



**Kootenay-Columbia
School District No.20**

District Learning and Technology Plan

*“building capacity to impact achievement in a 21st century
learning paradigm”*

Final – May, 2010

Table of Contents

| | |
|---|----|
| Vision statement..... | 3 |
| Beliefs..... | 3 |
| Introduction | 3 |
| Process in reaching this plan | 4 |
| Direction we are heading | 5 |
| 1. Policy / Direction Theme | 5 |
| a. Sustainable (PD1) | 6 |
| b. Assessment informs teaching (PD2)..... | 6 |
| c. Student led learning (PD3)..... | 6 |
| d. Support shift in teaching styles (PD4)..... | 7 |
| e. Individualized, self paced learning (PD5)..... | 7 |
| f. Online classroom supports face-to-face learning (PD6)..... | 7 |
| g. Efficiency maximized in district operations by technology (PD7)..... | 7 |
| 2. Infrastructure Theme | 8 |
| a. Resources available anywhere, anytime (I1) | 9 |
| b. Wireless access throughout all buildings (I2)..... | 9 |
| c. Online “classroom” for all teachers to support and enhance their face-to-face instruction (I3) | 10 |
| d. School portals to connect and inform students, staff and parents (I4)..... | 10 |
| e. Permanent digital teaching infrastructure in each and every classroom (I5)..... | 10 |
| f. e-Texts (I6)..... | 11 |
| g. Pool of devices available for loan to supplement personal devices (I7) | 12 |
| h. Synchronous and asynchronous tools are available to facilitate face-to-face meetings and offline meetings (I8)..... | 12 |
| i. Assistive technology is available for those who could benefit (I9) | 12 |
| j. Portable device/computer for all teachers (I10) | 13 |
| 3. System Capacity Theme | 13 |
| a. Technical Support (SC1)..... | 14 |
| b. Leadership (SC2) | 14 |
| c. Innovation (SC3) | 14 |
| d. Professional Development (SC4)..... | 15 |
| Summary of themes in our vision..... | 16 |
| Ways to achieve the vision..... | 17 |
| Project Name: Core district technology services | 18 |
| Project Name: 21 st Century Teaching Stations..... | 20 |
| Project Name: Helping Infuse Technology Teachers (HIT) | 22 |
| Project Name: Wireless access in all schools – WiFi20 | 25 |
| Project Name: Mobility + project | 27 |
| Project Name: Repair Fund | 29 |
| Project Name: Technology Infusion Innovation Fund (TIIF) | 30 |
| Project Name: Elementary Reporting Project..... | 31 |
| Project Name: e-20 – SD20’s Educational Portal | 32 |
| Appendix A - 2006-2009 “Evergreen” Plan..... | 35 |
| Appendix B – Start/Stop/Continue notes | 36 |
| Appendix C – Common vision..... | 37 |

Vision statement

In School District No. 20 (Kootenay-Columbia) we are building capacity to impact achievement in a 21st century learning paradigm.

Beliefs

We believe that a 21st century learning paradigm involves:

- Teaching that is relevant and appropriate for 21st century learners
- Instruction (face to face, online and blended) that is effectively supported by digital assets
- Anywhere, anytime learning
- Providing appropriate supports
- The use of personal devices used to enhance learning opportunities
- A commitment to the vision to ensure a sustainable future

Introduction

Our District Learning and Technology plan (DLT) is focused on building capacity to impact achievement in a 21st century learning paradigm. It is built upon a common vision of using technology to positively impact student achievement.

The plan is an ongoing, living document requiring continuous oversight and review. A diverse committee of interested staff jointly developed the plan and subsequent budget requests. The plan is not a hardware or software shopping list. It addresses support, professional development as well as the hardware and software.

Our discussion has been focused on what we want to achieve for our students in 5 years. We focused on what we want to do and have purposely avoided talking technical solutions.

Through our journey we identified 20 items that would help us reach our common vision. When we looked at the items further we found that they naturally grouped around 3 themes: Policy/Direction items; Infrastructure items and System Capacity items. We detail the 20 items and 3 themes later in the report. These items also drive all of our budget requests.



The entire plan cannot and should not be achieved in one year. We understand that money spent on technology is in competition with all other choices that the Board must decide. We need commitment from the Board to affirm and support the role that technology plays in improving achievement and operating the district. Lastly, sustainability is critical to any project or plan. We are requesting, to the best of the Board's ability, commitment to this plan.

Process in reaching this plan

In December, 2009 the District Learning and Technology committee (DLT) was reconstituted to look at developing a new plan that would support achievement through the infusion of technology throughout the district. The committee has representatives from the Kootenay-Columbia Teachers' Union (KCTU), Canadian Union of Public Employees Local 1285 (CUPE), Kootenay Columbia Principals' / Vice Principals' Association (KCPVPA) and senior district staff. We have representatives from elementary, secondary and alternate schools to help provide the complete picture.

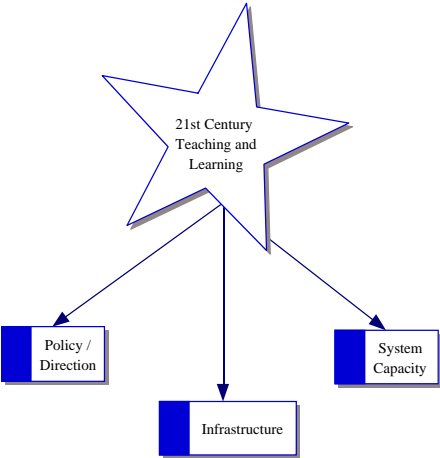
A series of meetings were held throughout December 2009 to February 2010. The group started with a Start/Stop/Continue activity to share individuals' thoughts on what is working well and what needs to change with regards to our use of technology. We then moved to an activity that developed a shared vision of the use of technology in School District No. 20.

From those two pieces we started to focus on themes that would help us achieve the common vision. Given agreement around the major themes we have developed this plan. All stakeholders agreed that this plan cannot be a static document for even three years. Given the pace of technology change we must meet annually to check-in, revise and adapt based on evolving student, staff and community expectations and needs within the context of improving student achievement.



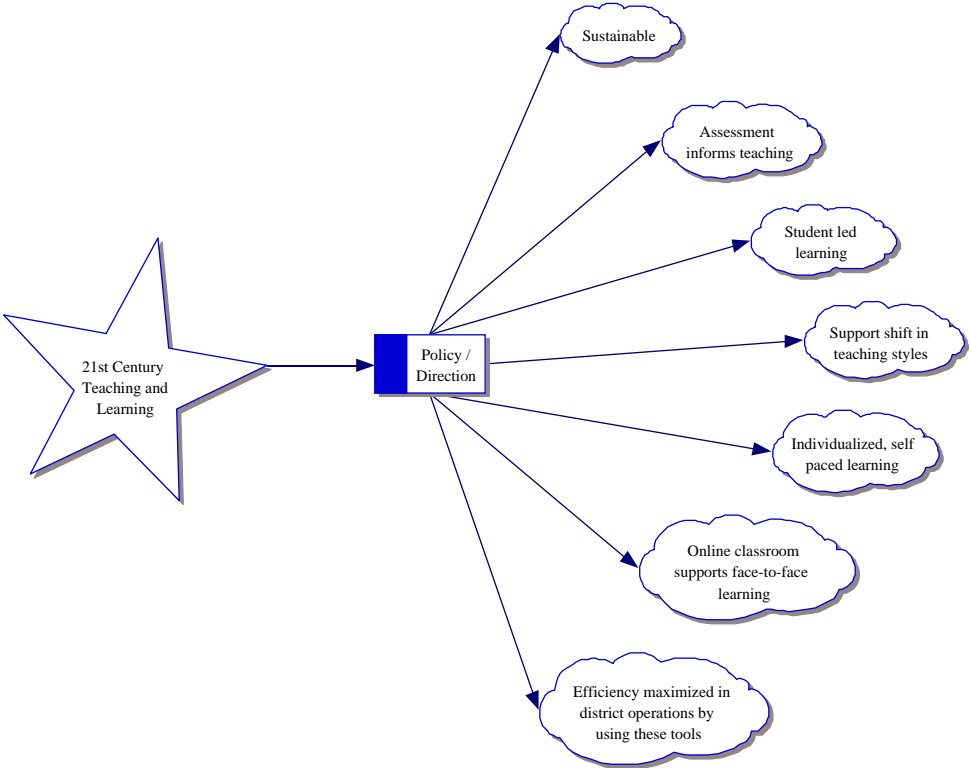
Direction we are heading

Our plan is focused on achieving the shared vision of “building capacity to impact achievement in a 21st century learning paradigm.” When we reviewed the shared vision we found that items naturally grouped themselves around 3 main themes.



