

# **Yakutat School District Technology Plan 2008-2011**

## **YSD Mission Statement**

The mission of the Yakutat School District is to provide each student with positive educational experiences in a broad range of subjects that reflect community values and individual needs. These experiences will be provided in a safe environment that will foster academic excellence, creativity, and promote cooperative and individual achievement. Students will learn and practice the skills necessary to participate as a responsible citizen in a global society.

## **Technology Vision Statement**

**“The convergence of media and technology in a global culture is changing the way we learn about the world and challenging the very foundations of education. No longer is it enough to be able to read the printed word; children, youth, and adults, too, need the ability to both critically interpret the powerful images of a multimedia culture and express themselves in multiple media forms. Media literacy education provides a framework and a pedagogy for the new literacy needed for living, working and citizenship in the 21<sup>st</sup> century. Moreover it paves the way to mastering the skills required for lifelong learning in a constantly changing world.”**

**Elizabeth Thoman and Tessa Jolls  
Media Literacy: A National Priority for a Changing World**

People need to be prepared for the complex world of the future because technology is the bridge to the 21<sup>st</sup> century. Students and staff need to be prepared for the workplace environment that they will encounter outside of school. Yakutat City Schools will address the needs of students and staff to use instructional technologies efficiently and effectively. High levels of technology proficiency allow for greater and more creative use by students and teachers. Higher level of use by students and teachers need an educational system that supports the skill sets required in the 21<sup>st</sup> century. Educators for the Yakutat City Schools will identify the skills necessary to be successful in the 21<sup>st</sup> century and carefully align them with the Content and Performance Standards for Alaska Students, conventional academic standards, and classroom practices. These aligned academic standards will be authentic, culturally sensitive, and intellectually challenging for students to fully realize technology’s most positive effects.

Technology provides tools for storing, accessing, and presenting vast amounts of information. Power for learners lies in the amount of access they have to information, their ability to evaluate information and to apply that information to what they already know. In doing so, learners

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construct new ideas and build meaningful connections to their existing knowledge base. It is important to create information sharing environments and promote cooperative interactions within each classroom, school community, the world—and beyond.

Technology will be used in a practical context that respects the special needs and talents of each individual and enables each person to develop new capabilities. This use of technology stimulates, challenges and engages all users enabling them to evaluate the potential of technology in the present and future. Users will understand the legal and ethical responsibilities of technology use.

## **School Board Adoption**

The Yakutat School District Technology Committee completed its annual review of the district's technology plan in the spring of 2008. The Yakutat School District Technology Committee revised the Yakutat School District Technology Plan for certification as required by the Alaska Department of Education and Early Development. The Yakutat School District Technology Committee will present the Technology Plan to the Yakutat Board of Education for adoption in July 2008. The technology committee's goal is to develop and implement a comprehensive technology plan to support high levels of technology proficiency and develop the skill sets required by students and teachers in the 21<sup>st</sup> century.

## **Persons Involved in Crafting the Plan**

The Technology Committee consists of:

Rose Fraker:	Student
Cherise Ryman:	Student
Carol Pate:	Parent & YSD certified staff
Velvet Ivers:	Parent & YSD certified staff
Rhoda Jensen:	Parent
Tina Ryman:	Board President & Parent
Joy Klushkan:	Business Manager
Howard Diamond:	YSD Superintendent
Ken Caron:	YSD Technology Director & certified staff

## **Instructional Technology**

We live in a digital age. Our students have access to greater amounts of information, more people and new ideas with increased options for learning, communicating and working. Life and school tasks are increasingly Internet dependent with low-income students at a potential disadvantage. Broadband access is becoming the norm for many activities by students, which places more pressure on schools to provide broadband Internet access. Additionally, these resources are changing what, how and when students learn.

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*Learning for the 21st Century*, a report published by The Partnership for 21st Century Skills, a public-private coalition ([www.21stcenturyskills.org](http://www.21stcenturyskills.org)), contends that, "Today's education system faces irrelevance unless we bridge the gap between how students live and how they learn." The Partnership for 21st Century Skills recommends that schools focus on six key elements of 21<sup>st</sup> century learning.

The elements identified include:

- Emphasize Core Subjects – No Child Left Behind identifies conventional academic skills as English, reading or language arts, mathematics, science, foreign languages, civics, government, economics, arts, history and geography. Without these foundation skills, access to the tools of technology will be of little benefit leaving little opportunity for students to realize their full potential to successfully live, learn and work in the 21<sup>st</sup> century.
- Emphasize Learning Skills – "To cope with the demands of the 21st century," the report states, "students need to know more than core subjects. They need to know how to use their knowledge and skills-by thinking critically, applying knowledge to new situations, analyzing information, comprehending new ideas, communicating, collaborating, solving problems, and making decisions."
- Use 21<sup>st</sup> Century Tools to Develop Learning Skills – Students need to be familiar with the tools that are a part of everyday life and the workplace in a digital world. Students should possess information and communication technologies (ICT) literacy skills.
- Teach and Learn in a 21<sup>st</sup> Century Context – Academic content needs to be learned in real-world examples, applications and experiences. Establish meaningful learning opportunities that occur beyond the four walls of the classroom.
- Teach and Learn in a 21<sup>st</sup> Century Content – Content essential for preparing students to live and work in a 21st century world include knowledge and skills in global awareness, financial, economic and business literacy, and civic literacy.
- Use 21<sup>st</sup> Century Assessments that Measure 21<sup>st</sup> Century Skills – Schools need to go beyond standardized testing instruments by utilizing a balance of assessments that will measure the elements of a 21<sup>st</sup> century education.

Yakutat City Schools has completed its realignment in the language arts, math, science and social studies curriculum areas with the state content and performance standards, as well as the technology, employability, and cultural standards. The Technology Goals and Objectives identified on pages 8 – 13 encourage the acquisition of the skill sets identified by the *Learning for the 21st Century*, report.

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## **District Integration Narrative**

In partnership with parents and community, our mission is to provide a supportive climate where all students are challenged through a holistic approach to develop a core of basic knowledge, technical ability, self-sufficiency, confidence and self-esteem; and to develop a sense of responsibility to and respect for a diverse community as individual and team problem solvers, and to become lifelong lovers of learning.

Today, understanding and using technology is an integral part of every aspect of daily life. For this reason, it is imperative that students and staff utilize technological tools and skills that are integral to all content areas. The Yakutat School District envisions learning environments where the tools of technology are as *transparent* and functional as paper and pencil.

To this end, the stakeholders of the Yakutat City Schools participated in an on-line survey, Professional Practices Inventory assessment, to help the technology committee establish a framework for effective technology use in school. The survey targeted stakeholders based on their roles – educator, district administrator, building administrator, building technology coordinator, district technology coordinator, board member, community member, student and parent. Survey results provides baseline data in the use of instructional technologies as teaching and learning tools, the level of integration of technology in curricula and instruction, establishes the needs for ongoing professional development, and will provide guidance in the planning for the system wide use of educational technologies.

The Professional Practices Inventory framework identifies average skill levels for the Yakutat School certified and some classified staff. The report will be analyzed by the technology committee and recommendations will be provided to all stakeholders.

The data collected from the Professional Practices Inventory survey will be useful for the Yakutat City Schools Technology Committee to build a shared, community-based vision that prepares students to learn, work, and live successfully in the Digital Age, baseline stakeholders' perceptions of the use of instructional technologies as a teaching and learning tool, identify user levels by students and staff, and provide guidance to outline a plan for ongoing and sustainable professional development during the course of this technology plan.

Yakutat City Schools stakeholders will be asked to take the Professional Practices Inventory survey in March of each year of the plan so that the Technology Planning Committee can compare the results with the data gathered in March of 2008. The comparison of the data sets will demonstrate the level of growth in the use of instructional technologies as teaching and learning tools, the level of integration of technology in curricula and instruction, the effectiveness of the ongoing professional development provided by the district, and the overall success of system wide use of educational technologies by Yakutat City Schools students and staff.

Yakutat School District's communications network including computers, WAN and LANs, Internet access, satellite and television systems, and enhanced telephone technology facilitate

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learning, expedite communication, and enrich our communities. Students, parents and educators use telecommunication resources and information technologies to enhance and expand the traditional role of education. While our basic goal is to prepare our students for lifelong learning and success in a changing society, the tools and instructional methods to achieve this goal have advanced dramatically. E-Rate funds significantly subsidize Yakutat School District's ability to provide students and staff transparent and dependable telecommunications services.

Educators are helping students to learn and grow during a time of an unprecedented revolution in technology. Education is experiencing an explosion in e-Learning and Virtual Schools. e-Learning environments include a virtual community of people who share some common ideas, interests, feelings and space over the Internet or over some other communication network. According to the United States Department of Education, 38% of all K-12 public schools offer some form of individual online instruction. e-Learning expands course offerings for students and increases professional development opportunities for teachers.

