

2010-2013 Technology & Learning Plan

Vancouver Public Schools

Worksheet – Vision Statement

Technology Vision Statement

- Vancouver Public Schools seeks to provide a learning environment with multiple and varied opportunities available to the learner 24 hours a day, seven days a week and 365 days a year. The learning environment is flexible, dynamic, relevant, engaging and responsive to individual student and instructor needs. Cutting-edge learning tools are pervasive and equitably accessible to all. The learning environment includes expanded local and worldwide connections, enabling students to reach their full potential and to become competitive in the global community. Within this context, technology is used as a tool for communication, collaboration, teaching, learning & productivity.

Worksheet –Technology Goals

Technology Goal – Technology Literacy of 8th-Grade Students

90% of all 8th graders will evaluate at a tier 2 or tier 3 Student Technology Literacy level by June 30, 2013.

Strategy

VPS will research, pilot, evaluate, and implement (as funding sources allow) appropriate student technology platforms at all levels to meet the needs of 21st century learners. The technology platform(s) will incorporate a personalized content and collaboration delivery system (Student Portal) in combination with one to one mobile computing platforms (as appropriate for a student's age level) to facilitate the integration of technology into all curricular areas. Use of this model will increase technology literacy at all levels, having a direct impact on 8th grade technology literacy survey results and student achievement.

Rationale

Research shows that the traditional deployment of computing devices in school environments, with some density of computer labs and other resources scattered throughout classroom and media spaces, does not provide adequate and flexible access to students. Research also suggests that increased density deployments, such as one to one laptop or other mobile device plans, can often fail if the technology tool is not combined with a corresponding shift in teaching practice to take advantage of the new resources. A one to one model with ubiquitous access used to deliver robust and integrated educational content and learning resources will overcome these barriers to innovation and allow immersive technology integration that becomes native to the educational process and prepares students to be life long learners with technology as an instinctive toolset.

Evaluation Procedure

Collect outcome data through the 8th-grade technology literacy survey on PILOT Jr.

Activities & Tasks	Professional Development	Monitoring Effectiveness	Who Is Responsible	Timeline	Resources	Cost & Funding Source
Research, pilot, & evaluate student portal software systems to meet the 21st century learning needs of students, teachers, administrators, and parents.	Staff training on the functional use of a portal as well as the integration of the tool into daily instruction.	Teacher and student satisfaction surveys as part of the pilot process.	ITF, Tech Ops, Curriculum Joint team	1/4/2010 - 1/3/2011	Site visits and training costs	\$1,000.00 ITS Training Budget
Research, pilot, & evaluate wireless infrastructure technologies capable of providing the throughput and client capacity necessary to support the eventual implementation of a one to one mobile device model.	Independent research and vendor presentations, Site visits	Client capacity and throughput testing	ITF & Tech Ops teams	1/4/2010 - 1/3/2011	Wireless Pilot & Capacity testing	\$25,000 – TBD

Research, pilot, & evaluate one to one mobile device hardware and software platforms to deliver a portable student desktop and student portal	Independent research and vendor presentations,	Tech team sustainability analysis Student & teacher focus groups	ITF & Tech Ops teams	1/4/2010 - 1/3/2011	Evaluation and testing of one to one device models	\$2,500.00 - ITS Budget
Research & evaluate creation of STEM based instructional program in concert with WSU Vancouver and Clark College	Site visits	Continuous Improvement Process cycle	Time & Space board subcommittee, ITS leadership team, Planning leadership team	3/2010 - 3/2012	Various	\$5,000 (est.) - General Fund
Implement one to one learning strategy with wireless access and student portal	Instructional staff training on Student portal IT staff platform training	PDSA Improvement Cycle	Tech Planning Team (defined on last worksheet)	9/2012 - 12/2013	Various	\$10,000,000.00 (est.) - Future voter approved funding

Conduct review of existing technology policies (or other) that may create barriers to the implementation of innovative technology solutions	NA		Barriers to innovation Goal team (includes legal counsel)	1/10 – 12/10	NA	None
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Worksheet –Technology Goals

Technology Goal – Technology Integration Skills of Teachers

40% of all teachers will report technology integration skills at the Tier 2 or Tier 3 level by June 30, 2013

Strategy - The strategy and activities associated with this goal area are the same as those outlined in the “Technology Proficiencies of Teachers and Teacher Librarians” goal area as these are integrated efforts in our strategic plan.