1. Policy / Direction Theme

This theme addresses the policy and directional issues that we must support in order to help positively impact student learning. Most of these items are not technical solutions but foundational steps that we believe must be in place in order for technology to effectively impact achievement.



a. Sustainable (PD1)

The district must be committed to providing the necessary supports if we are to reach our vision. Many of these items will require time and significant funds in order to impact achievement. Some projects will need to be phased in as they build on each other. Others are required to be phased to help spread the cost over multiple budget years. No matter what the reason, the district must be committed to plan.

Trust must be established and maintained that schools not receiving direct support or equipment in one year will receive it the following year.

We have established that trust over the first 3 years of the recent “evergreen” plan but recent budget cuts have shaken that trust.

Solutions selected must provide all of the required supports in order to impact achievement. We cannot buy equipment and not have the required implementation support (training, curricular infusion or technical support) if we are to truly be successful.

b. Assessment informs teaching (PD2)

This theme is a cornerstone of the current purposeful practice in education. Technology solutions that support effective assessment practices should be investigated and supported.

c. Student led learning (PD3)

This theme supports the change in focus from the teacher to the learner in our system. Our district will need to shift from the teacher as provider of knowledge to a model which focuses on student truly in the centre with staff supporting the student no matter where they are in their learning continuum.

We have a diverse student population with a variety of interests and passions. The teacher will be guiding and supporting the journey of all students on diverse paths to reach the required outcomes.



d. Support shift in teaching styles (PD4)

The student led learning theme is already challenging our current model. Supports will need to be provided to ensure students still achieve the required outcomes.

e. Individualized, self paced learning (PD5)

Much like the above “student led learning” theme we see a shift in the delivery of education. Whole scale groupings will reduce and students will be on supported, independent journeys.

In order to provide appropriate learning opportunities students will occasionally be “grouped” where it best supports achieving outcomes. Most of these temporary groupings will be physical but in other cases online / virtual discussion groups will best meet the needs of the learner.



f. Online classroom supports face-to-face learning (PD6)

We strongly believe that face-to-face classrooms can positively benefit from using online tools and supports to enhance learning opportunities. We believe that each teacher should have an online presence where they can supplement their face-to-face instruction with digital resources.

Again, simply providing the online classroom space is not enough. Teachers will need support in effectively utilizing an online classroom. We do not just want to duplicate the physical classroom experience online. Rather, we want to use the best of both worlds where appropriate. Helping teachers with making those choices, posting information, selecting good resources are just of some the supports required if online classrooms are to effectively support face-to-face learning.

g. Efficiency maximized in district operations by technology (PD7)

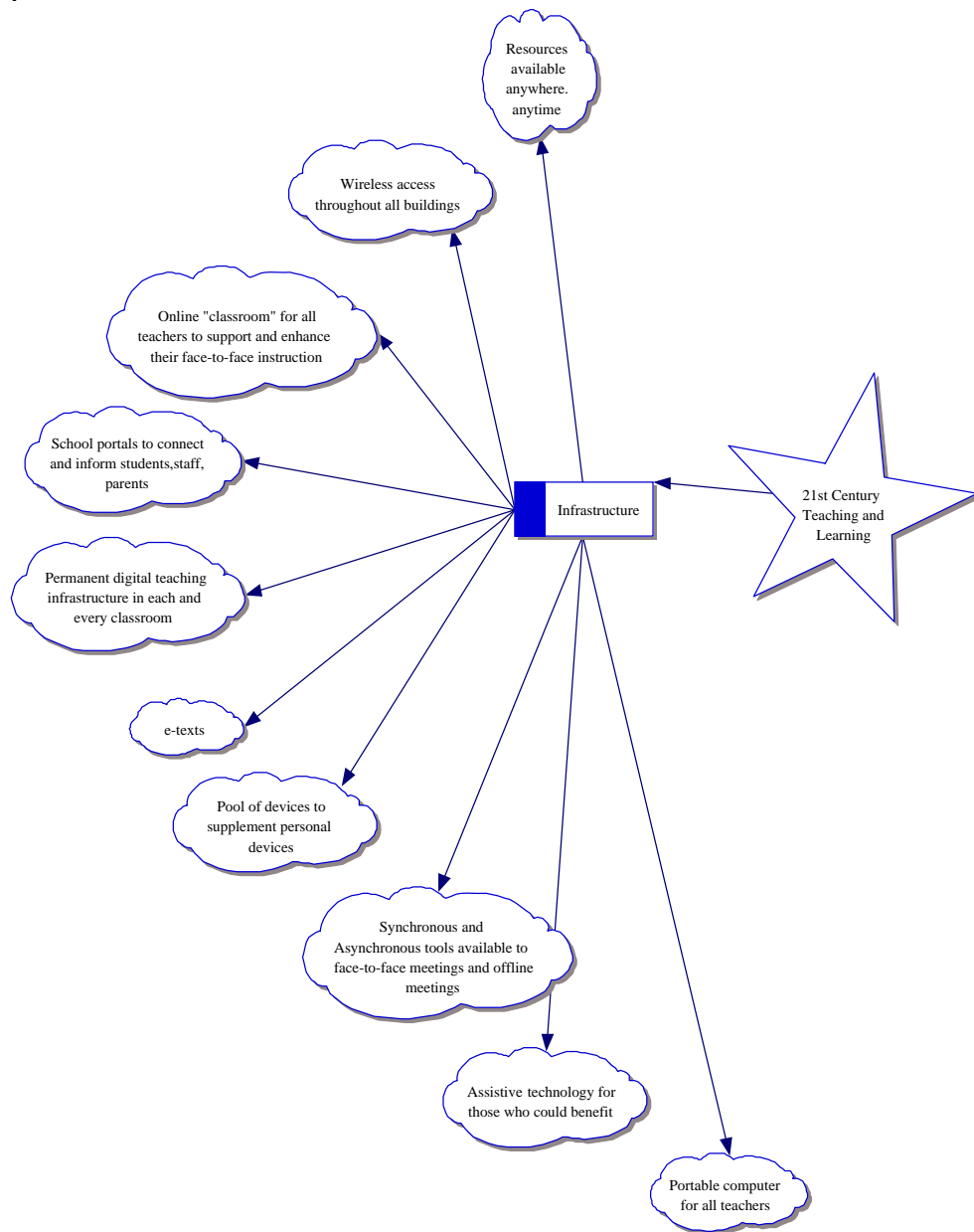
Although our plan is largely student achievement focused, we understand that the effective and efficient use of technology for the district’s business and administrative functions is important. We should model effective technology use for our staff, students and community.

Information should be available wherever possible in a digital format. Reduction of our carbon footprint should be a goal area overall for the district.

Efficiency and cost reduction in business and administrative functions allows us to put more dollars toward our achievement agenda.

2. Infrastructure Theme

This theme addresses a number of components that become the technology that we build upon to impact student achievement



a. Resources available anywhere, anytime (I1)

As the model shifts to students learning anywhere and anytime so must our resource provision paradigm. If we are encouraging students to learn from anywhere then they must have access to the majority of the resources not only from within the school but as well from home, work, friends, etc.

Whether it is access to their documents from home, online classroom from a coffee shop or participating in a discussion forum about a curricular topic we need to reduce barriers and provide secure access.

This is a paradigm shift whereby we spent a significant amount of time and effort blocking access from the outside. Now we must provide easy, yet secure, access.



b. Wireless access throughout all buildings (I2)

Our learning environment is changing from pen and paper to digital. If we truly want to infuse technology then we must adopt technology that is mobile and portable. The district moves from a “lab centric” technology model to a “mobility centric” model. Fixed, desktop computers are replaced with portable, handheld “computers”. No longer fixed to one location we must provide the necessary infrastructure so that these mobile devices can connect and access resources on both our local networks as well as the internet.

This foundation piece needs to be implemented before a wide scale mobility/notebook project could be successfully implemented.

Another shift is related to the “owner” of the devices. For years the district has provided the computers but given the lower cost of mobile computers we see the ground shifting. Many students already have devices that could be used to access both local and global networks. We need to move from blocking those devices to welcoming the devices. No longer will the district be the sole provider of computers in our sites. Students and staff will bring personal devices and we must enable them to access our resources in a secure manner.

- c. Online “classroom” for all teachers to support and enhance their face-to-face instruction (I3)

Much like described earlier in the Policy/Direction theme this becomes the actual hardware and software that allows teachers to supplement their face-to-face instruction with engaging and relevant digital content.