Technology helps students learn, solve problems, and interact with a wide variety of resources within and beyond the classroom walls. Effective software and e-Learning resources will be an integral part of the Yakutat School District 's curriculum. High quality and engaging software with e-Learning resources that are directly related to the school's curriculum will increase students' learning opportunities.

Most significantly, is the need for students and staff to develop the skills and strategies to successfully participate in e-Learning environments including Interactive Instructional Video to support personal productivity, remediate skill deficits, and facilitate learning throughout the curriculum. Staff will need to develop strategies to guide e-Learning learning opportunities in the classroom environment. Yakutat School District will provide students and staff learning opportunities to develop skills and strategies to successfully participate in e-Learning environments. This is especially critical given the size of the student population of Yakutat School District, Yakutat School District's remote location, and the lack of sufficient resources to meet all of the academic needs of the students as identified by No Child Left Behind.

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Yakutat Board of Education will be presented with the revised goals, strategies and objectives in the Yakutat School District's Technology Plan in July 2008. Adoption of the will take place by September 2008. The goals and objectives will provide learning opportunities/activities for students through:

- Keyboarding
- Data processing and information management
- Use of technology in classroom instruction
- Computer-aided instruction
- K-12 content specific software
- Multimedia and Web page design
- Internet use for projects, research, and cultural exchange
- e-Learning opportunities

These activities can provide students the information literacy skills essential for active participation in an information-based society. Additionally, these activities will empower students with skills and strategies to be successful in school and help students to meet state academic standards. Students will be prepared to meet or exceed minimum performance standards on the SBA's in grades 3-10, the TerraNova CAT/6 in grades 5<sup>th</sup>, & 7<sup>th</sup> District Writing Assessment and High School Graduation Qualifying Exams in grades 10<sup>th</sup> through 12<sup>th</sup>.

The Yakutat School District provides district wide and site based training opportunities for staff and students. The staff and students have made steady progress in each of the goal areas identified in Yakutat School District's Technology Plan. Yakutat School District will continue to support staff development opportunities at the district and site levels. The Yakutat School District will continue to provide district wide and site based training opportunities for staff and students. We will provide an educational setting where technology enables the staff and students to live, learn and work successfully in an increasingly complex and information-rich society.

Through technology, the Yakutat School District will be empowered with the skills to share with the global community its unique heritage, scenic beauty, and ancient wisdom. In turn, Yakutat will receive from the global community greater understanding of other cultures, increased access to information, a more complete view of the world and participation in the world economic market.

The District Technology Team shall work to support teachers in technology integration. The District Technology Team will do this annually by performing needs assessments, evaluating and assessing current hardware use to determine future needs, sharing successful practices, and suggesting future in-service topics.

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## **Curriculum Integration**

Many educators, whether using technology or not, have found that students are more engaged in the learning process when they participate in a class-based project. When technology is used as a mode of production for these projects, “the teacher becomes a leader and a mediator, directing students toward resources. These resources range from the dictionary, encyclopedia, and library book to Web sites or Internet connections with experts. Technology allows students to become fully immersed in authentic content and complex problems” (Soos, 2001).

Yakutat City Schools has completed its realignment in the language arts, math, science and social studies curriculum areas with the state content and performance standards, as well as the technology, employability, and cultural standards. New methods of communication, social networking, will push our local educational community to develop new forms of interaction and assessment. (The Horizon Report 2008)

The technology director has worked with several staff members and their students in the elementary and high school to integrate technology into their projects. The yearbook itself is developed completely with the district’s technology. This year we plan to include a DVD to it. Internet, email, digital cameras and appropriate software are now all in place for the staff to use.

With technology, mentoring is to be accomplished through cross-grade school-wide projects within thematic units. Performance standards, key elements, and grade and course objectives have all been developed and aligned with technology in the four completed areas of Language Arts (reading and writing), Math, Science and Social Studies, K-12. It was found in a California study that “alignment of project or lesson content with state content standards is an important first step to infusing technology with curricula. A survey of 465 teachers in California resulted in 92% affirming that the first step in infusing technology into the curriculum is having information about the specific content of a program or use of an application that aligns with state-adopted curriculum standards. A number of the respondents indicated that an online resource that profiles electronic learning resources with the specific skills in knowledge areas that align with content standards would help them select programs that will facilitate curriculum integration with technology” (Cradler & Beuthel, 2001).

To meet the demands of 21<sup>st</sup> Century workplace requirements, activities must be designed to “help students become information seekers, analyzers, evaluators, innovative thinkers, problem solvers, decision makers, and producers of knowledge” (Porter 15). “Webbased tools are rapidly becoming the standard, both in education and in the workplace. Technologically mediated communication is the norm. Fluency in information, visual, and technological literacy is of vital importance, yet these literacies are not formally taught to most students. We need new and expanded definitions of these literacies that are based on mastering underlying concepts rather than on specialized skill sets, and we need to develop and establish methods for teaching and evaluating these critical literacies at all levels of education.” (The Horizon Report 2008)

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## **YSD Goals and Objectives**

**First. All Yakutat School District students and staff will receive training in current and emerging technology.**

- Objective A: All staff will receive annual in service training in the use of current hardware and software technology tools.
- Objective B: The district will send a minimum of two staff members to a technology training conference on an annual basis (e.g. Alaska Society for Technology in Education (ASTE). Upon their return to the district, attendees will utilize collaborative time for training the rest of the staff.
- Objective C: The students will receive on-going training and support in the use of hardware and software technology tools.

**Second. The Yakutat School District will maintain and improve the technology infrastructure.**

- Objective A: Increase educational opportunities through the use of VTC classes or other innovative technology.
- Objective B: Hire 0.5 Distant Ed. Coordinator to help research, expand and facilitate VTC classes and/or other online/distance courses.
- Objective C: District will maintain a minimum of one certificated/endorsed technology coordinator, 0.5 FTE position.
- Objective D: Provide sufficient bandwidth for all educational services.
- Objective E: Purchase computers for student one-to-one laptop initiative.

**Third. All Yakutat School District students and staff will incorporate technology to locate, manage, evaluate and share information.**

- Objective A: Users will be able to identify, examine, and select relevant information from a variety of media by applying research strategies.
- Objective B: Students and staff will exchange ideas globally using a variety of publishing tools.
- Objective C: Staff will identify and integrate a variety of Internet educational resources into curriculum areas.

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- Objective D: YSD will upgrade our SIS (eg. PowerSchool) to increase stakeholders' collaboration on student data.

### **Fourth. All Yakutat School District students and staff will use technology responsibly and understand its impact on individuals and our global society.**

- Objective A: Discriminate between responsible and irresponsible uses of technology.
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- Objective B: Respect others' right of privacy in electronic environments.
- Objective C: Demonstrate ethical and legal behavior regarding intellectual property.
  - a. Copyrights
  - b. Software licensing
  - c. Internet responsibilities

## **National, State and Local Standards & Strategies**

At the current time, the standards based curriculum has been integrated at every level for the state's technology standards in language arts, math, science and social studies. The rest of the technology curriculum is based on the following profiles, standards and outcomes:  
(This material has been adapted or used, by permission, from the ISTE National Educational Technology Standards for Students. See Appendix E)

National Educational Technology Standards for Students, Second Edition, C  
2007, ISTER (International Society for Technology in Education),  
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### **National Educational Technology Standards for Students: The Next Generation** **“What students should know and be able to do to learn effectively and live productively in an increasingly digital world ...”**

#### **1. Creativity and Innovation**

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:

- a. apply existing knowledge to generate new ideas, products, or processes.
- b. create original works as a means of personal or group expression.
- c. use models and simulations to explore complex systems and issues.
- d. identify trends and forecast possibilities.

#### **2. Communication and Collaboration**

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.  
Students:

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- a. interact, collaborate, and publish with peers, experts or others employing a variety of digital environments and media.
- b. communicate information and ideas effectively to multiple audiences using a variety of media and formats.
- c. develop cultural understanding and global awareness by engaging with learners of other cultures.
- d. contribute to project teams to produce original works or solve problems.

### **3. Research and Information Fluency**

Students apply digital tools to gather, evaluate, and use information. Students:

- a. plan strategies to guide inquiry
- b. locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media.
- c. evaluate and select information sources and digital tools based on the appropriateness to specific tasks.
- d. process data and report results.

### **4. Critical Thinking, Problem-Solving & Decision-Making**

Students use critical thinking skills to plan and conduct research, manage projects, solve problems and make informed decisions using appropriate digital tools and resources. Students:

- a. identify and define authentic problems and significant questions for investigation.
- b. plan and manage activities to develop a solution or complete a project.
- c. collect and analyze data to identify solutions and/or make informed decisions.
- d. use multiple processes and diverse perspectives to explore alternative solutions

### **5. Digital Citizenship**

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior. Students:

- a. advocate and practice safe, legal, and responsible use of information and technology.
- a. exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity.
- b. demonstrate personal responsibility for lifelong learning.
- c. exhibit leadership for digital citizenship.

