieved July 2017. <http://www.cei.org.au/blog/implementation-education-findings-scoping-review> ;

Planning for implementation will support you in achieving your intended outcome of leveraging technology systemically to enhance student centered learning. Lack of planning has the potential to allow for variation in application of the change you are imagining, and as a result some students may not benefit from the efforts and resources extended.

Moving directly to action, past a planning phase, may lead to missed components in comprehensively supporting the capacity of your system. These tools and resources provide you with background information that will assist you in developing your plan.

Activity 1: Essential Conditions

Who should be involved:

- Superintendent
- Education Technology Lead (ET)
- Information Technology Lead (IT)
- Other system leaders (e.g. Assistant Superintendent of Learning Services)

A Guide to Support Implementation: Essential Conditions (www.essentialconditions.ca) offers planning tools to consider how to thoughtfully address the components required to support implementation in the area on which you are focusing. This “made in Alberta” guide accessed the thinking and leadership provided by the ISTE “Essential Conditions” to leverage technology implementation. <https://www.iste.org/standards/essential-conditions>

Activities

The template “Planning for Implementation” addresses the “Plan and Act” component of the collaborative inquiry cycle. By using this template you will address the area of focus on which you are working, identify all of the actions you plan to take and also ensure that you address all of the “conditions” to plan for and support implementation.

You can use this tool in two ways:

1. Planning for implementation based on actions. On a separate page list all of the actions you plan to take given the area you are focusing on. Transpose the actions onto the essential conditions template, aligning with the “condition” you feel it addresses. You may discover you have missed a component of implementation planning and need to reflect on additional actions to take to ensure you have a complete plan. (You could also use this template and plan actions around the conditions.)
2. Reflect on the actions you currently take to support the meaningful integration of technology. List those actions based on what condition it most closely aligns with. This reflection will allow you to assess any gaps or omissions in implementation support and planning.

Activity 2: Large Scale Technology Planning for District Success - Addressing the Why and your Digital Dividend

Simon Sinek has a simple but powerful model for inspirational leadership - starting with a golden circle and the question, “Why?”

Often we focus on the “what” and “how” of change and neglect the “why” we are planning to take action. The video in the link shares a message for leaders about creating the right environment for change to occur and stresses the value in planning based on the direction you are headed. The work begins with a shared vision that identifies the “why” of the work.

Activity 3: Additional Tools for ET and IT System Leaders to Set the Stage for Planning and Identifying Actions to Address Your Outcome

Who should be involved:

- ET and IT System leaders

Digital Dividend - Return on Learning

Districts that collaboratively plan for success address essential questions that are not about the hardware and software but the WHY of technology. Determining the best investments that will provide the greatest dividend for student learning is key. Knowing how to measure if the efforts and actions are having an impact - and creating a dividend for learning - will assist with continuous system success and the meaningful integration of technology.

Tools and Resources

[Planning for Implementation - Essential Conditions Template](#)

MS Word

[Aspen View School Division Sample Adobe PDF](#)

Implementation Plan Insert your school authorities focus (e.g., leveraging technology systemically to enhance student centred learning; a focus on LTPF policy direction XX)		
Essential Condition	Key Actions to address this essential condition and support implementation (e.g. based on your LTPF self-assessment)	Indicators of Implementation What will you accept as evidence that your key actions are having an impact? How will you know?
Shared Vision Stakeholders share an understanding of and commitment to the intended outcomes.	e.g. What is the outcome you are wishing to achieve as a result of your actions to leverage technology?	
Leadership Leaders at all levels have the capacity to champion the shift from the current reality to the intended outcomes.	e.g. How are system leaders working together to achieve the outcome? (e.g., Superintendent, ET and IT)	
Research and Evidence Current research, evidence, and lessons learned inform implementation decisions.		
Resources Human resources, materials, funding, and infrastructure are in place to realize the intended outcomes.		

"Why?"

[https://www.ted.com/talks/](https://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action)

[simon_sinek_how_great_leaders_inspire_action](https://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action)

Online Video (18:04 Min.)

[What's your District's Digital Dividend?](#)

MP4 Video (24:49 Min.)

This video walks your district through the key considerations to define and deliver a targeted and measured Learning Return on its digital investments.

[Digital Dividend Activity](#)

ADOBE PDF

After your team has finished viewing the video “What is your District’s Digital Dividend” this simulation activity will provide an opportunity to dig deeper on the concept of delivering a Digital Dividend.