We have a long tradition of using these tools in our alternate programs but we must move these tools into all classrooms. Globally and locally the tools already exist but we need to provide the access and, more importantly, the support to teachers to utilize these valuable resources.

- d. School portals to connect and inform students, staff and parents (I4)

Our society is moving to instant, on demand access for information. Weekly newsletters replaced monthly newsletters but people want and demand instant access. School websites or portals become the first place that students and parents come to when they look to access digital assets for a class, information about the school, communicate with staff and communicate with other parents.

Portals need to be sustainable so that no one individual is relied upon to keep the site current and up to date. Content becomes a shared responsibility through a variety of content “owners”.

Just like the school portals the district actively maintains a site for information to stakeholders.

- e. Permanent digital teaching infrastructure in each and every classroom (I5)

The paradigm is shifting from teacher as content provider to teacher as learning facilitator. Computers will become common place in the hands of students. Ensuring instruction is current, engaging and relevant becomes even more important when the majority of students have devices that they interchangeably use for education and entertainment.



Teachers need the required resources in their own classrooms. Shared or pooled LCD projectors on carts do not have the same impact as when each teacher has their own. Teachable moments often do not occur in the half day or 30 minute block that you pre-booked the technology.

Teachers should have a laptop computer, LCD projector and document camera available in every classroom. When the equipment is always there it reduces technical barriers. No longer do you need to find the cart, wheel it down and connect all of the required cables. As evidenced in 2 of our schools (JLC and RCS) where all classrooms have similar setups, the equipment goes on at the beginning of the day, is used when appropriate throughout the day and then powered off at night. The next day, all of the same equipment is still there and the teacher just picks up and moves on.



Having reliable, immediate access to appropriate teaching resources are key to effective infusion of technology in the classroom.

These installations should last 4-5 years in classrooms but will need replacement over time. We must not forget about the tables and furniture required to make these setups effective.

f. e-Texts (16)

We must start the transition from paper textbooks to digital texts in those situations that textbooks are even still required. Learning outcomes are the curriculum and not texts made by publishers. Printed textbooks are expensive to replace as they get worn, damaged or lost. They also become “outdated” quickly after arriving.

Using appropriate resources to achieve the outcomes are critical. As more students have devices that allow them to access material online we must leverage that. While promising, it is challenging to move to e-texts until all students have ready access to a computer. We propose that we work with publishers on dual licenses of paper and digital texts until such time as we can fully migrate to e-texts.

- g. Pool of devices available for loan to supplement personal devices (I7)
We understand that all students may never have their own personal computer. Our plan would have a pool of portable computers available for sign-out or loan to students.

We have also had some discussion that the district could look at facilitating personal devices by recommending “standards” and potentially purchase plan models.



- h. Synchronous and asynchronous tools are available to facilitate face-to-face meetings and offline meetings (I8)

With staff and students learning happening anywhere and anytime, we require the tools to support communication. Beyond email we believe we need access to tools that facilitate communication both in real time and offline. Access to “Elluminate” style synchronous tools have a place to play in supporting learning as do offline or asynchronous tools (e.g. discussion threads, list serves, distribution list, wikis).

We must model the use of technology infusion for staff development. Release time is expensive and creates additional time away from students. We should utilize online learning tools to facilitate staff development and meetings. This would also reduce our carbon footprint.

- i. Assistive technology is available for those who could benefit (I9)

Technology can be most empowering for persons with a wide variety of challenges. We must use current and modern technology to help reduce barriers. Working closely with our student support services staff, we must empower all students by using the right tool for the right situation.

Learning disabled students can benefit greatly with technology in reaching their full potential. The same technology goals – anywhere, anytime learning supported through mobile access should be the goal for this group of students.

j. Portable device/computer for all teachers (I10)

Our learning environment is changing and we must equip our teachers with the necessary tools to ensure current, engaging and relevant learning opportunities for our students. One such tool is a portable computer that can go with the teacher wherever they are. An anywhere, anytime learner needs an anytime, anywhere teacher.

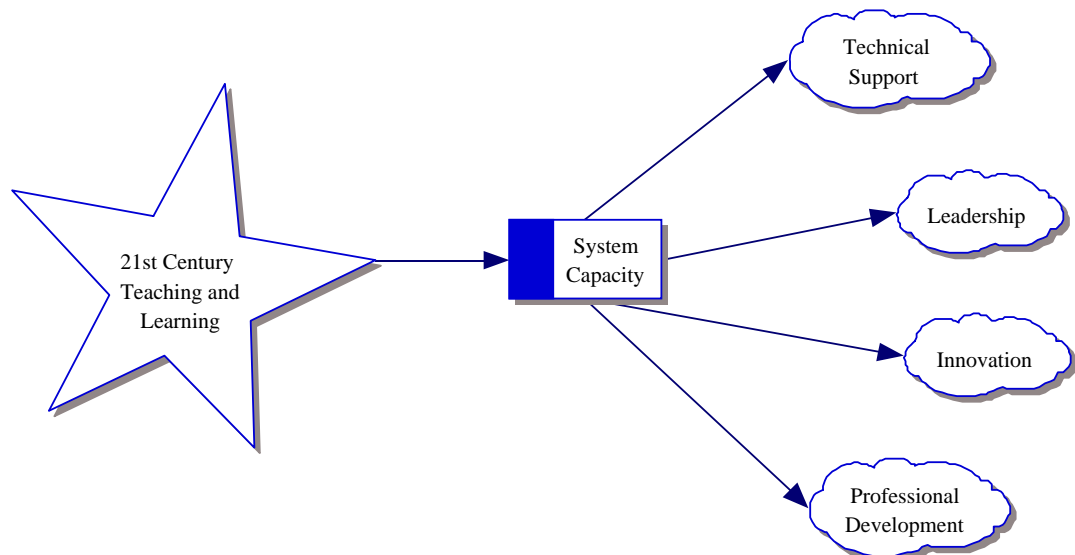
This would be one of the components of the digital teaching infrastructure in each classroom.

We expect a lifespan of 4 to 5 years for each computer based on 2010 standards and equipment. This “device” would need to be constantly reassessed to ensure we have the “right” tool in the hands of our teachers.



3. System Capacity Theme

This theme addresses a variety of components that must exist throughout the district in order to effectively infuse technology. They are often not visible or tangible items but without these any amount of spending or equipment is likely not going to be systemically successful.



a. Technical Support (SC1)

Technical support is foundational to any successful implementation. Finding the right solution, making it work in our environment to achieve our goals, updating it, dealing with issues, securing access are part of the technical support we must provide. Failure to provide adequate, timely, effective support renders any solution useless in a short matter of time.

As a district we have made the commitment to provide this support. We cannot waiver on that support. We must also ensure our technical support team is current, modern and well supported in their growth.

While the model of support may change as the solutions we are required to implement change, we must ensure the necessary technical support is available.



b. Leadership (SC2)

The pace of technological change is increasing. It is an area that requires significant leadership if we are going to use it to provide infused, current, engaging and relevant learning opportunities.

A blend of technical knowledge and educational knowledge is required given our small size and inability to have two discrete positions.

Budget needs related to technology are significant. Solutions proposed must be proven, modern and well researched.

Leadership can be provided by committees but ultimately someone needs to be responsible for the operations of the department and enterprise.

c. Innovation (SC3)

Technology is constantly evolving and we must keep current. A small pool of funds should be available for early stage trials. A component of receiving innovation funds should be the potential district wide achievement impact. Another component would be sharing the knowledge gained with others in the district.

We propose a small pool of funds be set aside for promising, innovative projects. An application process is developed along with the criteria used to award funds. These applications would be reviewed with the District Learning and Technology committee.

d. Professional Development (SC4)

This item is absolutely critical if technology purchases are to positively impact achievement. We should not provide equipment or software without the necessary training on how to use it effectively.

Immediate focus should be on how we use what we currently have to achieve learning outcomes. Any new technology implementations must have a corresponding staff development plan. We must focus beyond just how to use the software. We need to focus on how to use the software to achieve specific outcomes.



Teachers helping other teachers is the model in which we strongly believe. Technicians can facilitate learning opportunities for staff. A challenge for technicians is moving from how to use the equipment or software to how to use it to impact achievement. Peer teachers can focus on purposeful usage rather than technical usage. The support needs to be both face-to-face (in the classroom) and online. Teachers must commit time and effort in learning new skills and tools in technology infusion. It must be ongoing, personal and professional development.