### **6. Technology Operations and Concepts**

Students demonstrate a sound understanding of technology concepts, systems and operations. Students:

- a. understand and use technology systems.
- b. select and use applications effectively and productively.
- c. troubleshoot systems and applications.
- d. transfer current knowledge to learning of new technologies.

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### **A. Grades PK-2 Profile/Strategies:**

Prior to completion of Grade 2, students will:

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1. Use simulations and graphical organizers to explore and depict patterns of growth such as the life cycles of plants and animals.
  2. Illustrate and communicate original ideas and stories using digital tools and media-rich resources.
  3. Use developmentally appropriate multimedia resources (e.g., interactive books, educational software, elementary internet resources) to support learning.
  4. Engage in learning activities with learners from multiple cultures through email and other electronic means.
  5. Demonstrate safe and cooperative use of technology.
  6. Create developmentally appropriate multimedia products with support from teachers, family members, or student partners.
  7. Independently apply digital tools and resources to address a variety of tasks and problems.
  8. Gather information and communicate with others using virtual environments, with support from teachers, family members, or student partners.
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1. Debate the effect of existing and emerging technologies on individuals, society, and the global community.
  2. Discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use.
  3. Use general-purpose productivity tools and peripherals to support personal productivity, remediate skill deficits, and facilitate learning throughout the curriculum.
  4. Use technology tools (e.g., multimedia authoring, presentation, Web tools, digital cameras, scanners) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom.
  5. Practice injury prevention by applying a variety of ergonomic strategies when using technology.
  6. Use online resources (e.g., e-mail, online discussions, Web environments) to participate in collaborative problem-solving activities for the purpose of developing solutions or products for audiences inside and outside the classroom.
  7. Use technology resources (e.g., calculators, data collection probes, videos, educational software) for problem solving, self-directed learning, and extended learning activities.
  8. Determine which technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems.
  9. Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources.

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## **C. Grades 6-8 Profile/Strategies:**

### **Prior to completion of Grade 8, students will:**

1. Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use.
2. Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society.
3. Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse.
4. Use content-specific tools, software, and simulations (e.g., environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research.
5. Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum.
6. Design, develop, publish, and present products (e.g., web pages, DVDs, PDFs, movies, podcasts) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom.
7. Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom.
8. Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems.
9. Employ data-collection technology such as probes, handheld devices, and geographic mapping systems to gather, view, analyze, and report results for content-related problems.
10. Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems.

## **D. Grades 9-12 Profile/Strategies:**

### **Prior to completion of Grade 12, students will:**

1. Identify capabilities and limitations of contemporary and emerging technology resources and assess the potential of these systems and services to address personal, lifelong learning, and workplace needs.
2. Select digital tools or resources to use for a real-world task and justify the selection based on their efficiency and effectiveness.
3. Analyze advantages and disadvantages of widespread use and reliance on technology in the workplace and in society as a whole.
4. Model legal and ethical behaviors when using information and technology by properly selecting, acquiring, and citing resources.

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5. Use technology tools and resources for managing and communicating personal/professional information (e.g., finances, schedules, addresses, purchases, correspondence).
6. Evaluate technology-based options, including distance and distributed education, for lifelong learning.
7. Create and publish an online art gallery with examples and commentary that demonstrates and understanding of different historical periods, cultures and countries.
8. Select and apply technology tools for research, information analysis, problem-solving, and decision-making in content learning.
9. Collaborate with peers, experts, and others to contribute to a content-related knowledge base by using technology to compile, synthesize, produce, and disseminate information, models, and other creative works.

### **Staff Development**

Educators can integrate technology into their professional lives by modeling appropriate usage for students, designing lessons integrating technology into the students' day, and by continuing their professional development.

Yakutat City Schools uses a variety of models for training and for on-going professional development. Staff should be able to use computers comfortably and confidently. Computer use by staff can include email, grading, research, lesson plans, developing classroom materials, visual presentations, and use social networks for collaboration with other educators. This will help develop students' perspectives for potential uses of computers as learning tools, especially, students who see computers primarily as a means for entertainment.

Effective technology training programs for teachers offer "incentives and support, teacher-directed training, adequate access to technology, community partnerships, and ongoing informal support and training opportunities" (Bowman Alden, 2002). The Technology Director and committee members for the Yakutat City Schools coordinate courses and workshops. Courses are offered in a variety of formats and times, including time during and outside of the school day and the school year. Some are offered intensively and some are spaced out over time to provide for practice. Yakutat City Schools has participated in the ARCTIC program which trained mentor teachers that supports staff learners with a help network.

"To be effective in schools and classrooms, teachers and administrators need training, tools and proficiency in 21st century skills themselves. Used comprehensively, technology transforms standards and assessments, curriculum and instruction, professional development, learning environments, and administration." (Maximizing the Impact: The pivotal role of technology in a 21st century education system, 2007)

The most effective "programs survey teachers' needs and develop training sessions around these topics" (Bowman Alden, 2002). Technology proficient educators agree, "dedicated training followed by 'playing' and 'trial and error' . . . is the way that every technology pro has learned"

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(Hopkins, 1999). Also, a technology staff development plan must be timed right to allow for teachers to benefit from its instruction given their hectic schedules (Jackson, 2003).

The utilization of technology mentors to aid fellow peers in the understanding and use of technology is a strategy adopted by the Yakutat City Schools. Mentor systems are based on the principle of guidance, not management (Jackson, 2004). These models are an easier as a form of instruction over traditional methods of teaching, especially amongst educational professionals (Jackson, 2004). Technology training is on-going through staff mentoring, staff technology instruction on in-house hardware and software, and trouble-shooting.

“Such technologies as videoconferencing, online learning, networking and instant messaging can support professional development and professional learning communities. Using technologies like these, educators can learn and collaborate with peers, mentors, experts and community members routinely. They can build ongoing professional relationships, develop capacity in teaching 21st century skills, benefit from just-in-time communications, and reduce the time and expense of travel.” (Maximizing the Impact: The pivotal role of technology in a 21st century education system, 2007)

By involving Yakutat City Schools’ staff in identifying training needs, and providing opportunities for training and mentoring, we are able to facilitate and meet the goals of our technology plan.

At the present time, partners for staff development include the University of Alaska - Southeast, SERRC - Alaska’s Educational Resource Center, Alaska Staff Development Network, Quality Schools trainers, the Department of Education and Early Development, our own technology coordinator who was trained in Ohio in the ARCTIC program.

Yakutat City Schools will continue to provide teachers with the knowledge and skills they need to enhance their lessons with technology. Before expecting teachers to effectively integrate technology, Yakutat City Schools will make training convenient and appropriate, and provide teachers with time to learn the technology (Starr, 2003). The staff is involved in determining the kinds of training opportunities they will receive, and are able to come to a consensus on what will be most beneficial to them. Yakutat City Schools will continue to survey and involve staff to determine areas of training. The District will use the Professional Practices Inventory to gather information on staff development. See Appendix B for a copy of the survey and results.

### **Staff Needs Assessment**

In the Spring of 2008, the staff at Yakutat School District completed the Professional Practices Inventory. This survey provides data and guidance regarding professional development, assessment of our telecommunication services, hardware and software that is used as instructional technologies to improve educational services, and is an evaluative tool to monitor progress toward the specified goals articulated in this plan. Appendix B.

The Professional Practices Inventory is part of a comprehensive review of technology integration in the Yakutat School District. Yakutat School District’s Technology Committee will use survey

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results for technology planning purposes to provide Yakutat School District staff ongoing, sustainable professional development to further the effective use of technology in the classroom as a learning tool to improve educational services and student academic achievement.

The results of this year's teacher need's assessment shows that the YSD staff had the highest skill level, by standard, in Personal & Professional Use of Technology. At the other end of the spectrum, Research & Evaluation of Technology Use and Assistive & Adaptive Technologies were the lowest. There is a wide range of technology skills among Yakutat's small staff. The YSD Technology Committee will meet with teaching staff to determine the best possible in-service instruction for the District. See Appendix B for the full report.

The integration of the technology that the district has at this time will improve as the staff has more exposure and training. More staff development will need to be given in this area, but the emphasis will be in technology integration, development of student multimedia projects to demonstrate learning, and standards integration with technology in teaching, learning, and assessment.

