ICT Technology Planning Standing Committee

FEBRUARY 5, 2019

Technology Planning - Agenda

- Planning framework

- What we do

- Planning Cycle

- Current Technology Plan

- Review Process

- New Technology Plan – how do we get there?

Technology Planning - Framework

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- Ten Year Plan
  - We (ICT) provide seamless and appropriate information and communications technology to serve all aspects of learning and to support our operations.

  - All our schools are now equipped with wireless and we continue to embrace the application of technology as a tool for education and for collaboration
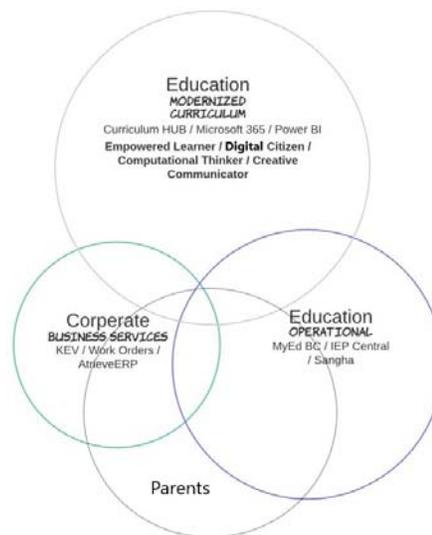
Technology Planning - Framework

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- Three Year Operating Plan
  - Continue to develop the 21st century classroom with embedded technology supporting teaching and learning

  - Continue to provide innovative programming and teaching, with an examination for potential expansion in the areas of:
    - STEM (Science, Technology, Engineering, and Math)

What We Do

- Support people
  - 16000 students, 2500 staff, 20,000 parents

- Purchase and repair hardware
  - 4000 computers/devices
  - 100 servers
  - 1000's of network nodes

Connections

Education
MODERNIZED CURRICULUM
Curriculum HUB / Microsoft 365 / Power BI
Empowered Learner / **Digital** Citizen /
Computational Thinker / Creative
Communicator

Corperate
BUSINESS SERVICES
KEV / Work Orders /
AtrieveERP

Education
OPERATIONAL
MyEd BC / IEP Central
/ Sangha

Parents

Technology Planning Cycle

- Information Technology Infrastructure Library

  - Best practices in IT

  - Service operation mode

  - Time to revisit – Service Strategy

  - Technology Planning Review

Current Technology Plan

- Infrastructure – Seven to ten+ year cycle
  - Servers
  - Network
  - Phones and other network enabled devices
- Computer Sustainability Plan (CSP)
  - Replacement of Staff computers every 5 years
  - Different groups each year – Elementary teachers next
- Student Devices
  - School and PAC funded

Current Technology Plan – Report Card

- Infrastructure – Seven to ten+ year cycle
  - Servers ✓
  - Network ⚠
  - Phones and other network enabled devices ✓
- Computer Sustainability Plan (CSP) ✓
  - Replacement of Staff computers ✓
- Student Devices ⚠

Student Devices

- Research shows 1 device to 4 students is average

  - 1 to 4 or less   = Green
  - 4 to 6   = Yellow
  - 6 or more   = Red

- 7 years or older – not supported
  - Both Apple and Dell

School	Enrollment	Student Devices	Students per Device	Student Devices >7	Students per Devices >7
Boundary Elementary NVan	345	161		101	
Lynn Valley Elementary	365	119		34	
Upper Lynn Elementary	474	87		30	
Ross Road Elementary NVan	532	114		44	
Norgate Elementary NVan	134	98		37	
Westview Elementary NVan	241	156		24	
Carisbrooke Elementary	336	119		24	
Queen Mary Elementary	406	86		0	
Capilano Elementary NVan	427	119		24	
Braemar Elementary NVan	435	57		30	
Larson Elementary NVan	467	77		24	
Montroyal Elementary NVan	299	86		0	
Canyon Heights Elementary	354	106		15	
Highlands Elementary NVan	426	111		39	
Cleveland Elementary NVan	483	97		19	
Eastview Elementary NVan	271	60		0	
Queensbury Elementary	295	36		0	
Brooksbank Elementary	408	88		0	
Ridgeway Elementary NVan	567	150		74	
Sutherland Secondary NVan	882	258		53	
Lynnmour Elementary NVan	192	69		30	
Seymour Heights	262	64		34	
Blueridge Elementary NVan	316	50		30	
Cove Cliff Elementary NVan	328	108		0	
Sherwood Park Elementary	426	87		16	
Dorothy Lynas Elementary	553	188		45	