Summary of themes in our vision

1. Policy/Direction

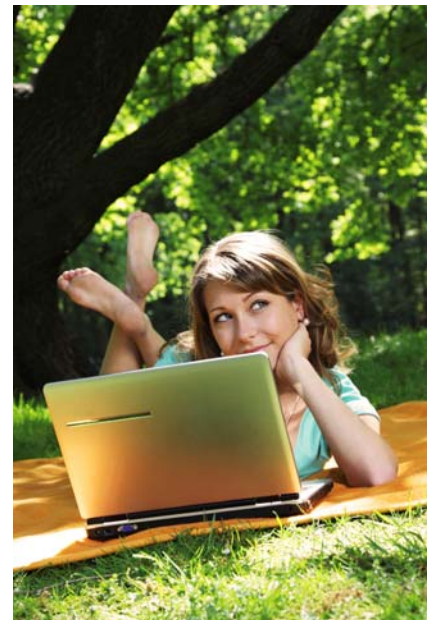
- a. Sustainable (PD1)
- b. Assessment informs teaching (PD2)
- c. Student led learning (PD3)
- d. Support shift in teaching styles (PD4)
- e. Individualized, self paced learning (PD5)
- f. Online classroom supports face-to-face learning (PD6)
- g. Efficiency maximized in district operations by technology (PD7)

2. Infrastructure

- a. Resources available anywhere, anytime (I1)
- b. Wireless access throughout all buildings (I2)
- c. Online “classroom” for all teachers to support and enhance their face-to-face instruction (I3)
- d. School portals to connect and inform students, staff and parents (I4)
- e. Permanent digital teaching infrastructure in each and every classroom (I5)
- f. e-Texts (I6)
- g. Pool of devices available for loan to supplement personal devices (I7)
- h. Synchronous and Asynchronous tools are available to facilitate face-to-face meetings and offline meetings (I8)
- i. Assistive technology is available for those who could benefit (I9)
- j. Portable device/computer for all teachers (I10)

3. System Capacity

- a. Technical Support (SC1)
- b. Leadership (SC2)
- c. Innovation (SC3)
- d. Professional Development (SC4)



Ways to achieve the vision

The following pages will describe a number of projects that will help us reach our vision for technology infusion throughout the district. These are the items for which we will be seeking budget support.

Many are interconnected. We have placed the budget items in priority sequence based on the beliefs of the committee. The projects are the means to affect change. Some projects are one time initiatives; others are 2 year projects and some projects are ongoing.

We acknowledge that these projects are based on a set of technologies generally available as of 2010. As new technologies emerge we must constantly revisit this plan to ensure that we are utilizing the appropriate technologies to reach our vision.



Project Name: Core district technology services

Project Description:

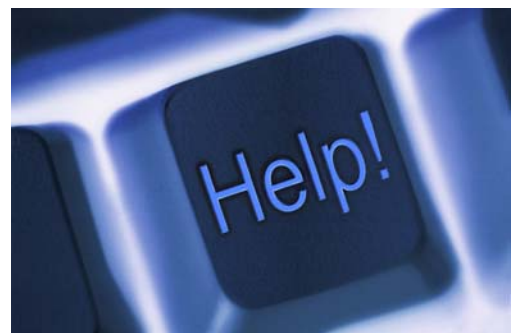
These core services support the district in its operation. They are wide servicing, often assumed and touch all staff and students in one manner or another. They cover a wide variety of items that are at the heart of technology in SD20. Without these items all our current technology in SD20 becomes challenged to maintain and sustain.

Broadly they are grouped into the following groups: network infrastructure, administrative computing, technical support and software.

Network infrastructure deals with the servers whether physically at a school site or virtually at a school but physically housed elsewhere. Other network infrastructure items include: all of the network switches that allow the devices to talk together; power supplies to protect our most sensitive assets; backup devices for disaster purposes; printers; firewalls; etc. Rarely seen by anyone in the district, these are items that cannot be ignored and that must be replaced and upgraded every 3-5 years.

Administrative computing deals with the computers throughout the district that deal with district operations. Notebook computers for school and district administrators, administrative assistant computers and itinerant staff notebooks are all examples of devices that fall within this category. Computers for our libraries to do circulation cannot be missed. All need to be replaced in a cycle to ensure we have the tools to perform our duties.

Technical support is the glue that holds all of these projects together. We must maintain a sufficient level of staffing to meet the demands of our system. Not only personnel to perform the duties but we must invest in that personnel to ensure they can support the ever growing list of hardware and software that we wish to use. Timely, efficient support is critical. Our current model of family of schools based support with one team leader working to support those technicians and district projects must be maintained.



Software allows the hardware devices to do what we need. It is constantly evolving as it needs to meet user expectations, new hardware, and new reporting requirements. Currently, we keep our core software on software support agreements. This provides us support from the vendor when we require it as well as latest versions of the software.

Helps achieve vision themes:

Themes addressed: All of the themes require support either from our local technicians or the vendor.

How helps achievement

Indirectly, achievement is impacted by allowing technology to be used. Statutory reporting alone would require a significant increase in staffing if we were not using technology to facilitate our reporting.

All of the plans listed in the District Learning and Technology plan build on the assets and resources provided in this core group in order to positively impact achievement.

How we measure its impact

- All of these items currently are being provided. A significant risk to efficient operations of the district would occur if any of these items were removed.
- Best measured by effort analysis if we did not have these services. Time to meet reporting and business operations would need to be calculated.
- Cost benefit analysis related to software support agreement costs vs. not keeping software on support agreements.
- Lost productivity without these core services
- Survey staff around satisfaction with supports provided

Timing

These items are already in place

Necessary requirements / assumptions for this project

- These are the items that all of the technology projects in this plan are based upon

Cost

\$682,206 per year

Network Infrastructure & Administrative computing - \$100,000 per year

Technical Support - \$384,856

Software - \$197,350 per year

See detailed breakdowns attached.

February 19, 2010- DRAFT #1 - Core Services - Administrative computing & Network Infrastructure Plan

| School | | PC Admin 4yr cycle | PC office 4 yr cycle | PC LRC 1:100 | Servers | Network Infra | Printers | Total Cost |
|-----------------|-------|-----------------------|-------------------------|-----------------|-----------|---------------|----------|------------------------|
| CP | | 1 | 1 | 2 | 1 | | 2 | |
| | costs | \$1,800 | \$1,250 | \$2,200 | \$5,000 | \$3,000 | \$1,000 | \$14,250 |
| FES | | 2 | 2 | 4 | 1 | | 4 | |
| | costs | \$3,600 | \$2,500 | \$4,400 | \$5,000 | \$5,000 | \$2,000 | \$22,500 |
| GES | | 2 | 1 | 4 | 1 | | 4 | |
| | costs | \$3,600 | \$1,250 | \$4,400 | \$5,000 | \$4,000 | \$2,000 | \$20,250 |
| TR | | 2 | 1 | 4 | 1 | | 4 | |
| | costs | \$3,600 | \$1,250 | \$4,400 | \$5,000 | \$4,000 | \$2,000 | \$20,250 |
| WEB | | 1 | 1 | 3 | 1 | | 3 | |
| | costs | \$1,800 | \$1,250 | \$3,300 | \$5,000 | \$3,000 | \$1,500 | \$15,850 |
| KES | | 2 | 1 | 4 | 1 | | 4 | |
| | costs | \$3,600 | \$1,250 | \$4,400 | \$5,000 | \$4,000 | \$2,000 | \$20,250 |
| MAC | | 1 | 1 | 3 | 1 | | 3 | |
| | costs | \$1,800 | \$1,250 | \$3,300 | \$5,000 | \$3,000 | \$1,500 | \$15,850 |
| RCS | | 1 | 1 | 3 | 1 | | 3 | |
| | costs | \$1,800 | \$1,250 | \$3,300 | \$5,000 | \$3,000 | \$1,500 | \$15,850 |
| SHSS | | 3 | 4 | 6 | 1 | | 6 | |
| | costs | \$5,400 | \$5,000 | \$6,600 | \$5,000 | \$10,000 | \$3,000 | \$35,000 |
| RSS | | 2 | 3 | 4 | 1 | | 4 | |
| | costs | \$3,600 | \$3,750 | \$4,400 | \$5,000 | \$7,000 | \$2,000 | \$25,750 |
| Crowe | | 3 | 4 | 6 | 1 | | 6 | |
| | costs | \$5,400 | \$5,000 | \$6,600 | \$5,000 | \$10,000 | \$3,000 | \$35,000 |
| SBO | | 6 | 9 | | 8 | | 3 | |
| | costs | \$10,800 | \$11,250 | | \$40,000 | \$5,000 | \$1,500 | \$68,550 |
| TMS | | 2 | 1 | | 2 | | 2 | |
| | costs | \$3,600 | \$1,250 | | \$10,000 | \$3,000 | \$1,000 | \$18,850 |
| BBC | | 0 | 0 | | 1 | | 2 | |
| | costs | \$0 | \$0 | | \$5,000 | \$3,000 | \$1,000 | \$9,000 |
| Sp Ed Itinerant | | 15 | | | 0 | | 0 | |
| | costs | \$27,000 | | | \$0 | | \$0 | \$27,000 |
| OLL | | 1 | 1 | | 1 | | 2 | |
| | costs | \$1,800 | \$1,250 | | \$5,000 | \$3,000 | \$1,000 | \$12,050 |
| CMO | | 3 | 4 | | 1 | | 2 | |
| | costs | \$5,400 | \$5,000 | | \$5,000 | \$3,000 | \$1,000 | \$19,400 |
| District totals | | \$84,600 | \$43,750 | \$47,300 | \$120,000 | \$73,000 | \$27,000 | \$395,650 over 4 years |
| | | | | | | | | \$98,913 per year |