The Yakutat School District will use the Professional Practices Inventory annually to monitor the technology plan's progress. The technology committee will use survey data to make the necessary adjustments to the technology plan and its goals in response to identified staff needs. The technology committee will meet regularly and position itself to respond to new developments and opportunities as they arise. Additionally, the technology committee will use evaluations of from professional development trainings and in-service to determine their effectiveness and make decisions regarding future offerings.

### **Resources for Staff Development**

At the present time, partners for staff development include the University of Alaska, SE; Southeast Regional Resource Center, Alaska Staff Development Network and Quality School trainers, ASTE, ISTE, and the Department of Education and Early Development. The staff is involved in choosing from a list of training provided by partners, and is able to come to a consensus on what will be most beneficial to them.

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## **Inventory**

There are two buildings in Yakutat that are about 350 yards apart. One houses the elementary school and one houses grades 7-12. These two buildings are connected by fiber optic line. Each of these buildings houses a Macintosh computer lab. The high school has a 10 MacBook mobile lab and a stationary lab with 19 Macintoshes. The elementary school has 15 eMacs in its lab. Every classroom has at least three Macintosh computers along with a teacher station. YSD has two Xserves that house district information and a PowerSchool server for our SIS. The business office has a Windows server and computers for their needs. There is other technology that is found throughout the schools such as projectors, scanners, whiteboards, copy machines, faxes and printers. Our current SIS software is PowerSchool. District software includes Adobe Creative Suite (Extended version for Photoshop), Microsoft Office, AppleWorks, FileMaker Pro, Final Cut Express, Final Cut Studio and others.

## **Wiring & Network Description**

The district network infrastructure is comprised primarily of Category 5, Unshielded Twisted Pair (UTP), 4-pair cable, wired and tested to support data transfer rates up to 1 GB. The network standard is 1 GB BaseT Ethernet for all LAN sites. Physical backbone connections are extended with the fiber optic system where distances exceed the 90-meter limit for UTP.

## **LAN Protocols/Telecommunications Software**

TCP/IP is the routed protocol for the district. Some Apple Talk support is provided at LAN level. TCP/IP stacks are provided for Apple and Microsoft operating systems and host platforms. A variety of browser software is used to connect to the Internet.

Connections to the Internet and CIPA/N-CIPA (filtering) requirements are provided by GCI. Appendix D contains Yakutat School District's board policies regarding Internet Use by students and staff. This includes the *Internet Use Form*, and policies regarding Internet content filtering, Protection Act (CIPA).

## **Upgrades, Maintenance and Obsolescence Strategies**

### **First. Replacement schedule using the Technology Special Revenue fund**

- Strategy A: Budget annually for replacement/upgrades of software and hardware.
- Strategy B: Budget annually for purchase of computers to refresh them approximately every four years.
- Strategy C: Budget annually for purchase of equipment recommended by the technology review committee.

# **Yakutat School District Technology Plan 2008-2011**

## **Second. Maintenance of hardware**

- Strategy A: One person makes up the data processing department, charged with maintaining networks, computer hardware, network hardware, and the network operating system, additionally with initial troubleshooting at the building and program levels.
- Strategy B: Annual preventative maintenance on all machines.

## **Third. Regular disposal schedule**

- Strategy A: Sales, recycling, etc.

## **Fourth. Technology Plan Review Cycle**

- Strategy A: The Yakutat School District will complete an annual review of the plan during the three-year cycle.

## **Acquired Technology**

At the current time we have three multimedia projectors to be used by both schools. In the 2007-2008 school year, the District upgraded its storage with new Xserve hardware and software. This change has helped students considerably in organizing their work flow. It has also helped staff access and work with students in a more collaborative manner.

iMovie, FinalCut Express, and FinalCut Studio are used as video production tools. Dreamweaver is utilized for website production. PhotoShop and Quark Express have greatly enhanced and the Yearbook construction and publication. They are also tools for multimedia in curriculum integration of “best practice” techniques for student presentations and computer knowledge as well as teacher instructional methods. YSD is currently reviewing web based tools to decrease district costs and increase student collaboration both locally and globally.

We have upgraded our business hardware and accounting software. A new video surveillance system has been installed because of vandalism and drug use on school property, especially on weekends. Our COPS in School resource officer has provided training for staff that is in charge of surveillance equipment.

As a matter of procedure, we update computers school-wide on a rotating basis. Fifty percent of undesignated funds from the school-operating budget is added to the technology special revenue fund each fiscal year to cover hardware and software costs.

Students use the computer and network resources as a learning tool. Students participate in the use of Renaissance Learning software, Accelerated Reader and Math programs and the S.T.A.R. Math, Reading, and Early Literacy assessment programs. This suite of software provides instructional staff timely, accurate, objective information they can use to personalize instruction and accelerate learning for students of all ages and abilities.

# **Yakutat School District Technology Plan 2008-2011**

Accelerated Reader and Math programs are oriented to increase basic reading and math skills, but have the resources to challenge students at all levels. These programs can be used on a daily basis and be integrated as part of the regular classroom curriculum. Active participation by students will increase reading and math skills.

The S.T.A.R. Math, Reading, and Early Literacy programs are computer-adaptive assessment tools that we are currently using to provide student progress information. Students are tested on a semiannual basis to determine baseline data and to monitor student progress for determining student program adjustments. These assessments are used in addition to state standardized test scores to measure the effectiveness of the student achievement using instructional technologies.

## **Supporting Resources to Be Acquired**

The YSD Technology Committee will meet at least twice a year, fall & spring, to review new technology purchases for the district.

The district will continue to update existing resources such as Microsoft Office, Photoshop, Quark and others. We recently updated our Star Reading and Math software components to meet new technology requirements. This will continue to be an ongoing component for each year of the plan.

During the timeframe of this plan, the addition of white boards, video conferencing equipment, PDA's, graphing calculators and other emerging technology will be add to Yakutat School District as indicated by research and funding.

We maintain a technology special revenue fund (approximately \$40,000) to upgrade hardware, software, and telecommunications. Our E-rate grant has been very beneficial to the district and we intend to keep applying for it.

See Appendix E for timeline of Technology To Be Acquired.

## **Funding**

To realize the effective use of information and communication technologies by students and staff, Yakutat School District actively uses a number of funding sources to support instructional technologies. Funding sources for the next 3 years include a special revenue technology fund contributed to each year by excess in the general budget at the end of the year, our E-Rate grant, and any other grant money we might be able to acquire. See Appendix E for timeline of Technology To Be Acquired as well as the funding source and approximate costs for 2008-2009.

For connectivity and infrastructure, Yakutat School District relies heavily on E-Rate funds. E-Rate provides subsidies for connectivity to the Internet, building and maintaining communications systems, and developing and maintaining expanded network systems. Without these network and communication systems, students and staff will not fully realize instructional technologies most positive effects. E-Rate funds help Yakutat School District provide students

## **Yakutat School District Technology Plan 2008-2011**

and staff transparent and dependable telecommunications services. These services will allow for the exploration, adoption and transformation of new learning environments filled with information sharing, research, collaborative learning and the exploration of e-Learning opportunities that are possible with instructional technologies by students and staff.

E-rate funds are earmarked to help pay for nearly 90% of the allowable expenses for Internet connection and telephone services. Funding is itemized on the Budget/Inventory Analysis for E-Rate Components worksheets ( Appendix C) required to demonstrate Yakutat School District's ability to acquire and pay for all of the E-Rate ineligible services and equipment that is needed to reach the educational goals (e.g. training, infrastructure, software, etc.).

### **Policies and Filtering**

Our Internet provider, GCI School Access, provides filtering. The Yakutat School District has board policies regarding Internet Use by students and staff. Students are required to submit an *Internet Use Form* with student and parent signatures. Users of Yakutat School District's network services understand their rights and responsibilities and the consequences for not following the contract, mainly ending their use of those privileges. There will be revision of our policies in the fall of 2008 to accommodate one-to-one computers for our students. See Appendix D for BP6161.4, AR6161.4, E6161.4, AR6161.5.

### **Equity**

Yakutat School District is 75% Tlingit population with the gender population spread throughout evenly. Also, 75% qualifies for free and reduced lunch. All our students have access to all technology in both the high school and the elementary school. No child is restricted except on the basis of a disciplinary action having to do with the misuse of the Internet.

### **Alliances and Partnerships**

The Yakutat School District partners with the Yakutat Tlingit Tribe in extending technology to the community and Tlingit Elders. Classes are offered in the evenings at the high school. YSD and the Yakutat Tlingit Tribe are currently working on a world language project to bring Tlingit into the school, community and beyond using iPods and server based applications.

The district goal for increased community accessibility for instructional technologies is facilitated by the community's use of the School district's library services. It is the only library in Yakutat, Alaska and is open on a scheduled basis for community use. Community members have access to technology resources for e-Learning opportunities. Yakutat City schools will continue to make these resources available to the community and explore other opportunities for program development.