Activities

Leadership Essentials

These video presentations outline perspectives on the essential elements of leadership to be considered when school authorities work to implement the LTPF. They will provide you with ideas to consider as “Actions” for your implementation plan.

ET and IT leads may consider watching and summarizing and/or highlighting essential components for superintendents and school leaders to watch and or know.

Reflection and Data for System Improvement

Reflect on the data your team has gathered using the baseline tools (e.g., LTPF Self assessment, Digging Deeper LTPF Analysis, technology data collection template). Consider why data can support and stimulate transformational systems level change.

How will you:

- communicate about the data you have collected
- use this data to set direction and determine plans
- use this data as a benchmark to reflect on at a later date to ensure your actions and planning have had an impact on practice

Designing a Rich Technology Environment - District Strategies and Priorities

Revisit your “Defining Grade and Classroom Technology Profiles” results and consider your overall costing structures and whether there is optimization.

Tools and Resources

[Culture – Leveraging System Leadership \(Chris Smeaton\)](#)

MP4 Video (18:50 Min.)

This video examines the role of the Chief Superintendent and the senior leadership team in creating a culture of innovation. It gets to the heart of setting the “tone at the top” to effectively scale innovation across a district.

[Leadership Essentials \(Del Litke\)](#)

MP4 Video (35:57 Min.)

An examination of the best practices as they relate to Leadership and what it is that effective Districts do to make a difference.

[Data FORE the Learner](#)

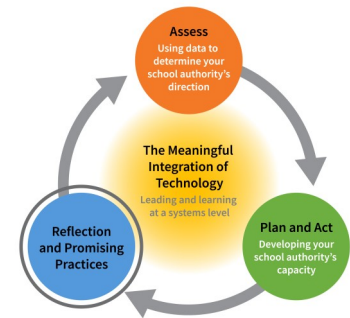
MP4 Video (33:27 Min.)

This video looks at the typical data challenges facing districts and how data can be best positioned to directly support learners.

[\(Revisit Activity\) - Defining Grade and Classroom Technology Profiles?](#)

MS Excel

This Learning Guide provides your leadership team an opportunity to reflect on your plan for student-centred learning that is coherent with the provincial Learning Technology Policy Framework and your local priorities.



General Synopsis

Revisiting your school authority's LTPF self-assessment provides the opportunity to reflect given the planning and actions you have undertaken. Consider revisiting the self-assessment each year to measure how your efforts are having an impact, as well as consider areas for continued growth.

Activities

Activity 1: Alberta Promising Practices

All school authorities have promising practices to share and, as you move forward with your own practices in this area, you may also want to consider sharing what you have learned with others. The five Alberta school authorities listed were asked to share key strategies they are using to support implementation of the LTPF.

They also offered indicators they are using to determine if their efforts are having an impact. Although the LTPF policy directions are interrelated and interdependent, these school authorities were asked to focus on one policy direction. ET and IT leaders may consider viewing these together and identifying those practices and actions that may be most consistent with your context.

Tools and Resources

Presentation Resources:

Student-Centered Learning - Policy Direction #1
[Parkland School Division](#)

Research and Innovation - Policy Direction #2
[Wolf Creek Public Schools](#)

Professional Learning - Policy Direction #3
[Horizon School Division #67](#)

Leadership - Policy Direction #4
 Golden Hills School Division (Video under construction)

Access, Infrastructure and Digital Learning Environments - Policy Direction #5:
[Chinook's Edge School Division](#)

Recurring Activity

Revisiting your LTPF self assessment assists with continuous improvement and support for your school authorities outcomes. (e.g., student centered learning)

LTPF Self Assessment and Planning Framework

ASSESS						PLAN	ACT	REFLECT
Using school authority data to determine direction.						Identify your area(s) of focus and plan for implementation	Strategies and tools to address your area(s) of focus.	Review and re-assess
	Item a.	Item b.	Item c.	Item d.	Item e.	Overall Policy Average Score		
Policy #1: STUDENT-CENTERED LEARNING	3	3	3	3	3	3.0		
Policy #2: RESEARCH AND INNOVATION	1	2	2					
Policy #3: PROFESSIONAL LEARNING	2					2.0		
Policy #4: LEADERSHIP	2	2	3	1		1.5		
Policy #5: ACCESS INFRASTRUCTURE AND DIGITAL LEARNING ENVIRONMENTS	2	1	1			1.3		