February 26, 2010- DRAFT #1 - Core Services - Software

| | |
|--|-----------|
| Plato | \$11,600 |
| Mentor Enterprise | \$7,100 |
| L4U | \$14,100 |
| ERAC membership | \$9,600 |
| BC Learning network membership | \$5,000 |
| Open School courses | \$1,200 |
| Desktop Authority support | \$3,500 |
| DeepFreeze support | \$1,000 |
| BackUp Exec support | \$6,000 |
| Universal Image Utility support | \$1,500 |
| Ghost support | \$750 |
| BCeSIS | \$42,000 |
| MS Office agreement | \$9,000 |
| MS Windows agreement | \$9,000 |
| MS Server licenses | \$3,500 |
| LaserFiche Support | \$4,000 |
| Apple license agreement | \$30,000 |
| Individual licenses for various software | \$5,000 |
| SDS | \$26,000 |
| Antivirus / Antispam | \$7,500 |
| Total annual cost | \$197,350 |

Project Name: 21st Century Teaching Stations

Project Description:

The paradigm is shifting from teacher as content provider to teacher as learning facilitator. Technology is rapidly becoming common place in the hands of students. Ensuring instruction is current, engaging and relevant becomes even more important when the majority of students have devices that they interchangeably use for education and entertainment.

Teachers need the required resources in their own classrooms. Shared or pooled LCD projectors on carts do not have the same impact as when each teacher has their own. Teachable moments often do not occur in the half day or 30 minute block that you pre-booked the technology.

Teachers should have a portable computer, LCD projector and document camera available in every classroom. When the equipment is always there it reduces technical barriers. No longer do you need to find the cart, wheel it down and connect all of the required cables. As evidenced in 2 of our schools (JLC and RCS) where all classrooms have similar setups, the equipment goes on at the beginning of the day, is used when appropriate throughout the day and then powered off at night. The next day, all of the same equipment is still there and the teacher just picks up and moves on.



Having reliable, immediate access to appropriate teaching resources is key to effective infusion of technology in the classroom.

These installations should last 4-5 years in classrooms but will need replacement over time. We must not forget about the tables and furniture required to make these setups effective.

Helps achieve vision themes:

Themes addressed: PD4, I1, I5, I10, SC3, SC4

How helps achievement

Having permanent digital teaching assets in the centre of the classroom as opposed to at the side of the classroom changes the focus from a tool for administration to a tool for teaching. As evidenced already at JLC and RCS teachers will immediately use technology more and more in their teaching. The power also shifts as students now utilize technology to demonstrate their learning, share alternate ways how they personalize the learning. Like all of us, when the tool is there, ready to go, you use it where it makes sense.

How we measure its impact

- This will improve overall achievement results throughout the district. Over years we will expect teachers utilizing technology to engage and bring relevant and meaningful, experiential learning to the forefront.
- Pre and post implementation surveys to teachers as to the number of times they integrate technology into their daily teaching. We will see a significant rise when the resource is always available to them.
- Teachers will increase their overall comfort level with technology. This could be measured in the same survey.

Timing

This project could start immediately.

Necessary requirements / assumptions for this project

- Willingness for teachers to adapt to new teaching tools
- Technical support to keep the equipment functioning
- Access to an electrician to install power poles in all these classrooms (cost for such is built into this budget)

Cost

\$500,000 if done all at once.

Recommend we do it over 2 years so approximately \$250,000 for 2 years

See detailed breakdown attached.

SD20 21st century teaching stations

revised - April 8, 2010

| Site | # of Teachers non-Sp Ed | # of Classrooms (not Sp Ed, Band, Gym, Shops, LA, Multipurpose) | | LCDs | LCDs costs | Doc Cams | Doc Cams Cost | Notebooks | Notebooks cost | Installation costs | Total for site |
|------------------------|-------------------------|--|------------|------------|------------------|------------|------------------|------------|------------------|--------------------|------------------|
| | | | | | | | | | | | |
| CP | 7 | 8 | 8 | 8 | \$6,000 | 8 | \$6,400 | 7 | \$7,000 | \$3,200 | \$22,600 |
| FES | 19 | 20 | 20 | 20 | \$15,000 | 20 | \$16,000 | 19 | \$19,000 | \$8,000 | \$58,000 |
| GES | 15 | 12 | 12 | 12 | \$9,000 | 12 | \$9,600 | 15 | \$15,000 | \$4,800 | \$38,400 |
| JLC | 48 | 0 | 0 | 0 | \$0 | 0 | \$0 | 48 | \$48,000 | \$0 | \$48,000 |
| KE | 15 | 15 | 15 | 15 | \$11,250 | 15 | \$12,000 | 15 | \$15,000 | \$6,000 | \$44,250 |
| Mac | 10 | 12 | 12 | 12 | \$9,000 | 12 | \$9,600 | 10 | \$10,000 | \$4,800 | \$33,400 |
| OLL | 2 | 1 | 1 | 1 | \$750 | 1 | \$800 | 2 | \$2,000 | \$400 | \$3,950 |
| RCS | 11 | 11 | 11 | 11 | \$8,250 | 11 | \$8,800 | 11 | \$11,000 | \$4,400 | \$32,450 |
| RSS | 25 | 17 | 17 | 17 | \$12,750 | 17 | \$13,600 | 25 | \$25,000 | \$6,800 | \$58,150 |
| SHSS | 40 | 24 | 24 | 24 | \$18,000 | 24 | \$19,200 | 40 | \$40,000 | \$9,600 | \$86,800 |
| TMS | 0 | 3 | 3 | 3 | \$2,250 | 3 | \$2,400 | 0 | \$0 | \$1,200 | \$5,850 |
| TR | 16 | 13 | 13 | 13 | \$9,750 | 13 | \$10,400 | 16 | \$16,000 | \$5,200 | \$41,350 |
| Web | 10 | 10 | 10 | 10 | \$7,500 | 10 | \$8,000 | 10 | \$10,000 | \$4,000 | \$29,500 |
| DISTRICT TOTALS | 218 | 146 | 146 | 146 | \$109,500 | 146 | \$116,800 | 218 | \$218,000 | \$58,400 | \$502,700 |

| | |
|---|---------|
| LCD projector cost | \$750 |
| Document Camera cost | \$800 |
| Notebook cost | \$1,000 |
| Installation/power pole/desk cost per setup | \$400 |

C:\GregData\District_Learning_and_Technology\09-10 cycle\[Costing teaching stations.xls]Sheet1

Project Name: Helping Infuse Technology Teachers (HIT)

Project Description:

Our focus is to provide peer support to teachers who are trying to infuse technology into their classrooms to address the learning outcomes. Provincial curriculum has not addressed technology as a separate set of outcomes but rather the outcomes are integrated throughout all grades and subject areas. We cannot just provide the software or hardware and expect that it will make a difference in achievement. We need to provide time and expertise for teachers to work with their peers to infuse technology into their daily teaching routine. Not technology for the sake of technology but rather purposeful, effective usage that can engage and enhance learning opportunities.

A blended model is our approach using a combination of mentors and release time. At the elementary level we would create a 0.4 FTE position – Helping Infuse Technology Teacher. Their role is to work directly with teachers and students. This is not an administrative or technical position. Schools or teachers would approach this teacher on a project basis for help, mentorship and support in integrating technology into their teaching. A pool of release time would be provided to the infusion teacher to allow them collaborative planning time with the teachers. This 0.4 FTE position would not be able to work with every elementary teacher in the district in any given year.