### **Access & Parent Involvement**

# **Yakutat School District Technology Plan 2008-2011**

PowerSchool has increased the parental role in student education within the district. Parents have immediate access to student data such as grades, attendance, historical data and discipline issues via the Internet. Teacher and parent contact is tracked to help monitor student progress as all parties work together to educate our children. Student access to the database was about 95% in the first year. We consider this a great success as students became more engaged and responsible for their academic progress. Parental involvement and access have followed the same pattern. This has helped increase parent/teacher relations and continue growth in the students of Yakutat School District.

Yakutat School District believes that a student information system (SIS) is an effective use of technology to

1. generate data analysis to guide curriculum and instruction at the classroom, school, and district level.
2. promote parental involvement and increased communication with parents. It will also help the district to meet NCLB requirements by using research based instruction methods, student accountability, streamline multiple data sources and empower parents to guild their child's education.

It is widely accepted and supported by research that parental involvement is positively linked to student achievement. Some of the benefits of parent involvement include higher grades and test scores, and more effective schools. At the same time, schools are becoming increasingly accountable and need to become more efficient at managing the student data that must be reported.

By implementing and utilizing a student information system, teachers can communicate clearly the standards to be met and keep track of their students' progress more effectively; in addition, once the student data is entered, it can be immediately communicated to all of the other stakeholders with no additional time or preparation.

A web-based student information system promotes parental involvement and fosters communication among students, parents, and teachers about curricula, assessments, assignments, and attendance.

## **Effects of Technology on Student Achievement**

Each year the staff will continue to be involved in determining the kinds of training opportunities they will receive, and come to a consensus on what will be most beneficial. Based on staff input through the use of category specific surveys, Yakutat School District Technology Committee will identify the areas of greatest need and focus training accordingly. The Yakutat School District Technology Committee will identify or develop specific assessment survey tools for students and staff based on the Professional Practices Inventory assessment used this year to evaluate growth.

## **Yakutat School District Technology Plan 2008-2011**

Additionally, the staff is generating data driven student profiles and reports through the use of PowerSchool for evaluation purposes. They are also learning to use this data for student performance evaluation and to guide instructional practices to improve student achievement.

Assessment instruments used this past academic year included:

- Kindergarten Development Profile
- HSGQE
- Terra Nova CAT/6 for 5<sup>th</sup> and 7<sup>th</sup> grades
- SBA 3-10
- Standards Based Assessment
- Renaissance Learning Software

The S.T.A.R. Math, Reading, and Early Literacy programs are computer-adaptive assessment tools that we are currently using to provide student progress information. Students are tested on a semiannual basis to determine baseline data and to monitor student progress for determining student program adjustments. These assessments are used in addition to state standardized test scores to measure the effectiveness of the student achievement using instructional technologies.

# Yakutat School District Technology Plan 2008-2011

## Alignment Examples

These tables illustrate some of Yakutat School District’s alignment of math, science, language arts, and history content standards to state technology standards. Content standards examples are in parenthesis.

<b>Technology Standard</b>	<b>YSD Students K-12</b>
Standard A: A Student should be able to operate technology-based tools.	Students will use the Microsoft Office Suite of tools for desktop publishing in language arts classes. (LA-A1-2, 5, 7, C1-5, D1-3, E3)
	Students will create digital projects or documents using task appropriate tools. (SCI-A1, GEOG-A2, 4, F4)
	Excel spreadsheets will be created to record and interpret scientific data. (M-A1-6, B1, 2, 4,6, C1-3, D2, E1)
	Graphing calculators will be used to solve mathematical models. (M-A3, 4, B1, D2)
	Students will utilize networks for cooperative learning projects locally & globally. (GOV-E3, LA-A7, C5, HIS-C1, 3, D6)
	Students will create science reports and projects by using laboratory data collection tools. (LA-A1-2, 5, 7, M-A3, SCI-A1-3, E1-3)
	Students will create multimedia projects to explore, disseminate & relate Yakutat culture to other groups. (SCI-F1-3, GEOG-D2, W.LANG-B1)

## Yakutat School District Technology Plan 2008-2011

<b>Technology Standard</b>	<b>YSD Students K-12</b>
Standard B: A Student should be able to use technology to locate, select and manage information.	Students will develop research strategies to evaluate digital resources. (LA-B1-3, D2, 3)
	Students will create PDF documents to manage student portfolios. (LA-A1-2, 5, 7, C2,4, 5, M-C2)
	A variety of media resources will be accessed by students for educational experiences. (LA-A1, 6,7, HIS-A7, D1-6)
	Students will evaluate digital resources to determine the accuracy of the content.

## Yakutat School District Technology Plan 2008-2011

Technology Standard	YSD Students K-12
<p>Standard C: A Student should be able to use technology to explore ideas, solve problems, and derive meaning.</p>	<p>Students will use digital recording tools to create scientific research projects. (LA-A1-2, 5, 7, C1-5, D1-3, E3, SCI-F1-3)</p>
	<p>Students will collaborate and publish history projects using web based tools such as blogs, wikiis, and UTube. (HIS-C1, 3, D6)</p>
	<p>Spreadsheets will be created to illustrate, reinforce and expand math concepts. (M-A1-6, B1, 2, 4,6, C1-3, D2, E1)</p>
	<p>Graphing calculators will be used to analyze data, find patterns and create mathematical models that will help explore local issues. (M-A1-6, B1, 2, 4,6, C1-3, D2, E1)</p>
	<p>Student will conduct science experiments using digital devices. (M-A3, SCI-A1-3, E1-3)</p>

Technology Standard	YSD Students K-12
<p>Standard D: A Student should be able to use technology to express ideas and exchange information.</p>	<p>Students will illustrate and communicate original ideas and stories using digital tools. (LA-A4-7, B3, E4, HIS-C1, ARTS-A5)</p>
	<p>Students will publish and exchange ideas utilizing social networking for educational purposes. (LA-A1-2, 5, 7, C1-5, D1-3, E3, HIS-C1, 3, D6, SCI-F1-3, GEOG-D2, W.LANG-B1)</p>
	<p>Students will use presentation technology for public speaking projects. (LA-A3, 7, ARTS-A3, W.LANG-B1)</p>
	<p>Students will incorporate images, movies and other digital data into documents to facilitate the exchange of ideas and information. (LA-A1-2, 5, 7, C1-5, D1-3, E3, HIS-C1, 3, D6, SCI-F1-3, GEOG-D2, W.LANG-B1)</p>

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**Review, Revision and Progress Towards Plan Goals**

The Technology Committee reviews the Technology Plan annually. We will realign and adjust our plan and accordingly. The review and revision of this plan take place in the spring of each year by the Technology Committee. Revision of the standards based curriculum will take place at the end of each semester based on student achievement and staff needs through in-services.

Yakutat School District will annually evaluate its efforts towards achieving its long and short-term tech plan objectives. Further, the district will disseminate the information to district stakeholders. In addition, the results will be available to the Alaska Department of Education to assist with its own analysis. The information will help the District administration and technology team monitor emerging technology and its uses, including telecommunications capabilities, collect data on effective integration methods, and adjust its technology plan in response to new developments and/or opportunities as they arise.

Our evaluation will be linked to our vision statement, strategies and goals. The evaluation will include a cyclical review of the progress toward our goals. The members of the technology committee will conduct this review annually. Revisions will be made to the technology plan as research dictates.

# Yakutat School District Technology Plan 2008-2011

## Appendix A: Timeline for Plan Strategies and Actions

Year of Plan	Year 2008-9	Year 2009-10	Year 2010-11
<b>Element of the Plan</b>	<b>Needs assessment</b>	<b>Needs assessment</b>	<b>Needs assessment</b>
<b>Starting Date</b>	March 2009	March 2010	March 2011
<b>Ending Date</b>	April 2009	April 2010	April 2011
<b>Persons Responsible</b>	Superintendent District Technology Committee Technology Director	Superintendent District Technology Committee Technology Director	Superintendent District Technology Committee Technology Director
<b>Element of the Plan</b>	<b>Realignment of Curriculum and Technology</b>	<b>Curriculum Integration</b>	<b>Curriculum Integration</b>
<b>Starting Date</b>	September 2008	September 2009	September 2010
<b>Ending Date</b>	October 2008	October 2009	September 2010
<b>Persons Responsible</b>	Certified Staff Technology Director Principal	Certified Staff Technology Director Principal	Certified Staff Technology Director Principal
<b>Element of the Plan</b>	<b>Staff Development</b>	<b>Staff Development</b>	<b>Staff Development</b>
<b>Starting Date</b>	Fall, 2008	Fall 2009	Fall 2010
<b>Ending Date</b>	Spring 2009	Spring 2010	Spring 2011
<b>Persons Responsible</b>	Superintendent Technology Director	Superintendent Technology Director	Superintendent Technology Director
<b>Element of the Plan</b>	<b>Funding Review</b>	<b>Funding Review</b>	<b>Funding Review</b>
<b>Starting Date</b>	May 2009	May 2010	May 2011
<b>Ending Date</b>	June 2009	June 2010	June 2011
<b>Persons Responsible</b>	Superintendent Business Manager	Superintendent Business Manager	Superintendent Business Manager
<b>Element of the Plan</b>	<b>Acquisition</b>	<b>Acquisition</b>	<b>Acquisition</b>
<b>Starting Date</b>	September 2008	September 2009	September 2010
<b>Ending Date</b>	May 2009	May 2010	May 2011
<b>Persons Responsible</b>	Technology Director, Certified Staff	Technology Director, Certified Staff	Technology Director, Certified Staff
<b>Element of the Plan</b>	<b>Evaluation of Tech. Plan</b>	<b>Evaluation of Tech. Plan</b>	<b>Evaluation of Tech. Plan</b>
<b>Starting Date</b>	March 2009	March 2010	March 2011
<b>Ending Date</b>	May 2009	May 2010	May 2011
<b>Persons Responsible</b>	Superintendent Tech. Director, District Tech. Committee, Certified Staff	Superintendent Technology Director, District Technology Committee, Certified Staff	Superintendent Tech. Director, District Technology Committee, Certified Staff

