South Portland School Department

Technology Plan 2005-2007

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__1. Community and Parental Involvement__ – Involve a broad representation of the school community in the planning process. Include a description of how the technology will be used effectively to promote community and parental involvement and increase communication with parents, including a description of how parents will be informed about the technology and its proper use.

A major focus of the District has been the improvement of our web pages and how we can use them to communicate information to parents, community members, and a larger audience of people considering employment or residence in South Portland. We have a centralized webpage which holds many forms and communications that come from our Central Office. Each school also has an individual page and the building administrator acts as the "editor in chief."

All of our schools use technology to create a newsletter which they send home to parents. This newsletter is also published digitally. A frequent column details the use of technology in our schools. To communicate how technology is used to the greater public we frequently work with local papers to create stories and press releases. Also, all of our public meetings are broadcast on local access television, and the topic of educational technology is frequently on these agendas. Lastly, each school holds an open house annually and the Technology Integration Specialists (TIS) work with classroom teachers to showcase student work.

This past year we also began using group emailing to communicate school related information to parents and community members. Currently it is used primarily for weather related cancellations and news, however we are investigating an expansion of more general information to those who wish to receive it. The "Alerts Email" has received tremendous public support and praise.

A goal is to have more student involvement in technology planning. We currently do have students who serve on interview panels for hiring of Technology Integration Specialists. At the end of this year an "InfoTech Team" was formed. This group includes the technology director, TISs, building administrators and librarians. We will add a

student and a regular education teacher to this group in an effort to expand our

stakeholders in the technology planning process.

*2. **Vision** - Establish a vision statement linking the tools of technology with areas such as curriculum content, instructional practices, professional development strategies, and enhanced services. (If you have already established a school or district-wide vision statement you may use it rather than establishing a separate statement, so long as it encompasses the requirements above.)*

The vision for the South Portland School Department is that technology can (1) enhance and enrich curriculum, (2) improve communications, and (3) improve productivity.

*3. **Goals** – Articulate specific goals, aligned with the Maine Learning Results, for using advanced technology to improve student academic achievement.*

Our Technology Goals are:

Our students will learn to solve problems cooperatively through teamwork assisted by appropriate technologies. They will use various technology and traditional resources to become "collaborative and quality workers" and "creative and practical problem solvers."

Our students will develop an appreciation for and the ability to use technology in problem solving situations. They will become data bases, and other resources."

Our students will have opportunities to work with voice, video, and data technology in an atmosphere conducive to their varied learning styles.

Our students will have equitable access to computers and other technology tools where instructional needs are best served.

Our students will be educated on the ethical use of technology, and how technology is changing the world in which we live in the hopes that they become "responsible and involved citizens"

Our students will be provided with a range of experiences designed to develop the technological skills necessary to function responsibly in life situations marked by rapid technological change.

Our staff will be supported by ongoing professional development and information skills experts at all levels (librarians, literacy specialists, technology integration specialists), so that they will have the skills to effectively use technology in their classrooms.

Our Local Comprehensive Assessment System will have technology embedded in all of the content areas.

4. Identify Necessary Technology – *Include a technology assessment. Gather information about technology currently in use so that what will be needed to meet new goals can be determined. Include a list of the equipment and telecommunication services that are necessary to reach the goals.*

The South Portland School Department is fortunate to have adequate financial support from our School Board and City Council. We are very well equipped with modern servers which are the brains of our technology infrastructure.

Goal #1   Our current WAN is 9 years old and is in dire need of an upgrade as spare parts are no longer manufactured or readily available. Upgrading this network is the number one technical goal (which also has implications to effective use of educational technology). We have acquired $275,000 in network hardware, and will be installing it by Fall of 2005.

Goal #2   The traditional goal of a computer in every classroom was long ago met. However many of these machines are inadequate. A review of our inventory reveals that 25% of our machines are below our minimum requirements for acceptable donations. South Portland School Department is currently wrapping up a 4 year project of renovating four of elementary schools and closing two others. While we are investigating the idea of closing one of our middle schools, this is an unlikely possibility. That being said we are confident that we have arrived at our final configuration of schools, and this makes a replacement plan for classroom computers much easier to articulate. In essence our goal is to make the purchase of classroom computers an expected an annual expense, and an entirely separate budget line. We can maintain that for $100,000 per year we can arrive at a five year lifespan for classroom computers.