At the secondary level a pool of release days for each secondary school would be provided. Within the school, with the Principal's support, groups of teachers would apply to access the planning and support time. The release days would be used for planning projects, team teaching, learning and evaluating projects. Expertise would come from within the school's staff or they could release another teacher from a different school to assist on a project or learning experience. This flexible model helps distribute leadership and builds capacity amongst the staff.

Teachers will be encouraged to share and showcase effective practices.

Helps achieve vision themes:

Themes addressed: PD1, PD3, PD4, PD5, PD6, I3, I5, I6, I10, SC3, SC4

How helps achievement

Our Achievement Review Committee (ARC) has developed two core statements that drive our achievement focus. The first statement: "School District No. 20 is committed to ensuring all learners experience relevant, current and purposeful practice" can directly be impacted by purposeful infusion of technology in helping all students achieve learning outcomes.

Teachers require mentorship, guidance and support in changing their teaching practice. Time spent hand in hand with a peer is effective. We must provide support if we expect to see a shift to 21st century teaching.

How we measure its impact

- Technology infusion self assessment / survey would be developed by the District Learning and Technology Committee. Staff would rate themselves on the number of integrated projects, their comfort level with infusing technology. This assessment would happen first thing in the fall and then at the end of the year.
- Teachers taking advantage of this peer support program will see both an increase in the number of projects or activities where they infused technology as well as their comfort level with technology in general.
- Count the number of infusion projects supported by mentors
- Number of sharing of results with other teachers

Timing

This project could start immediately.

Necessary requirements / assumptions for this project

- Reliable, stable access to technology (hardware and software) in the classroom and within the school
- Teachers who are willing to invite fellow teachers into their classroom
- Lead or mentor teachers
- Technical support is critical

Cost - \$87,400

Elementary program – \$56,400

- Helping Infuse Technology Teacher 0.4 FTE \$44,000 (\$40,000 salary and benefits, \$2,000 travel, \$2,000 equipment)
- Release days – $40 \times \$310 = \$12,400$

Secondary Program - \$31,000

- 40 release days for JLC – $40 \times \$310 = \$12,400$
- 40 release days for SHSS – $40 \times \$310 = \$12,400$
- 20 release days for RSS – $20 \times \$310 = \$6,200$

Project Name: Wireless access in all schools – WiFi20

Project Description:

Our learning environment is changing from pen and paper to digital. If we truly want to infuse technology then we must adopt technology that is mobile and portable. The district moves from a “lab centric” technology model to a mobility centric model. Fixed, desktop computers are replaced with portable, handheld “computers”. No longer fixed to one location we must provide the necessary infrastructure so that these mobile devices can connect and access resources on both our local networks as well as the internet.

This foundation piece needs to be implemented before a wide scale mobility/notebook project could be successfully implemented.

Supports anywhere, anytime learning paradigm

. For years we have provided the computers but given the lower cost of mobile computers we see the ground shifting. Many students already have devices that could be used to access both local and global networks. We need to move from blocking those devices to welcoming the devices. No longer will the district be the sole provider of computers in our sites. Students and staff will bring personal devices and we must enable them to access our resources in a secure manner.



Helps achieve vision themes:

Themes addressed: PD1, PD3, PD4, PD4, PD7, I1, I2, I6, SC3

How helps achievement

Locally, provincially and nationally we are seeing an anywhere, anytime learning paradigm shift. Empowering learners to be able to access online resources will help move teaching and learning from information provisioning to information processing. Our world is changing as information is becoming ubiquitous. We are moving from a system that places value on recalling factoids to a system that values the ability to synthesize the vast quantity of available information. As our assessments shift to that level then we will see positive achievement impacts.

How we measure its impact

- Environment scans – use of technology currently vs. once wireless network fully implemented
- Teacher survey around technology infusion pre and post implementation

Timing

This project could start immediately.

Necessary requirements / assumptions for this project

- Devices to access the network
- Electrician (built into budget)
- Technical support

Cost

\$118,000 – equipment and installation included

See detailed breakdown attached.

SD20 Wireless project

| Site | Access Points | Security Sensors | | |
|--|---------------|------------------|-----------|------------|
| BBC | completed | 1 | | |
| CMO | 2 | 2 | | |
| CP | 4 | 2 | | |
| FES | 8 | 3 | | |
| GES | 5 | 2 | | |
| JLC | completed | completed | | |
| SBO | completed | completed | | |
| KE | 7 | 3 | | |
| Mac | 5 | 2 | | |
| OLL | 1 | 1 | | |
| RCS | 5 | 2 | | |
| RSS | 11 | 4 | | |
| SHSS | 14 | 4 | | |
| TMS | 6 | 3 | | |
| Web | 7 | 3 | | |
| Total | 75 | 32 | | |
| Cost per device (including PoE injector) | \$800 | \$900 | | |
| Equip cost | \$60,000 | \$28,800 | \$88,800 | |
| | | total | \$96,999 | incl taxes |
| Installation costs per device | \$200 | \$200 | | |
| Install costs | \$15,000 | \$6,400 | | |
| | | total | \$21,400 | |
| Total project costs | | | \$118,399 | |

C:\GregData\District_Learning_and_Technology\09-10 cycle\[Costing wireless project.xls]Sheet1

Project Name: Mobility + project

Project Description:

As the model shifts from students learning anywhere and anytime so must of resource provision paradigm. Our current model is fixed, desktop computers available mostly in labs with the occasional pod in the hallway or individual computer in a classroom. This project moves the computers out of the labs and into the classrooms or learning environment. We believe that if technology is truly to be infused it must happen in the classroom. We will encourage students to use their own devices. We will supplement personal devices with district provided mobile computers. The district computers will stay in the school but be shared between multiple students throughout the school.

This project provides a base allocation to each school equivalent to the maximum class size. It also supplements that allocation with one mobile computer for each ten grade 4 and beyond student. This will allow teachers to do whole group work in the classroom with a computer for each student PLUS leave a pool of others still to be used throughout the school as needed. We do not want just to replicate the lab experience now using mobile computers. Rather we want to be able to do all that we currently do in the labs plus still have additional access. With support we will see at least some mobile computers in use in the majority of all classrooms at any one time.

In secondary and alternate programs we acknowledge a need for some fixed, desktop computers. We propose "labs" for those sites where the curriculum requires specialized software and it is most cost effective to provide robust desktop computers.



As more personal devices make their way into schools we hope to reduce the amount we need to provide. Our current proposal should not put hardship on anyone due to their personal circumstances. It provides for equity throughout the district.

The mobile devices would be selected annually. This way we can choose a device that best can help us achieve our educational needs. We are not considering full, robust desktop replacement notebooks but rather small, mobile computers that can meet our more modest needs.

Helps achieve vision themes:

Themes addressed: PD1, PD3, PD4, PD5, I1, I7, I9, SC3

How helps achievement

Technology use is to support achievement of outcomes in a variety of curriculums. The combination of affordable mobile computers and wireless technology enabling access has made the opportunity to bring the technology to the classroom rather than the other way around. Just in time usage of technology, where appropriate, will help engage and enhance learning opportunities. Technology's greatest impact comes when it is used for purposeful achievement of outcomes. The ability to work collaboratively is also positively connected to increased student achievement levels. When the students are working together in groups for 2 or 3 with 1 mobile computer we can truly maximize learning and our resources. We do not need all 30 students in the lab each doing their own thing. Those 30 computers will be better utilized in 3 classrooms each with 10 groups doing collaborative work.

How we measure its impact

- Student and staff satisfaction with technology survey
- Do pre and post implementation surveys to teachers as to the number of times they integrate technology into their daily teaching. We will see a significant rise when the resource is always available to them.

Timing

This project would make sense to implement once the wireless network is fully implemented.

Necessary requirements / assumptions for this project

- Wireless network is already in place and functioning well
- Teachers have opportunities to discuss this change in practice from lab based to mobile based technology infusion
- Technical support to keep the mobile devices functioning
- Processes developed for sign out of devices, recharging of batteries, etc.
- Policy developed around use of personal devices in schools

Cost

\$145,000 per year for each of 4 years

See detailed breakdown attached.