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**Appendix B:**

**Yakutat School District  
Technology  
Professional Practices Inventory**

**Executive Summary Report**

**Prepared by  
School Perceptions LLC  
March 28, 2008**

# **Yakutat School District Technology Plan 2008-2011**

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# **Yakutat School District Technology Plan 2008-2011**

## **Overview**

The ***Technology Professional Practices Inventory*** was conducted for the Yakutat School District in February and March of 2008 by School Perceptions L.L.C. School Perceptions has worked with hundreds of school districts throughout the country and is regarded as one of the nation's leading experts on gathering and analyzing school data.

### **The Objective of the *Technology Professional Practices Inventor*:**

- ✓ To expose each staff members to a comprehensive array of technology practices and skills - some of which they may not have been familiar with or have even considered.
- ✓ To help identify areas where the staff needs additional professional development
- ✓ To identify areas where staff members have expressed an interest in receiving additional information and / or training.

### **Overall**

The ***Technology Professional Practices Inventory*** results will provide the Yakutat School District with a good data set from which to begin analyzing alternatives for future decisions. These decisions are never easy and this survey tool should be one of many factors influencing the direction you choose to take.

**Yakutat School District Technology Plan  
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**Skill Levels**

## Yakutat School District Technology Plan 2008-2011

<b>Skill Levels by Standard</b>		
<p>This chart lists the standards in rank order based on your staff's average self-assessed skill level score. The score in each standard can range from 10 up to 40. (If every staff member rated themselves at the highest level in all items within a standard the score for that standard would be 40.)</p>		
Rank	Item	Score
1	Personal and Professional Use	20.35
2	Professional Development/Growth and Communication	18.42
3	Technical Operations and Concepts	17.77
4	Instructional Software Use	15.49
5	Student Assessment	15.35
6	Fostering Home/School Communications	15.22
7	Research and Evaluation of Technology Use	12.36
8	Assistive and Adaptive Technologies	11.94

### **Analysis:**

The staff scores highest in Personal and Professional Use of Technology. The lowest ranked standards are Research and Evaluation of Technology Use and Assistive and Adaptive Technologies.

## Yakutat School District Technology Plan 2008-2011

<b>Skill Levels by Item</b>		
<p>This chart lists all items from the inventory in rank order based on your staff's average self-assessed skill level score. The score for each item can range from 10 up to 40. (If every staff member rated themselves at the highest level for an item on the inventory the score for that item would be 40.) The top five and bottom five items are highlighted.</p>		
Rank	Item	Score
1	<b>Personal and Professional Use:</b> Use technology for electronic communication	25.00
2	<b>Personal and Professional Use:</b> Use word processing software	25.00
3	<b>Personal and Professional Use:</b> Conduct research online	23.88
4	<b>Professional Development/Growth and Communication:</b> Use Internet resources to obtain research, teaching materials, lesson plans and information related to the content of my classes	22.22
5	<b>Personal and Professional Use:</b> Use presentation software	20.55
6	<b>Student Assessment:</b> Utilize an electronic grade book to keep track of student data	20.55
7	<b>Professional Development/Growth and Communication:</b> Use electronic resources for professional growth	20.55
8	<b>Technical Operations and Concepts:</b> Manage data in files and folders	20.55
9	<b>Personal and Professional Use:</b> Use a variety of browsers and Boolean searches with a variety of search engines	20.55
10	<b>Personal and Professional Use:</b> Use technology to organize and plan my time / tasks	20.00

## Yakutat School District Technology Plan 2008-2011

11	<b>Fostering Home/School Communications:</b> Utilize email communication with parents	20.00
12	<b>Technical Operations and Concepts:</b> Install software / download updates	20.00
13	<b>Personal and Professional Use:</b> Understand the ethical and legal issues concerning the use of computers	19.44
14	<b>Professional Development/Growth and Communication:</b> Utilize distance learning opportunities in the use of technology	18.88
15	<b>Technical Operations and Concepts:</b> Troubleshoot printer problems	18.88
16	<b>Technical Operations and Concepts:</b> Determine my computer's RAM and hard drive configuration	18.88
17	<b>Personal and Professional Use:</b> Use technology to improve collaboration with others	18.33
18	<b>Student Assessment:</b> Utilize the computer to conduct student assessments	18.33
19	<b>Personal and Professional Use:</b> Use of telecommunication devices	17.77
20	<b>Personal and Professional Use:</b> Use spreadsheets software	17.77
21	<b>Instructional Software Use:</b> Teach students to gather, organize, and present information to solve real life problems in the classroom	17.77
22	<b>Instructional Software Use:</b> Teach students to integrate the tools of technology to gather, organize and share information to demonstrate their learning	17.77
23	<b>Professional Development/Growth and Communication:</b> Read electronic newsletters and journals to keep current on educational practices	17.77

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24	<b>Technical Operations and Concepts:</b> Set up and use projectors	17.77
25	<b>Technical Operations and Concepts:</b> Work in a networked community on a local or wide area network	17.77
26	<b>Technical Operations and Concepts:</b> Manage digital files (scanner or camera) and make the files small in size but still retain image quality	17.22
27	<b>Instructional Software Use:</b> Teach students to communicate ideas using text, graphics, images, video, audio and Internet resources, and integrate these forms of data into multimedia projects	16.11
28	<b>Instructional Software Use:</b> Utilize small groups working cooperatively or in rotation to take advantage of student to equipment ratios of greater than one to one with a variety of instructional delivery methods	16.11
29	<b>Student Assessment:</b> Utilize student information system to aggregate and disaggregate data by subgroups for grading, attendance, discipline, report card/progress report	16.11
30	<b>Fostering Home/School Communications:</b> Maintain a parent/guardian mailing newsletter list to distribute information about my classroom	16.11
31	<b>Professional Development/Growth and Communication:</b> Use computerized presentation program(s) when giving workshops or speaking at conferences	16.11
32	<b>Personal and Professional Use:</b> Use database management software	15.55
33	<b>Instructional Software Use:</b> Utilize instructional software as a part of my teaching strategy	15.55
34	<b>Instructional Software Use:</b> Utilize software programs such as drill and practice, simulations, tutorials, etc. as part of my teaching strategy	15.55
35	<b>Student Assessment:</b> Utilize student information system to manage student test data	15.55
36	<b>Student Assessment:</b> Utilize online learning environments to facilitate a participant's progress and grade assignments	15.55

## Yakutat School District Technology Plan 2008-2011

37	<b>Technical Operations and Concepts:</b> Configure an email client with my information	15.55
38	<b>Student Assessment:</b> Utilize software programs in the creating of teaching rubrics	15.00
39	<b>Fostering Home/School Communications:</b> Utilize a web interface to my grade book to provide real-time information to parents about individual student's progress	15.00
40	<b>Professional Development/Growth and Communication:</b> Participate in electronic discussion groups and chat rooms that are related to my area of education	15.00
41	<b>Instructional Software Use:</b> Work with fellow teachers to create, modify and improve my practices in the area of meaningful technology integration in the classroom	14.44
42	<b>Student Assessment:</b> Utilize student information system to track student learning goals, objectives and skills	14.44
43	<b>Instructional Software Use:</b> Research and implement new software titles and e-Learning opportunities to improve academic achievement	13.88
44	<b>Student Assessment:</b> Utilize student information systems in determining assignments, teaching strategies, and groupings	13.88
45	<b>Student Assessment:</b> Maintain portfolios of student produced materials electronically	13.33
46	<b>Student Assessment:</b> Utilize student information system to track school, district, state and federal reporting requirements	13.33
47	<b>Assistive and Adaptive Technologies:</b> Utilize technology to help students with learning problems with special needs	13.33
48	<b>Technical Operations and Concepts:</b> Ensure cross-platform file compatibility between operating systems	13.33
49	<b>Student Assessment:</b> Utilize and present data collected electronically during parent/teacher conferences	12.77