In anticipation of the district’s 21st century learning environments initiative, Vancouver Public Schools has formed a team of Instructional Technology Facilitators with a focus on the complementary goals of improving teacher technology literacy and the integration of technology into instruction. The team’s work plan focuses on:

- Researching, evaluating and implementing technology tools and integration strategies that are replicable, scalable and sustainable
- Providing professional development to address the integration of technology with teaching, learning and 21st century skills, based on the Washington State Technology EALRs
- Building professional development and coaching models to expand leadership in the integration of technology

This team works in collaboration with departments including Curriculum and Instruction, Career and Technology Education and Professional Development to coordinate efforts in providing high quality training and support of shared outcomes.

Rationale

School districts spend millions of dollars annually on professional development even though data shows that as little as five percent of this new knowledge is actually applied in the classroom. Educators face a knowing-doing gap between what they learn and what they use in the classroom. In order to close this gap, VPS has chosen to focus efforts on applying and supporting the use of best practices in the classroom through systemic professional development & mentor/coaching.

Evaluation Procedure

Collect outcome data through the classroom teacher proficiency survey on PILOT and data on the percentage of teachers accessing technology integration professional development funds.

Activities & Tasks	Professional Development	Monitoring Effectiveness	Who Is Responsible	Timeline	Resources	Cost & Funding Source
Continue leadership development support of E2T2 competitive grant educator cadre to build technology integration leadership capacity within the district.	As included in Grant Process	Teacher technology proficiency and integration surveys, district data collections	ITF Team	Annually	ITF Team	42 existing grant participants with variable additional grant dollars per teacher per year, paid by Title IID grant.
Continue leadership development support of teacher librarian cadre to build technology integration leadership capacity within the district.	ITF lead media specialists training	Teacher librarian technology proficiency and teacher integration surveys, district data collections	ITF Team	Annually	ITF Team	\$10,000 annually E2T2 flow through funds
Technology tools research and trials	As necessary per toolset	Tech use evaluation form	ITF, CTE, Curriculum	Ongoing	Test equipment as needed	\$10,000 annually, ITS budget
Continue integration training in tech tools, tech based interventions & CTE programs	district & site specific PD courses	Teacher technology proficiency and integration surveys	ITF Team	Ongoing	Teacher training pay	\$10,000 annually – Funded via E2T2 flow-through funds

Worksheet –Technology Goals

Technology Goal — **Technology Proficiencies of Teachers and Teacher Librarians**

70% of teachers and 90% of teacher librarians will report technology integration skills at the Proficient level by June 30, 2013

Strategy – The strategy and activities associated with this goal area are the same as those outlined in the “Technology Integration Skills of Teachers” goal area as these are integrated efforts in our strategic plan.

In anticipation of the district’s 21st century learning environments initiative, Vancouver Public Schools has formed a team of Instructional Technology Facilitators with a focus on the complementary goals of improving teacher technology literacy and the integration of technology into instruction. The team’s work plan focuses on:

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School districts spend millions of dollars annually on professional development even though data shows that as little as five percent of this new knowledge is actually applied in the classroom. Educators face a knowing-doing gap between what they learn and what they use in the classroom. In order to close this gap, VPS has chosen to focus efforts on applying and supporting the use of best practices in the classroom through systemic professional development & mentor/coaching.

Evaluation Procedure

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Activities & Tasks	Professional Development	Monitoring Effectiveness	Who Is Responsible	Timeline	Resources	Cost & Funding Source
Podcast & VideoCast Cadre development	Is a PD activity	Teacher technology proficiency and integration surveys	ITF team	Feb 2010- June 2010	Teacher training pay	\$5000 - Funded via E2T2 flow-through funds
Investigate and procure cost effective on-line PC applications training package for staff use with focus on K-12 education if possible	Is a PD activity	Teacher technology proficiency surveys	ITF team	Sept 2010 – June 2011	Software licensing	\$5,000 - \$20,000 Source TBD
Continue to expand use of data driven decision making at the teaching staff level via existing learner profile application and other tools	Staff training in data driven decision making	Tool use statistics	DD Task Force	Jan 2011- Jan 2012	Data analysis team	None

Worksheet –Technology Goals

Technology Goal – Technology Proficiencies of Administrators

95% of all Administrators will report technology proficiency at the Proficient level by June 30, 2013

Strategy

Vancouver Public Schools will deploy a software based performance management tool-set at the administrative level. The system will compile, track and report on key indicators of performance identified in the strategic planning process, with the intent to define excellence, measure and report progress, and take clear improvement steps based on data.