Technology Plan Review

- Elementary Focus – Their turn in the cycle
  - Process – Stakeholder Engagement
    - School visits - Interviews with tech committees and teachers
    - Elementary Principals Focus Group - 7 schools- input
    - ICT Advisory Committee – input
    - Visits to other districts
    - Engagement with other district across province and country through social media

Stakeholder Engagement- Key Findings

- Lack of network connectivity

- Not enough student devices

- Some schools have only iPads

- Inconsistent levels of technology between schools

- One size fits all approach to teacher computers

- What technology foundational skills needed for K-7?

Other Findings

- Libraries
  - Used to be technology hubs, what is needed now?
- Learning Assistance
  - What are the core needs for Learning Assistance Classrooms?
  - What is needed in every classroom?
- Too much screen time for students?
  - A concern raised by parents
  - What is a recommended amount of time for delivery of foundation skills?

Technology Plan Review

- We have questions
  - What technology should be in a classroom and school?
    - What is needed to deliver the curriculum requirements?
    - What is needed to enhance student learning?
    - What is needed to support learning adaptations?

  - Still work to be done before we know what we need
    - We will need broader stakeholder engagement

Technology Plan Review - Infrastructure

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- What infrastructure is needed
  - To support learning and our operations?
  - To develop the 21st century classroom

- Engagement with ICT staff, vendors & other districts
    - Plan the complete cycle as we know it now – 7 to 10 years
    - Focus on immediate needs
    - Lack of network connectivity is a key finding

Technology Plan - Infrastructure

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- Infrastructure – Review and replace as needed
  - Servers - downsize as we move to cloud based services
  - Staff Computers – reviewing who is due for refresh
  - Phones and other network enabled devices
    – Plan for more, Internet of Things (IoT) is here
  - Network infrastructure to support wired and wireless access
    - This is a known immediate need
    - Ties in with the goals of the Ten Year Plan

Technology Plan Review – Teacher

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- What does a teacher need to deliver the curriculum?
  - Computer
    - What is the teacher using the device for?
      - Different device depending on use?

    - Projector – should this be a classroom basic device?

    - Way to project from devices
      - Software – Document Camera – both?

    - Sound – what is needed?

Technology Plan Review - Student

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- What do students need in the classroom?
  - Classroom devices – what is needed?
    - For adaptive needs and research
      - In class all the time or sign out?

- What is needed to deliver technology foundations?
    - i.e. What is needed, time and devices, to deliver what is in the curriculum?

- What is necessary for learners needing adaptations?

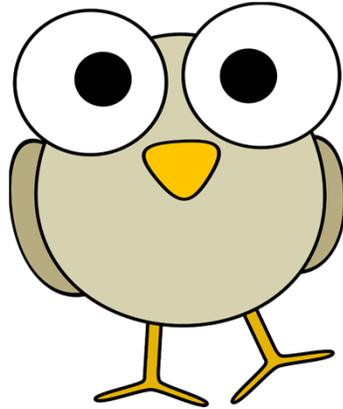- What is needed for enhanced learning?

Next Steps

- Work to define the curriculum foundations for technology
  - Continue stakeholder engagement
  - Create Foundations guide
  - Define basic technology needs, computers, iPads, projectors etc
  - Define what technology is needed to enhance learning
  - Define what technology is needed to provide adaptions

- Pilot Teacher technology options based on stakeholder feedback

- Improve wireless connectivity and infrastructure

Finally: The Last Slide (almost)

- There is a clear need for change
  - We should always review when a service is operational– best practice
    - Stakeholder engagement is key
    - Feedback to date, has indicated there are more questions
    - Answers are better coming from stakeholders

- We need to use our time and budget well
  - Wireless infrastructure – a known pain point – fix it
  - Regular operational needs and maintenance
  - Continue to find efficiencies in existing hardware and software
- Budget
  - We will still need to fit all this into the budget box, and ensure key priorities are met across the district

Who has a Question?