## Yakutat School District Technology Plan 2008-2011

50	<b>Fostering Home/School Communications:</b> Work with parent organizations to teach parents how to access school information electronically	12.77
51	<b>Research and Evaluation of Technology Use:</b> Evaluate the difference that electronic instructional technologies have made in the students' learning and classroom climate	12.77
52	<b>Research and Evaluation of Technology Use:</b> Gather, use, and share anecdotal information and observations about student use of technology in my classroom	12.77
53	<b>Instructional Software Use:</b> Build e-Learning communities that expand the learning opportunities for learning community members	12.22
54	<b>Fostering Home/School Communications:</b> Build and maintain a classroom webpage	12.22
55	<b>Research and Evaluation of Technology Use:</b> Conduct/participate in technology-based collaboration as part of continual and comprehensive professional growth to stay abreast of new and emerging technologies supportive of learning for PK-12 students	12.22
56	<b>Assistive and Adaptive Technologies:</b> Utilize technology to develop detailed individualized education plans	11.66
57	<b>Assistive and Adaptive Technologies:</b> Use of assistive and adaptive technologies	11.66
58	<b>Research and Evaluation of Technology Use:</b> Conduct/participate in formal studies of the impact of technology on student learning	11.66
59	<b>Assistive and Adaptive Technologies:</b> Utilize specialized communications devices or other compensatory devices	11.11

### Analysis:

This list is a great starting point when designing professional development. Starting at the bottom of the list, choose items that are widely used and needed by staff on a regular basis.

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**Training Interest**

## Yakutat School District Technology Plan 2008-2011

<b>Training Interest by Standard</b>		
<p>This chart lists the standards in rank order based on your staff's interest level in future staff development. The score in each standard can range from 0 up to 40. (If every staff member indicated a "High" level of interest in future staff development for all ten items within a standard the score for that standard would be 40.)</p>		
Rank	Item	Score
1	Professional Development/Growth and Communication	25.55
2	Instructional Software Use	24.56
3	Assistive and Adaptive Technologies	24.44
4	Student Assessment	23.93
5	Research and Evaluation of Technology Use	23.88
6	Personal and Professional Use	22.62
7	Technical Operations and Concepts	19.75
8	Fostering Home/School Communications	18.88

### **Analysis:**

The highest level of interest in future staff development is in the area of Professional Development/Growth and Communication. The lowest area of interest is in Fostering Home/School Communication. This is despite the fact that this standard is the third lowest skill level among staff and surveys consistently show that parents want teachers to use technology to communicate more.

## Yakutat School District Technology Plan 2008-2011

<b>Training Interest by Item</b>		
<p>This chart lists all 100 items from the inventory in rank order based on your staff's average Interest in further training score. The score for each item can range from 0 up to 40. (If every staff member marked "Very Interested" in training for an item on the inventory the score for that item would be 40.) The top five interest items are highlighted.</p>		
Rank	Item	Score
1	<b>Professional Development/Growth and Communication:</b> Use Internet resources to obtain research, teaching materials, lesson plans and information related to the content of my classes	30.00
2	<b>Instructional Software Use:</b> Teach students to communicate ideas using text, graphics, images, video, audio and Internet resources, and integrate these forms of data into multimedia projects	28.88
3	<b>Assistive and Adaptive Technologies:</b> Utilize technology to help students with learning problems with special needs	27.77
4	<b>Research and Evaluation of Technology Use:</b> Conduct/participate in technology-based collaboration as part of continual and comprehensive professional growth to stay abreast of new and emerging technologies supportive of learning for PK-12 students	27.77
5	<b>Personal and Professional Use:</b> Use of telecommunication devices	26.66
6	<b>Instructional Software Use:</b> Work with fellow teachers to create, modify and improve my practices in the area of meaningful technology integration in the classroom	26.66
7	<b>Student Assessment:</b> Utilize student information system to aggregate and disaggregate data by subgroups for grading, attendance, discipline, report card/progress report	26.66
8	<b>Student Assessment:</b> Utilize online learning environments to facilitate a participant's progress and grade assignments	26.66
9	<b>Professional Development/Growth and Communication:</b> Use electronic resources for professional growth	26.66
10	<b>Professional Development/Growth and Communication:</b> Utilize distance learning opportunities in the use of technology	26.66

## Yakutat School District Technology Plan 2008-2011

11	<b>Personal and Professional Use:</b> Use technology to organize and plan my time / tasks	25.55
12	<b>Personal and Professional Use:</b> Use technology to improve collaboration with others	25.55
13	<b>Instructional Software Use:</b> Utilize instructional software as a part of my teaching strategy	25.55
14	<b>Instructional Software Use:</b> Research and implement new software titles and e-Learning opportunities to improve academic achievement	25.55
15	<b>Student Assessment:</b> Utilize the computer to conduct student assessments	25.55
16	<b>Student Assessment:</b> Utilize student information system to manage student test data	25.55
17	<b>Professional Development/Growth and Communication:</b> Read electronic newsletters and journals to keep current on educational practices	25.55
18	<b>Research and Evaluation of Technology Use:</b> Evaluate the difference that electronic instructional technologies have made in the students' learning and classroom climate	25.55
19	<b>Personal and Professional Use:</b> Use presentation software	24.44
20	<b>Student Assessment:</b> Utilize an electronic grade book to keep track of student data	24.44
21	<b>Student Assessment:</b> Utilize software programs in the creating of teaching rubrics	24.44
22	<b>Technical Operations and Concepts:</b> Manage digital files (scanner or camera) and make the files small in size but still retain image quality	24.44
23	<b>Personal and Professional Use:</b> Use technology for electronic communication	23.33

## Yakutat School District Technology Plan 2008-2011

24	<b>Personal and Professional Use:</b> Use database management software	23.33
25	<b>Instructional Software Use:</b> Utilize software programs such as drill and practice, simulations, tutorials, etc. as part of my teaching strategy	23.33
26	<b>Instructional Software Use:</b> Teach students to gather, organize, and present information to solve real life problems in the classroom	23.33
27	<b>Instructional Software Use:</b> Teach students to integrate the tools of technology to gather, organize and share information to demonstrate their learning	23.33
28	<b>Student Assessment:</b> Maintain portfolios of student produced materials electronically	23.33
29	<b>Fostering Home/School Communications:</b> Build and maintain a classroom webpage	23.33
30	<b>Assistive and Adaptive Technologies:</b> Utilize technology to develop detailed individualized education plans	23.33
31	<b>Assistive and Adaptive Technologies:</b> Utilize specialized communications devices or other compensatory devices	23.33
32	<b>Assistive and Adaptive Technologies:</b> Use of assistive and adaptive technologies	23.33
33	<b>Professional Development/Growth and Communication:</b> Use computerized presentation program(s) when giving workshops or speaking at conferences	23.33
34	<b>Personal and Professional Use:</b> Conduct research online	22.22
35	<b>Instructional Software Use:</b> Utilize small groups working cooperatively or in rotation to take advantage of student to equipment ratios of greater than one to one with a variety of instructional delivery methods	22.22
36	<b>Instructional Software Use:</b> Build e-Learning communities that expand the learning opportunities for learning community members	22.22

## Yakutat School District Technology Plan 2008-2011

37	<b>Student Assessment:</b> Utilize and present data collected electronically during parent/teacher conferences	22.22
38	<b>Student Assessment:</b> Utilize student information system to track student learning goals, objectives and skills	22.22
39	<b>Fostering Home/School Communications:</b> Utilize a web interface to my grade book to provide real-time information to parents about individual student's progress	22.22
40	<b>Personal and Professional Use:</b> Use spreadsheets software	21.11
41	<b>Student Assessment:</b> Utilize student information system to track school, district, state and federal reporting requirements	21.11
42	<b>Student Assessment:</b> Utilize student information systems in determining assignments, teaching strategies, and groupings	21.11
43	<b>Professional Development/Growth and Communication:</b> Participate in electronic discussion groups and chat rooms that are related to my area of education	21.11
44	<b>Research and Evaluation of Technology Use:</b> Gather, use, and share anecdotal information and observations about student use of technology in my classroom	21.11
45	<b>Research and Evaluation of Technology Use:</b> Conduct/participate in formal studies of the impact of technology on student learning	21.11
46	<b>Technical Operations and Concepts:</b> Configure an email client with my information	21.11
47	<b>Personal and Professional Use:</b> Use a variety of browsers and Boolean searches with a variety of search engines	20.00
48	<b>Technical Operations and Concepts:</b> Manage data in files and folders	20.00
49	<b>Technical Operations and Concepts:</b> Troubleshoot printer problems	20.00