Rationale

Vancouver Public Schools has a history of gathering data to improve student learning, support teacher effectiveness, and increase efficiencies and cost-effectiveness. During the Design II strategic planning process, participants identified Key Performance Indicators, which span all key areas of the organization, to be used as measures of past, present and future performance. Business intelligence software will present this data to decision makers at all levels of the organization to support intentional, timely and well-informed action steps. Use of the system will enable effective intervention, accountability, and return-on-investment analyses. A model of ongoing training and coaching will ensure the consistent use of data tools for data-driven decision-making. Technology Proficiency Skills identified in the Pilot Survey will be critical to effective use of the data tools.

Evaluation Procedure

Collect outcome data through the Administrators portion of the technology proficiency survey on PILOT.

Activities & Tasks	Professional Development	Monitoring Effectiveness	Who Is Responsible	Timeline	Resources	Cost & Funding Source
Develop and implement actionable views of data based on VPS Key Performance Indicators/Balanced Scorecard	Administrators will participate in Professional Learning Community activities focusing on the use of data tools and decision-making; coaching and mentoring provided by the Data Dashboard team.	<p>Personalized “next steps” based on data-focused conversations</p> <p>Evidence of data use in faculty meetings and communications</p> <p>Data dashboard page counters</p>	Building Administrators, Chiefs of Elementary and Secondary Education, Manager, Information and Instructional Technology, and Data Dashboard Team	<p>Phase I Completion – June 2010</p> <p>Phase II Completion – June 2011</p> <p>Phase III Completion – June 2012</p> <p>Phase IV Completion – June 2013</p>	Existing Data Dashboard Taskforce staff	\$0.00 (Existing FTE resources)
Implement system-wide milestone benchmarks with 5 year stretch targets	K-12 leadership, including building principals and central office administrators for teaching and learning services will participate in ongoing capacity-building and planning workshops, using scheduled K12 Leadership meeting times.	<p>Evidence of strategies to support milestone benchmarks in School Improvement Plans and department or work group plans</p> <p>Evidence collected through leading indicators of identified outcomes</p>	Building Administrators, Chiefs of Elementary and Secondary Education, Teaching and Learning Department, Manager, Information and Instructional Technology, and Data Dashboard Team		Existing Data Dashboard Taskforce staff	\$0.00 (Existing FTE resources)

Worksheet – Narrative, Technology Survey & CIPA Compliance

Technology Plan

All districts complete this section of the district technology plan.

Narrative

Write a **high-level overview** that explains how the building(s) in your district are addressing the need to integrate technology into teaching and learning, as part of their school improvement plan(s).

Vancouver School District's Strategic Plan, Design II, adopted in January 2008, includes goals and strategies to support 21st century learning environments. This goal area also speaks to the use of technology to create flexible learning opportunities for student learning. In addition, the district's Milestone Benchmark work is creating common student learning outcomes across the system.

The district's expectation, supported in the School Improvement Planning process, is that Design II goals and outcomes are addressed in each building's School Improvement Plans. In some cases, this translates into a building- or level-specific goal directed at student achievement and utilizing one of the technology-based intervention curricula, such as Scholastic's Read 180, System 44 or FASTT Math. In other cases, a district-wide goal is implemented at each school to address the Washington State Technology EALRs . An example of district-wide goals include the implementation of an internet safety instructional program at all elementary schools. For district-wide goals, the process established for the spring of 2010 and beyond is as follows:

1. The K-12 leadership group, including all building and program administrators in the area of teaching and learning, meet to generate and evaluate high-impact strategies and activities to meet the goals and outcomes of the strategic plan, including 21st Century Learning Environments.
2. Recommendations are reviewed by a joint team of task force leads and Teaching and Learning administrators in order to address resource implications and ensure maximum impact on outcomes.
3. Task forces with representation from building administrators and teachers assemble to add detail to the implementation plan for the following school year. Details include timelines, roles and responsibilities, budget requirements and annual SMART targets.
4. Information from task forces is communicated back to the K12 Leadership group, with expectations and activities to connect the work to School Improvement Plans and department work plans.
5. School Improvement Plans are reviewed for compliance by the Chiefs of Elementary and Secondary Operations.

Technology Survey & CIPA Compliance

Annual Technology Survey

District has completed the current technology survey and will continue to complete the survey annually.

CIPA Compliance

The district has completed the current Form 479 and will continue to complete a Form 479 annually.

Worksheet – E-rate Priority One

Network & Telecommunications Plan

E-rate Priority One

- All districts complete this section of the network & telecommunications plan.
- Phone service, data — Internet and intranet — K-20 network VC infrastructure, network capability and non-basic telecom services, such as Centrex.