Goal #3   Beyond teacher access to a computer in their workspace, the Technology Committee believes that true technology integration is best achieved by using mobile computers, digital peripherals and SmartBoard technology. We have a goal to increase access to SmartBoards by 50% over the next three years. While we await information on the MLTI's future, we have purchased 125 non MLTI laptops for students over the past 2 years. We will buy 40-60 additional laptops per year to move closer to one-one access to computers for our students at ALL grade levels. This is of course contingent upon MLTI and EPES figures.

5. *Collaboration with Adult Literacy Service Providers* – *Describe how the program will be developed, where applicable, in collaboration with adult literacy service providers.*

While South Portland Schools do not have an Adult Literacy program *per se*, there are many instances where we work with students who are not following the traditional path of an in school K-12 education. For various reasons, some students work off site with the aid of a tutor or a full time teacher. Our goal is to provide access to coursework through online "E-Learning" software. We have come one step closer to this goal with the purchase just this month of PLATO software, which will enable the non traditional learner to experience rigorous coursework and work toward mastery of standards, regardless of where they are physically located.

6. *Strategies for Improving Academic Achievement and Teacher Effectiveness* – *Describe how funds, specifically Ed Tech funds where applicable, will be used to improve academic achievement, including the technology literacy of all students attending schools served by the SAU; and describe how funds expended will improve the capacity of all teachers in schools served by the SAU to integrate technology effectively into curricula and instruction.*

Each summer our staff is invited to various professional development opportunities which are funded by NCLB Title 2D monies. Of particular success has been our Summer Technology Institute (www.spsd.org/sti) where staff members for one week are immersed in a technology based project which they will use in their classroom the following school year. As we reopen our newly renovated schools, the elementary level staff is given a two

day introduction to the considerable new technologies which include SmartBoards, projectors and laptop computers. New this summer is an offering by the InfoTech Team of the Big-Six model of research, which wonderfully blends technology and library skills (http://resources.spsd.org/downloads/BIG6__2.pdf). Ongoing, school-year, staff development includes informal 2 hour after school "quick shops" on various strategies to integrate technology, use resources, or build basic computer skills. Lastly, we are experimenting with "just in time" professional development offered during the school day to our teachers who are given release time, covered by a "roaming" substitute teacher. All of these efforts to improve teacher effectiveness with technology are funded by Title 2D.

From our regular budget we have hired Technology Integration Specialists (TIS) at all grade levels. While we do offer technology specific courses at the 6-12 level, we have reduced these offerings in favor of an integrated approach of technology instruction. Our TIS work with the classroom teacher on units or projects and "infuse" them with technology in an effort to build skills among the staff and the students. At the lower grade levels direct skills instruction does take place under the direction of the TIS, and these skills are reinforced by integration into a culminating project or unit. In 2004 we hired a TIS for the high school, and we have hired a half time TIS for one of our elementary schools. A goal for 2006 is the addition of another TIS at the high school so that each TIS has a student load of about 475. South Portland has devoted considerable financial resources to this goal and is seeing the results in greatly improved student and faculty technology literacy. So much so that the technology curriculum in the middle grades s constantly in revision due to the quick learning and mastery of skills by or elementary students. In addition, basic computer literacy courses and typing have become virtually unnecessary at the high school and have been removed from the course of studies.

Staff are required to work with the TIS to create technology integrated units. TIS also work "behind the scenes" to examine common assessments and determine how they might be imbued with technology skills so that all of our staff and students are reached. This is a challenge in a school system of our size, but a definite district goal, supported strongly by the Curriculum Director.

Basic, day-to-day use of technology is expected of all teachers who enter grades, attendance, and communicate with parents, colleagues and students electronically.

7. Integration of Technology with Curricula, Instruction, and Assessment – *Describe how technology (including software and electronically delivered learning materials) will be integrated into curricula, instruction, and assessment and include a timeline for this integration.*

Over the past few years South Portland Schools have been working on their Local Common Assessment System (LCAS). This has been a great time to revise our curriculum and aligned it with the Maine Learning Results. It also affords an opportunity for our many schools to offer common units, projects, assessments and experiences to our students. The TIS and Technology Coordinator have been asked to look at the work of the content area teachers and find ways to integrate technology. This process is ongoing. This has been a great way to be sure technology skills are being taught at all levels and in all schools equitably.