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50	<b>Technical Operations and Concepts:</b> Set up and use projectors	20.00
51	<b>Technical Operations and Concepts:</b> Ensure cross-platform file compatibility between operating systems	20.00
52	<b>Personal and Professional Use:</b> Understand the ethical and legal issues concerning the use of computers	18.88
53	<b>Technical Operations and Concepts:</b> Work in a networked community on a local or wide area network	18.88
54	<b>Personal and Professional Use:</b> Use word processing software	17.77
55	<b>Technical Operations and Concepts:</b> Install software / download updates	17.77
56	<b>Fostering Home/School Communications:</b> Utilize email communication with parents	16.66
57	<b>Fostering Home/School Communications:</b> Work with parent organizations to teach parents how to access school information electronically	16.66
58	<b>Fostering Home/School Communications:</b> Maintain a parent/guardian mailing newsletter list to distribute information about my classroom	15.55
59	<b>Technical Operations and Concepts:</b> Determine my computer's RAM and hard drive configuration	15.55

### Analysis:

There is high interest in staff development on the use of technology in research both for professional growth and lesson design. Staff development should focus on helping staff

# **Yakutat School District Technology Plan 2008-2011**

members collaborate and research using the internet, and then ways to pass these skills on to their students.

## **Conclusions**

When all of the data is analyzed, there are distinct areas where there is high interest in staff development and low skill levels.

A gap analysis of the skill level data combined with the interest level data shows that the following five standards (in rank order) show the highest gaps:

- Assistive and Adaptive Technologies
- Research and Evaluation of Technology Use
- Instructional Software Use
- Student Assessment
- Professional Development/Growth and Communication

Assistive and Adaptive Technologies tops this list. It ranks as the third highest area of interest and the lowest skill levels of all of the standards evaluated. This would be a great place to start the professional development efforts. Look to individual items to identify topics of interest further.

Research and Evaluation of Technology Use, Instructional Software Use, and Use of Technology for Student Assessment are the next three areas you should focus on. As always, refer to individual items within each standard to further identify specific topics to cover in your professional development.

**Yakutat School District Technology Plan  
2008-2011**

**Yakutat School District**

**Technology Planning  
Survey Report**

**Prepared by  
School Perceptions LLC  
March 28, 2008**

# **Yakutat School District Technology Plan 2008-2011**

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# **Yakutat School District Technology Plan 2008-2011**

## **Overview**

The ***Technology Planning Survey*** was conducted for the Yakutat School District in February and March of 2008 by School Perceptions L.L.C. School Perceptions has worked with hundreds of school districts throughout the country and is regarded as one of the nation's leading experts on gathering and analyzing school data.

### **The Objective of the *Technology Professional Practices Inventor*:**

- ✓ Measure the usage of technology in various areas by student and their parents.
- ✓ Measure comfort level and perceived level of competency in the use of technology by student and their parents.
- ✓ To identify areas where the school could improve in the use of technology

### **Overall**

The ***Technology Planning Survey*** results will provide the Yakutat School District with a good data set from which to write a technology plan. It should be one of many data points used when composing this plan.

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**Parent Data**

## Yakutat School District Technology Plan 2008-2011

<b>Parent Use of Technology</b>		
<p>The following chart indicates the percent of parents answering "Yes" to a variety of different uses of technology. The top seven items have been highlighted.</p>		
Rank	Item	Percent "Yes"
1	Do you utilize e-mail to communicate with office staff?	91
2	Do you use the district telephone system to report an absence?	91
3	Do you use the district telephone system to leave messages for staff?	91
4	Do you utilize e-mail to communicate with administration?	83
5	Do you use the school webpage to view school & staff information?	75
6	Do you utilize e-mail to communicate with classroom teachers?	75
7	Do your children use e-mail at home?	75
8	Do your children use the Internet while at home to conduct research?	66
9	Would you use e-funding to make electronic payments for fees and lunch payments?	66
10	Do you access your child's report card information online?	58

## Yakutat School District Technology Plan 2008-2011

11	Do you access the online grade book to view your child's homework and academic progress (middle and high school only)?	58
12	Do you use the school webpage to view calendar information?	50
13	Do you use the district telephone system to connect with food service?	50
14	Do your children use chat rooms at home?	50
15	Do you use the web calendar to see homework (middle school only)?	41
16	Do you utilize e-mail to communicate with coaches?	41
17	Do you use the web calendar to see the athletic schedule?	33
18	Do you use the district telephone system to hear school closings?	33
19	Do you access your child's attendance information online?	25
20	Do you access your child's schedule information online?	25
21	Do you use the web calendar to see the schedule for other school activities?	25
22	Do you use the school webpage to view board & policy information?	25
23	Do you use the school webpage to use selected web resource links?	25

## Yakutat School District Technology Plan 2008-2011

24	Do you use the school webpage to view teacher web pages?	16
25	Do you use the school webpage to see school closings?	16
26	Do you use the school webpage to view curriculum information?	8
27	Do you use the school webpage to use library resources?	8
28	Do you access your child's food service information online?	0
29	Do you use the web calendar to view the lunch menu?	0

### Analysis:

Parents show a high level of usage of technology to communicate with the school in general and with individual staff members. The top four items on this list include communication:

- With office staff
- To report an absence
- To leave messages for staff
- To communicate with administration

At the other end of the spectrum, there is much less usage of the school's webpage to:

- View board & policy information
- Use selected web resource links
- View teacher web pages
- See school closings
- View curriculum information
- Use library resources

## Yakutat School District Technology Plan 2008-2011

<b>Additional Parent Questions</b>	
<p>This chart lists the standards in rank order based on your staff's interest level in future staff development. The score in each standard can range from 0 up to 40. (If every staff member indicated a "High" level of interest in future staff development for all ten items within a standard the score for that standard would be 40.)</p>	
<b>Question</b>	<b>Percent "Yes"</b>
Do your children learn appropriate computer skills?	100%
Do your children use computers to supplement classroom instruction?	91
Do your children have adequate access to computers while at school?	83
Have your children been instructed on Internet Safety?	83
Are there adequate library media resources for your children to access while at school?	83

### **Analysis:**

Parents in the district show a high level of satisfaction regarding technology use and their children. From technology skills taught to access to technology, parents appear to be very pleased with the experiences their children are having at the school.

**Yakutat School District Technology Plan  
2008-2011**

**Student Data**

## Yakutat School District Technology Plan 2008-2011

<b>Student Proficiency</b>		
This chart shows the percent of students who rated themselves as “Understand/ Use Regularly” or “Mastered / Use Often”. The top five items are highlighted.		
Rank	Item	Percent
1	Word processing software	99.99
2	Access online resources for school use	96.48
3	Understand the safety issues involved with use of the Internet	96.48
4	Conduct research online	92.97
5	Manage data in files and folders	87.71
6	Evaluate the reliability of information on the Internet	84.21
7	Presentation software	68.42
8	Understand the ethical and legal issues concerning the use of computers	68.41
9	Work in a networked community on a local or wide area network	63.15
10	Manage digital files (scanner or camera)	56.13
11	Spreadsheet software	43.85
12	Troubleshoot printer problems	42.09

### **Analysis:**

The top-rated item on this chart is the use of Word Processing Software. Second on the list is “Access online resources for school use”, an area where teachers rated themselves quite low. At the bottom of the list we find “Spreadsheet software and “Troubleshooting printer problems”.

# **Yakutat School District Technology Plan 2008-2011**

## **Conclusions:**

The overall level of parent satisfaction with their children's use of technology is great news for the school district. Students indicated their proficiency in a variety of areas as well. Improvement efforts may be focused on items near the bottom of this list which include:

- Understand the ethical and legal issues concerning the use of computers
- Work in a networked community on a local or wide area network
- Manage digital files (scanner or camera)
- Spreadsheet software
- Troubleshoot printer problems

From a parent/community education view, it appears that the district is doing a great job in the use of technology for one-on-one communication. Improvement efforts may be focused on improving the district website and increasing usage of online tools.

## **Yakutat School District Technology Plan 2008-2011**

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-----Original Message-----

From: Ken Caron [<mailto:kenc@yakutatschools.org>]

Sent: Thursday, March 27, 2008 12:25 PM

To: [permissions@iste.org](mailto:permissions@iste.org)

Subject: tech standards for students

Dear ISTE Representative,

My name is Ken Caron, an ISTE member, and I would like to request permission to include the National Educational Technology Standards and for Students and Profiles in our District technology plan. Thank you very much for your help.

Ken Caron

Yakutat School District