Voice, Data & Video

- Digital Transmission Services (WAN Connections)
- PRI Based Local Telephone Services
- Long Distance Calling Services
- Measured Business Line Service
- CAMA Trunk Service (911 Signaling)
- District Internet Connectivity (via State K-20 Network)
- Cellular Service

Budget & Potential Funding Source(s)

- \$59,503 General Fund-Utilities, \$138,840 E-Rate, Annual (fixed through 2013)
- \$10,035 General Fund-Utilities, \$23,417 E-Rate, Annual (fixed until 2012)
- \$2,256 General Fund-Utilities, \$5,265 E-Rate, Annual (fixed until 2013)
- \$13,801 General Fund-Utilities, \$32,203 E-Rate, Annual (tariffed rate)
- \$236 General Fund-Utilities, \$551 E-Rate, Annual (tariffed rate)
- \$25,000 ITS Budget, Annually (E-Rate discount pass-through from State)
- \$1,380 General Fund-Utilities, \$3,320 E-Rate, Annual

How will these services support your district's learning goals?

The services detailed here support teaching and learning by delivering high speed access to student data, collaboration tools, on-line learning content, and research. These services also facilitate family engagement and emergency communications. These elements are critical as administrators and teachers make decisions that impact instructional practice, curricula quality, administration and the school environment.

Worksheet – E-rate Priority Two

Network & Telecommunications Plan	
E-rate Priority Two <ul style="list-style-type: none"> ▪ Complete only if you plan to request Priority Two services. ▪ Can include ethernet switches, wireless access points, servers, server software, UPS systems, routers, hubs and related maintenance, upgrade and technology support. 	
Internal Network — Hardware & Software	Budget & Potential Funding Source(s)
Full Summary	
<p>VPS has not applied for priority 2 funding in several years as E-Rate priority 2 funding levels have not reached the VPS discount level.</p> <p>At such time as we are ready to move forward with wide deployment of the one to one computing and wireless infrastructures detailed in this plan, we would apply for priority two funding for these major initiatives:</p> <ul style="list-style-type: none"> • One to One Devices • Wireless Infrastructure • Portal Software (if eligible) 	<p>Current cost estimates for a one to one initiative are around \$10,000,000 for capital equipment. At our current 70% discount level we would be responsible for \$3,000,000 of those expenditures with the support of new voter approved funding, with the other \$7,000,000 supplied by E-Rate.</p>
How will these services support your district's learning goals?	These services directly support our primary goals to increase student technology literacy and teacher technology literacy & integration by providing the basis for a robust on-line educational content delivery system.

Worksheet A –Technology Assessment (Standards, Budget, Maintenance, Upgrade & Support)

District Technology Standards, Upgrades & Budget

District Standards for Technology	Budget
<ul style="list-style-type: none"> ▪ Students have access to computers at a 4 to 1 student to computer ratio. ▪ Teachers and office staff have dedicated computers (separate from the student ratio) providing convenient access to both standard productivity software and custom VPS performance management tools. ▪ Current productivity software available to all staff & students includes: GroupWise 8.0 (e-mail), Internet Explorer 8, Microsoft Office XP, & Adobe Reader & the VPS Staff Portal ▪ Countless other educational and administrative applications are supported via central provisioning ▪ Minimum workstation requirements: 100Mbps Networkable workstations with 512 MB of RAM, a 2.4 GHz processor, 40GB HDD and capable of running Windows XP. ▪ All schools staff have access to a high speed MFP (multi-function printer) device with copy, fax, scan and print capabilities including sort/staple options. All school staff also have access to high speed rizograph duplicators. All staff and students have access to black and white laser printers distributed throughout all instructional areas, and other specialty imaging devices as appropriate for specific curricular areas. ▪ All VSD facilities have 100MBs Switched Ethernet connectivity in all classroom and administrative spaces. Our wiring standard includes a goal of one CAT-5 drop per every four students. A typical classroom currently has 6 or 8 drops on average. ▪ All district sites (schools and administrative offices) are connected to the district central office via a fiber based Gigabit Ethernet backbone. ▪ All full time office staff have a digital, multi-line telephone with voicemail. All classroom spaces have an analog telephone with voicemail. ▪ VPS utilizes an identity management system to create, maintain, and synchronize user account information between systems based on employment or enrollment status. ▪ VPS seeks to implement new classroom technology standards with new voter approved funding to include presentation stations with projectors and audio systems in all classrooms. 	<p>The general fund budget allocated to the Information and Technology Services Department and building based technology support totals approximately \$4.5 Million. Of this amount, the following funds are allocated for system upgrades of the central infrastructure:</p> <ul style="list-style-type: none"> ▪ \$750,000 - supplies and equipment for server and network upgrades plus some new systems ▪ \$815,000 - WSIPC fees for student and fiscal systems. <p>Funding for procurement of end user devices traditionally comes from other sources such as:</p> <ul style="list-style-type: none"> • Administrative departments typically refresh their own PC workstations from their own budgets with input from ITS • Teacher PC's have recently been updated with end of year funds from the general fund budget • Student PCs have most recently been updated with Bond funds