**February 19, 2010 - draft - Mobility + Plan
SCHOOL**

| | FTE | FTE grade 4+ | Max class size in school | Fixed labs of 30 | Total Desktops | Desktop cost | Mobile full class allocations | Supplement Mobile devices (1 per 10 grade 4+ FTE) | Total mobile devices | Cost for mobile devices | Cost per school | |
|-----------------------------|-----|--------------|--------------------------|------------------|----------------|--------------|-------------------------------|---|----------------------|-------------------------|-------------------------------|-----------|
| Castlegar Primary | 122 | 0 | 24 | 0 | 0 | \$0 | 1 | 0 | 24 | \$13,200 | \$13,200 | |
| Twin Rivers | 343 | 277 | 30 | 0 | 0 | \$0 | 1 | 28 | 58 | \$31,900 | \$31,900 | |
| Fruitvale | 345 | 206 | 30 | 0 | 0 | \$0 | 1 | 21 | 51 | \$28,050 | \$28,050 | |
| Glenmerry | 264 | 148 | 30 | 0 | 0 | \$0 | 1 | 15 | 45 | \$24,750 | \$24,750 | |
| Kinnaird Elem. | 298 | 150 | 30 | 0 | 0 | \$0 | 1 | 15 | 45 | \$24,750 | \$24,750 | |
| MacLean | 190 | 64 | 30 | 0 | 0 | \$0 | 1 | 7 | 37 | \$20,350 | \$20,350 | |
| Robson | 191 | 103 | 30 | 0 | 0 | \$0 | 1 | 11 | 41 | \$22,550 | \$22,550 | |
| Webster | 189 | 106 | 30 | 0 | 0 | \$0 | 1 | 11 | 41 | \$22,550 | \$22,550 | |
| JL Crowe | 822 | 822 | 30 | 2 | 60 | \$66,000 | 1 | 83 | 113 | \$62,150 | \$128,150 | |
| Rossland Sec. | 357 | 357 | 30 | 1 | 30 | \$33,000 | 1 | 36 | 66 | \$36,300 | \$69,300 | |
| SHSS | 685 | 685 | 30 | 2 | 60 | \$66,000 | 1 | 69 | 99 | \$54,450 | \$120,450 | |
| KCLC & KCVS | 5 | 5 | n/a | | | | | | | | | |
| Jr. Alternate & Transitions | 39 | 39 | 20 | 1 | 20 | \$22,000 | 0 | 4 | 4 | \$2,200 | \$24,200 | |
| OLL | 47 | 47 | 20 | 1 | 20 | \$22,000 | 0 | 5 | 5 | \$2,750 | \$24,750 | |
| Cooperative Ed. | 65 | 65 | 20 | 1 | 20 | \$22,000 | 0 | 7 | 7 | \$3,850 | \$25,850 | |
| | | | | | | \$231,000 | | | | \$349,800 | \$580,800 | |
| | | | | | | | | | | | Cost per year if 4 year cycle | \$145,200 |

Project Name: Repair Fund

Project Description:

Each year we require some funds to deal with emergent repairs that are not addressed in any of the replacement plans. Without repair funds our reliability would diminish and be a barrier for technology infusion.

Helps achieve vision themes:

Themes addressed: PD1, PD7, SC1

How helps achievement

Much like the core services, these funds keep the basic infrastructure maintained and operating.

How we measure its impact

- List items that would not be in use unless repair funds we used

Timing

This project could start at any time.

Necessary requirements / assumptions for this project

- Technicians available to diagnose and repair items

Cost - \$30,000



Project Name: Technology Infusion Innovation Fund (TIIF)

Project Description:

Technology by its very nature is constantly evolving and changing. We must be able to stay current with promising educational uses of technology. This fund would allow schools to apply to the District Learning and Technology committee for up to \$2,400 for a project that utilizes emerging technology to positively impact student learning or district efficiency.

Helps achieve vision themes:

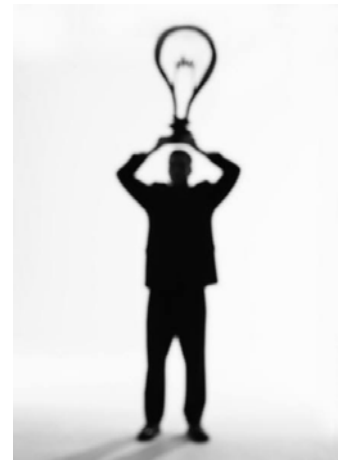
Themes addressed: PD4, PD7, I6, I9, SC3, SC4

How helps achievement

All projects would have to either address student achievement or district efficiency.

How we measure its impact

- All projects require measurements to be built into the project to determine the positive impact in the district
- All projects would have to either address student achievement or district efficiency



Timing

This project could start immediately.

Necessary requirements / assumptions for this project

- Individuals/Schools willing to innovate
- Depends on each individual TIIF project applications
- Projects that require supports or infrastructure that we do not have would need to demonstrate how the prerequisites would be developed within their project.

Cost - \$10,000

Project Name: Elementary Reporting Project

Project Description:

This project is focused on meeting the Ministry reporting requirements through an electronic elementary report card. In 09/10 the district has undertaken a pilot project around the use of a common electronic report card. All elementary schools have participated. By the end of the school year a recommendation will come forward to either deploy the BCeSIS report card throughout the district for all elementary reporting in 2010/2011 or we will need to start a pilot on a different software solution.

Mentors, training and release time to work collaboratively are required to help ensure a successful implementation.

Helps achieve vision themes:

Themes addressed: PD2, PD7, SC3, SC4

How helps achievement

This project helps us meet a legislated requirement. With the achievement data now available in one database it provides opportunity for the district to analyze report card data. Currently we cannot as the data is not housed in any one system. This could be a great source of data for the Achievement Review Committee (ARC).



How we measure its impact

- Anecdotal comments from teachers and parents
- Determine compliance with Ministry reporting legislation
- Survey if after 1 year it reduces the load on teachers around report card time
- Determine if data is used by ARC

Timing

This project would start in September 2010

Necessary requirements / assumptions for this project

- Lead teachers to mentor others in their school
- Technical solution that is satisfactory

Cost - \$33,000

See attached detailed plan and cost breakdown

DRAFT - Elementary Report Cards - Implementation costing - Sept, 2009

| | Staff in 09/10 - Team Leaders | Number of days per team leader | Total days for 09/10 | Cost for 09/10 teachers | Clerical cost for 09/10 | Total costs | Rest of staff in 10/11 **including school based admin | Number of days per rest of staff | Number of days for team leaders | Total days for 10/11 | Cost for 10/11 teachers | Clerical cost for 10/11 | Total costs |
|----------|-------------------------------|--------------------------------|----------------------|-------------------------|-------------------------|-------------|---|----------------------------------|---------------------------------|----------------------|-------------------------|-------------------------|-------------|
| CP | 2 | 3 | 6 | \$2,100 | \$380 | \$2,480 | 7 | 0.5 | 2 | 5.5 | \$2,063 | \$190 | \$2,253 |
| FES | 4 | 3 | 12 | \$4,200 | \$380 | \$4,580 | 18 | 0.5 | 4 | 13 | \$4,875 | \$190 | \$5,065 |
| GES | 4 | 3 | 12 | \$4,200 | \$380 | \$4,580 | 14 | 0.5 | 3 | 10 | \$3,750 | \$190 | \$3,940 |
| KE | 4 | 3 | 12 | \$4,200 | \$380 | \$4,580 | 13 | 0.5 | 3 | 9.5 | \$3,563 | \$190 | \$3,753 |
| MES | 4 | 3 | 12 | \$4,200 | \$380 | \$4,580 | 9 | 0.5 | 2 | 6.5 | \$2,438 | \$190 | \$2,628 |
| RCS | 4 | 3 | 12 | \$4,200 | \$380 | \$4,580 | 10 | 0.5 | 2 | 7 | \$2,625 | \$190 | \$2,815 |
| TR | 4 | 3 | 12 | \$4,200 | \$380 | \$4,580 | 16 | 0.5 | 4 | 12 | \$4,500 | \$190 | \$4,690 |
| WEB | 4 | 3 | 12 | \$4,200 | \$380 | \$4,580 | 9 | 0.5 | 2 | 6.5 | \$2,438 | \$190 | \$2,628 |
| TMS | | | | | | | 7 | 1 | 4 | 11 | \$4,125 | \$190 | \$4,315 |
| Supplies | | | | \$1,000 | | \$1,000 | | | | | \$1,000 | | \$1,000 |
| Total | 30 | | 90 | \$32,500 | \$3,040 | \$35,540 | 103 | | 26 | | \$31,375 | \$1,710 | \$33,085 |

09/10 Pilot

2 primary and 2 intermediate from each site
they act as implementation leaders in following year
3 days each for training and release time to enter report cards - full day training in October 2009
2 days per elementary school clerical time to setup - 1 day in October and 1 day in November
produce all 3 report cards for their homeroom using BCeSIS

10/11 Full implementation

pilot teachers for 09/10 act as implementation leaders
use fall school pro-D day for "training" by implmentation leaders
.5 day for release time/support for each teacher to work with implmentation leader to enter data
implementation leaders get 2/3/4 days (based on size of school) for supporting other teachers
1 day per elementary school clerical time to setup
all teachers, all report cards generated through BCeSIS

Project Name: e-20 – SD20’s Educational Portal

Project Description:

This project is a multi-phase project that has as a vision to provide 24 X 7, online access to resources used to lead or supplement instruction. The portal supports the change in focus from the teacher to the learner in our system. Our district will need to shift from the teacher as provider of knowledge to a model which focuses on students in the centre with staff supporting the student no matter where they are in their learning continuum.