Another chance for equal distribution of computer hardware and software was the renovation of most of our elementary schools. We were able to design a template which ensured equal access to technology (hardware and software). We also adopted a new budget model whereby schools paid into a central fund a per pupil allowance for technology (as opposed to the building based spending of the past). This allows for equity of access to similar technology, which in turn allows equal expectations of teachers for integration at all schools. It also makes professional development uniform and replicable at each building.

With the recent formation of our Infotech Team, we have set the goal of creating a guide to technology skills and integration K-12. This work will begin this Fall as the team is given release time to accomplish the important goal. Currently there exists a K-5 curriculum guide (attached in Publisher) which will serve as our model.

8. Technology Type and Costs, and Coordination with Funding Resources –
Develop a step-by-step action plan, with timeline, that includes goals, activities, required hardware and software, costs, and funding sources. Describe the type and costs of technology to be acquired and how it fits within the current structure (use the list developed in the technology assessment in # 4, above.). Designate sources of funding, specifically Ed Tech funds, E-Rate funds, and funds from other Federal programs, and state and local sources that support technology acquisition and integration. (The example below is available as an Excel document for an optional template).

TECHNOLOGY TYPE, COST, AND FUNDING SOURCE

GOALS	ACTIVITIES	HARDWARE/SOFTWARE	COSTS	FUNDING SOURCE
Ongoing Staff Dev.	STI, Quickshops, Release Time sessions, Orientations (2005-2007)	Varied	Instructor pay $15,000	NCLB Title 2D & Offices of the Supt. And Curr. Coordinator
Up to Date PCs in Every Classroom	Buy new machines each year. Establish predictable expenditure budget (2005-2007)	PCs and monitors	$100,000 annually	Building Budgets and Local Operating Budget
Increase use of Distance Learning facility	A/C, new furniture, SmartBoard (2005)	A/C, new furniture, SmartBoard	$20,000	Maintenance Requests
K-12 Technology Curriculum Guide	Infotech team meetings (2005)	Publisher, Access and Word	$0 - $2,000	Substitute Budget for release time.
"Smart" classrooms	Equipment purchase and installation (2005-2007)	SmartBoards, LCD projectors, DVD players, surround sound systems	$60,000 annually	Per Pupil Technology Allowance
Increased one-one access	Equipment purchase (2005-2007)	Purchase mobile laptop carts for all elementary schools. Purchase additional cart for HS	$100,000	Per Pupil Technology Allowance
Increased Staff for tech Integration	Hire 1.5 TIS 2005-2006	Additional staff at HS and Elem to increase staff development and technology use	$80,000	Local Budget
New WAN Hardware	Installation of purchased equipment 2005	Cisco routers and switches	$300,000	Already funded from Reserve Accounts

9. Supporting Resources *– Describe the supporting resources such as services, software, other electronically delivered learning materials, and print resources that will be acquired to ensure successful and effective uses of technology.*

The South Portland Schools have recently purchased software that will track student progress. One component will allow parents to log into a website to see how their children are doing in school.

In the Fall of 2005 we plan on opening web access to our students so that they can access all of their school files at home, and easily upload work they have done outside of school.

Staff will have a new icon on their desktops by the Winter of 2005 which will facilitate technology support. This will be used to ensure that their computers are in good operating condition, and will allow use to centrally manage calls for tech support (whether it be how to integrate technology, or how to format a paragraph in a word processor).

Our web designer is continuing his work on a resources page, where many common files and templates can be found, as well as a "How To" section to address needs of staff.

All of South Portland's libraries (public and school) are now using the Minerva system.

10. Steps to Increase Accessibility *– Describe the steps being taken to ensure that all students and teachers have increased access to technology. The description must include how Ed Tech funds, if applicable, will be used to help students in high-poverty and high-needs schools, or in schools identified for improvement or corrective action under Section 1116 of Title I; and how the steps taken will ensure that teachers are prepared to integrate technology effectively into curricula and instruction.*

As stated above in various sections, we are constantly striving to equip our students, staff, and classrooms with the latest technology equipment and software. We are very much focused on one to one access to technology, despite the financial challenges that

presents. In the past 2 years we have added student access to over 125 non MLTI laptops, and will be purchasing 40 more this summer.

By opening up our file servers to outside storage and access, we are effectively removing the barrier between home and school, thereby increasing student, parent and staff access significantly (a study reveals over 92% of families have internet access at home). That being said, we will work to find ways for impoverished students to access online resources from home, or after school in our labs and libraries. We do, on a limited basis, loan out laptop computers, as well as participate in a program that rehabilitates older machines to give to families who cannot afford computers.