<p>refresh/roll-down cycle prioritized annually to fit hardware performance with the needs of specific applications</p> <ul style="list-style-type: none"> • Evaluate and procure Network Backbone hardware at expiration of existing core network lease • The VSD completed an edge network equipment refresh cycle in the summer of 2006, upgrading all edge switches to 100Mbs switched ethernet with Gigabit uplinks. We anticipate a replacement cycle to refresh edge devices district wide by 2013 • Student computing ratios will be maintained as long as possible with maintenance of the existing PC fleet. The one to one student computing initiative outlined in the Goal section of this plan will address the future needs for student computing and may adjust student computing standards as appropriate • The VPS main computer datacenter is currently operating at 85% capacity and will require an expansion to accommodate future growth in demand for services and storage. • Continue funding of the in house hardware repair center to maintain existing PCs and printers fleet • Upgrade District workstation management infrastructure from Novell Zenworks to Novell ZCM to support future Windows 7 clients and address end of life of the current platform 	<p>other key hardware are purchased with standard or extended warranties covering the equipment for three years. Our large fleet of standardized servers allows us to maintain spare parts to extend the life of servers beyond their initial warranty period.</p> <ul style="list-style-type: none"> • The existing building to building WAN infrastructure is procured on a 4 year operating lease due to expire in 2012. The existing budgeted general fund ITS dollars (\$109,000.00 annually) will be used to fund a new lease • The Edge network refresh will require approximately \$50K per year for three years phased at the HS, MS & ES levels • Cost TBD. A one to one student computing initiative would require future voter approved • \$500K via future voter approved funding • Ongoing HW repair shop expenses total approximately \$50K annually from the ITS general fund budget • \$28,000 for hardware and software components from ITS general fund budget 	<ul style="list-style-type: none"> • November 2011 – April 2012 • Summer 2011, 2012, & 2013 • TDB • Summer 2012 ▪ Annual ▪ April-July 2010
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How will these services support your district's learning goals?	The infrastructure detailed in this plan lays the foundation necessary to directly support all teaching and learning goals that have a technology based strategy. The delivery of 21st century learning tools in support of instruction to 22,000 students will require a high capacity, centrally managed computing environment with superior reliability. The infrastructure will also directly support the delivery of performance management tools to decision makers at all levels of the district.
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Worksheet – Review & Update

Technology Plan Review & Update		
All districts complete this section of the district technology plan.		
Strategies for Evaluation & Update	Person or Team Responsible	Timeline
<p>Vancouver Public Schools, via the Design II strategic planning process, has established a standards based strategy for continuous improvement. This process makes use of the PDSA Improvement Cycle (Plan, Do, Study, Act) to support staff at all levels of the organization.</p> <p>As initiatives mature from the planning to the implementation phases, work teams stay in existence to track the sustainability and performance of all initiative related activities via the continuous improvement process.</p> <p>All teams will utilize the data dashboard system as appropriate to monitor and report progress across the system using identified KPI's.</p> <p>Details of this continuous improvement methodology can be seen in the Design II strategic plan document uploaded as a "Custom Data" element with this district technology plan.</p>	<p>Structures in support of technology specific strategic planning initiatives at various levels include:</p> <ul style="list-style-type: none"> ▪ Board level subcommittee for "Time and Space" strategic priorities ▪ Taskforce specific teams for each goal area ▪ Implementation teams for each target initiative <p>The Technology Planning Team is comprised of the following representatives who have developed this plan and will continue with it's review and update:</p> <ul style="list-style-type: none"> ▪ Chief Technology Officer ▪ Manager, Curriculum & Instruction ▪ Manager , Instructional Technology ▪ Director, Professional Development ▪ JPCC Administrator/Home Connection Principal/Virtual Learning Programs ▪ Technology Operations Manager ▪ Media Specialist - Instructional Technology Facilitator ▪ Teacher - Instructional Technology Facilitator 	<ul style="list-style-type: none"> ▪ March 2010. District Board of Directors approves the district technology plan. ▪ June 2010. Office of Superintendent of Public Instruction approves plan. ▪ March 2011. Technology Planning Team review & update to "Time and Space" subcommittee. ▪ March 2012. Technology Planning Team review & update to "Time and Space" subcommittee. ▪ November 2012. Begin to develop the new three-year technology and learning plan or update existing plan. ▪ March-April 2013. Complete new plan & approval cycle