We have a diverse student population with a variety of interests and passions. The teacher will be guiding and supporting the journey of all students on diverse paths to reach the required outcomes.

In order to provide appropriate learning opportunities students will occasionally be “grouped” where it best supports achieving outcomes. Most of these temporary groupings will be physical but in other cases online / virtual discussion groups will best meet the needs of the learner.

We strongly believe that face-to-face classrooms can positively benefit from using online tools and supports to enhance learning opportunities. We believe that each teacher should have an online presence where they can supplement their face-to-face instruction with digital resources.

Again, simply providing the online classroom space is not enough. Teachers will need support in effectively utilizing an online classroom. We do not just want to duplicate the physical classroom experience online. Rather, we want to use the best of both worlds where appropriate.

Helping teachers make those choices, posting information, selecting good resources are just of some the support required if online classrooms are to effectively support face-to-face learning.

If we are encouraging students to learn from anywhere then they must have access to the majority of the resources not only from within the school but as well from home, work, friends, etc.

Whether it is access to their documents from home, online classroom from a coffee shop or participating in a discussion forum about a curricular topic we need to reduce barriers and provide secure access.



This is a paradigm shift whereby we spent a significant amount of time and effort blocking access from the outside. Now we must provide easy, yet secure, access.

The portal would help us reach our school portals vision. Our society is moving to instant, on demand access for information. Weekly newsletters replaced monthly newsletters but people want and demand instant access. School websites or portals become the first place that students and parents come to when they look to access digital assets for a class, information about the school, communicate with staff and communicate with other parents.

Just like school portals the district actively maintains a site for information to stakeholders.

Helps achieve vision themes:

Themes addressed: PD3, PD4, PD5, PD6, PD7, I1, I3, I4, I6, I8, I9, SC3

How helps achievement

Technology encourages individualized learning and improves overall student achievement. Today's students want to use all kinds of technology to help them learn collaboratively, in their own time and at their own pace, and through structured activities that allow for creativity and self-expression. We need to provide a safe, structured environment to support the learning that is directly tied to our learning outcomes.

Additionally, online or e-learning tools can be used to provide access to additional courses for our students. This positively impacts student options as well as our district funding.

How we measure its impact

- Number and duration of students accessing site
- Number of distributed learning courses generated by the district for funding
- Number of course support available online
- Number of school site visits for information

Timing

This project could start at any time but future phases would need to be developed annually.

Necessary requirements / assumptions for this project

- Technical support to provide the actual portal
- Teachers willing to change their practices
- Appropriate project coordinator/leader

Cost - \$140,000

\$100,000 – 1.0 FTE Project coordinator

Phase 1 would see a dedicated project coordinator staffed for year 1 of the project. They would meet with stakeholders to develop the vision. A major part would be researching and prioritizing technical solutions to help achieve the portal's vision. They would also spend approximately 20 percent of the time championing distributed learning initiatives of the district. Another role would be sharing research and best practices around online education.

\$40,000

A pool of release time (125 days) would be provided for course/resource development and staff development. Targeted online courses would start to be developed and or enhanced. Mentors would work with interested teachers in developing modules or full courses in the portal.

Costs in phase 2 and beyond would be determined based on phase 1.

Appendix A - 2006-2009 “Evergreen” Plan

Executive Summary from original plan

School District No. 20 has made efforts in order to provide our schools with the technology required for the curriculum and trying to address the expectations of our students and parents. Technology evolves constantly and unfortunately has a short effective lifespan. Long term commitment is required along with a systematic plan to address the issue of providing adequate resources to meet the curriculum and the growing expectations for technology implementation on our public education system.

Technology implementation throughout the district has fallen below the demands we now put on our school technology. Schools are struggling with aging hardware and software. This struggle is impeding the effective infusion of technology into the lives of our students and staff. Our aged equipment is also requiring additional technical support to keep the systems working. Currently, we tend to address hot spots through 1 time injections of funds and this has added to the inequity around the district and added unnecessary complexity.

This plan will address the hardware, infrastructure and software required for the operations of our schools and the district. It fairly and transparently addresses the wide variety of needs. It is a realistic plan that understands and acknowledges the fiscal reality of public education in BC. It is one of the cornerstone documents of the 3 year District Learning and Technology Plan. It focuses on the “stuff” of the plan. Other documents will address the technical support and professional development needs with regards to effective technology implementation.

This plan can provide a stable platform to “support the journey of all our learners”. The key is a long term commitment to the plan along with the required funds. Without the foundation of solid, reliable, modern systems we will not be able to proceed to transformational changes in our classrooms through the use of technology.

The plan was originally approved as a 6 year continuous hardware and software replacement plan. Given budget pressures, evolving technology and lack of professional development provided in the plan we propose terminating that plan and bring a new focus to technology infusion in the district.

Appendix B – Start/Stop/Continue notes

Themes/Directions we arrived at when reviewing the “we must **start** items” ...

- Utilize and support mobility – anywhere, any devices style usage
- Have classrooms (not labs) be the where technology enhances learning
- Model effective technology integration (21st century classrooms, staff portal, online courses for Pro-D, etc.)
- Support innovation in multiple ways – money, technical support, guidance, risk taking
- Build our system’s capacity - without Pro-D traditional technology usage will not change. Not just Pro-D on software / hardware but also on how / when to use it in the classroom
- Accountability – do we know if it is making a difference?

Themes/Directions we arrived at when reviewing the “we must **stop** items” ...

- Make ensure what we are providing and supporting is moving us in the direction we want to get to
- Leverage the technology to enhance operations and achievement
- Not taking what is working in one place and not replicating it elsewhere
- Providing “tools” without the required “supports”

Themes/Directions we arrived at when reviewing the “we must **continue** items”....

- Supporting technology utilization where it makes a difference
- To have a plan that is followed, supported, reviewed and supported by stakeholders
- Purposeful use of technology – achievement focused
- Support innovation

Appendix C – Common vision

- Individually committee members described where and how technology would support achievement for students in 5 years.
 - We broke into groups of 3 or 4 and shared our individual visions and then each group reported back on shared themes
 - Anywhere, anytime access – same inside and outside the physical building – virtual desktops / cloud resources
 - Learning happens in real time
 - Assistive tech – text < -- > voice pervasive and truly integrates students and supports independence – levels playing fields
 - Less paper based – digital assets, texts
 - Student devices are ubiquitous – tablets/handhelds for all - No longer hide personal devices
 - Facilitation role – not content provider
 - Assessments inform
 - In touch with what is happening in their school real time through personal device
 - More self aware – multiple routes to get from A to B
 - Learning more individualized
 - Teach how to access, create with tools, apply to day-to-day living, share with each other, audience is no longer 1 teacher ... audience is listening – motivator
 - Bigger part of community / province – time zones / borders / districts are irrelevant
 - No longer hour by hour blocks and physical buildings
 - What do we do with the 5 kids without the device?
 - Students make appropriate choices with the use of technology
 - Support face-to-face learning through technology
- Individually committee members described how staff would use technology in 5 years.
 - We broke into groups of 3 or 4 and shared our individual visions and then each group reported back on shared themes
 - Teachers as facilitators / guide / pace setter / advisor /digital guide
 - Similar access to technology as students and providing the resources digitally to students
 - Have same devices
 - Resources reallocated for staff to create, learn, try
 - Collaboration, E-meetings, Pro-D online with some f2f interaction
 - Ability to visit “classrooms” virtually (teacher, peers, parents?)
 - Life skills around tech evolve
 - Evolving roles for Education Assistant
 - Traditional schooling – building, time, location of teacher, 10 months are all changed

- More transparent with parents, community – need to be able to justify
- Project based, offsite learning
- Techs move from supporting devices to training/Pro-D, getting to next level, more peer support
- Business processes supported by same technology as students – collaborative
- Automated and efficient
- Know the tools we already have better
- Truly paperless / electronic records for students
- Advocate for dollars to ensure support is provided
- Break traditional habits
- 21st century classrooms prevalent
- Students driving what our experience will be – they are driving us
- Capture digitally Pro-D events & opportunities to extend, share to others