***11. Promotion of Various Curricula and Teaching Strategies that Integrate Technology** – Describe how various curricula and teaching strategies that integrate technology effectively into the general curriculum and instruction will be identified based on a review of relevant research, and promoted to lead to improvements in student academic achievement*

The TIS in each building plays the important role of "technology advocate." She/He routinely contributes to newsletters, or writes email to staff, highlighting and encouraging best practices in technology integration. Also building based Open Houses serve as showcases for success stories in technology, and share with the community the great work our students are doing.

Our Infotech team has been a leader in presenting to staff at all levels the Big-6 model of research. Along with other staff members, they will continue to lead staff development such as the STI and Quickshops which promote the integration of technology.

Finally, as we finalize and begin to implement our LCAS, teachers will be in a way "forced" to employ proven teaching strategies in their unit assessments, portfolios and/or activities.

12. Professional Development – *Describe how ongoing, sustained professional development for teachers, principals, administrators, and school library media personnel will be provided to further the effective use of technology in the classroom and library media center.*

Ongoing, school-year, staff development includes informal 2 hour after school "quick shops" on various strategies to integrate technology, use resources, or build basic computer skills. During the summer our staff is invited to various professional development opportunities. Of particular success has been our Summer Technology Institute (www.spsd.org/sti) where staff members for one week are immersed in a technology based project which they will use in their classroom the following school year. As we reopen our newly renovated schools, the elementary level staff is given a two day introduction to the considerable new technologies which include SmartBoards, projectors and laptop computers. New this summer is an offering by the InfoTech Team of the Big-Six model of research, which wonderfully blends technology and library skills (http://resources.spsd.org/downloads/BIG6__2.pdf).

This Spring we experimented with technology based professional development offered during the school day to our teachers who are given release time, covered by a "roaming" substitute teacher. We found this to be an effective, yet expensive, model. We want to find ways to educate our staff during the course of their existing work day.

A professional development goal of the Infotech Team is to have a "Year of Technology." We are crafting a proposal to the school administration that would make 50% of the one full year's staff development (early and full release days) Technology focused. We are looking to the year 2007 as most staff release days are currently dedicated to other District goals and initiatives (LCAS, Differentiation, MLR etc).

All staff, ed techs, teachers, principals, clerks are entitled to reimbursement for courses taken outside of our District. We encourage people to take technology related classes, and routinely share and post information about such offerings beyond the walls of our schools.

Also, as mentioned above, our TIS work with teachers informally and formally each day to help develop their technology and integration skills.

13. Innovative Delivery Strategies – *Describe how the development and use of innovative strategies for the delivery of specialized or rigorous courses and curricula through the use of technology, including distance-learning technologies, will be encouraged, particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources.*

South Portland School Department is currently part of the ATM Distance learning network. That being said there has not been enough use of the Distance learning equipment since its installation beyond community & staff use for meetings. We feel this lack of use stems from a number of sources:

1. lack of understanding of DL
2. robustness of elective offerings @ SPHS and nearby colleges/institutions
3. poor room choice (small, hot space, with no furnishings)

To remedy this situation we have come up with a multipart plan:

1. air conditioning to be installed (Summer 2005)
2. installation of SmartBoard to increase room use (Summer 2005)
3. custom made furniture (Fall 2005)
4. investigate and promote "virtual field trips" (Summer/Fall 2005)

14. Accountability Measures – *Describe the process and accountability measures which will be used to evaluate the extent to which the plan activities are effective in integrating technology into curriculum and instruction, increasing the ability of teachers to teach, and enabling students to reach Maine's Learning Results.*

Each TIS keeps a detailed log of consultations and collaboration with classroom teachers. As all teachers are expected to work with the TIS, accountability is "built in" and building administrators oversee this process.

Many forms and information are now only available online. This ensures that teachers have the basic skills to function in a technological world. By 2007 all teachers will be

required to maintain an online grade book and syllabus. Currently grades 6-12 teachers do daily attendance and performance reporting on the computer. Each elementary teacher creates progress reports on a computerized form. Furthermore, all teachers will work within the LCAS and therefore be required to use educational technology.

The Infotech team intends on devising and phasing in over three years a program of educational technology literacy. It is our hope that employment in our schools is contingent upon a willingness to improve student performance via the integration of technology into the curriculum.