

## Executive Summary

Educational technology has until recently existed as an add-on in a classroom. The technology of today is a vital instrument critical to the teaching and learning process. Student success in the 21<sup>st</sup> century demands regular access to and meaningful use of technology embedded into all curricular areas. Our challenge as educators is to understand the value and role that technology can play in helping students advance academically while developing skills such as critical thinking, problem solving, and digital citizenship. To achieve this goal, technology must transform from a stand-alone topic to a tool that is used wisely and thoughtfully throughout everyday classroom activities. The Anchorage School District's (ASD) Educational Technology (EdTech) Plan is designed to articulate our vision and identify actions we are taking to realize this vision.

The ASD EdTech Plan has been developed through an iterative process involving a wide variety of stakeholders who are committed to furthering our vision through active involvement. Technology is evolving so rapidly that no static plan can remain functional. This document focuses on our vision, beliefs, and action plans and will be revisited as our needs and resources change. In order to accomplish this goal, we will continue to utilize online collaborative tools for feedback in addition to structured district committee meetings.

### Foundational Beliefs

- School should be engaging, challenging, and relevant for all students
- Students need to have global access to information and materials
- Learning is a collaborative process that involves the community
- The educational experience should be personalized to meet the needs of all students
- Educational opportunities are not confined by the school calendar or classroom walls
- Access to technology must be equitable for all students
- Teachers should model the meaningful use of technology

### Guiding Documents

A number of documents have guided the development of the ASD EdTech Plan. A brief description of each resource is designed to provide context so that all readers can develop a shared understanding of our underlying philosophy.

#### **ASD Six-Year Instructional Plan:**

The purpose of the ASD Six-Year Instructional Plan (Six-Year Instructional Plan- Appendix B) reflects the school district goals and identifies initiatives, measurements, and performance indicators to close the achievement gap and increase achievement for *all* students. In a large and diverse district, this plan serves as a guiding document that is foundational to all aspects of the work of the district.

The plan is organized around the following School Board goals:

1. All students will graduate from high school prepared for post-secondary academic/vocational/career opportunities.

2. The achievement gap between racial, ethnic and economic groups in the highly diverse ASD will be eliminated through education that is accessible, culturally responsive, supportive of students and safe.
3. ASD will partner with parents and the community for greater educational success for our students.
4. ASD will manage effectively and efficiently all financial and human resources.
5. All ASD departments will support the mission of the District with good customer service, both internally and externally.

Presented for school board approval March 24, 2011 (see board memo #294)  
(ASD Six-Year Plan – Appendix B).

### **International Society for Technology in Education (ISTE) : National Educational Technology Standards for Students (NETS•S)**

The ISTE NETS•S were revised in 2007 to move the nation beyond technology operational skills, which were the dominate focus of the 1998 version. The new ISTE NETS•S stress the application of technological tools as fundamental to the educational process. The revised standards require students to demonstrate the following:

<http://www.iste.org/standards/nets-for-students/nets-student-standards-2007.aspx>

- Demonstrate creativity and innovation
- Communicate and collaborate
- Conduct research and use information
- Think critically, solve problems, and make decisions
- Practice digital citizenship
- Use technology effectively and productively

### **National Educational Technology Standards for Teachers (NETS•T)**

The NETS for Teachers (NETS•T) were updated in 2008, following the acclaimed NETS for Students (NETS•S) update in 2007. The NETS•T 2008 defined the fundamental concepts, knowledge, skills, and attitudes for applying technology in educational settings. <http://www.iste.org/standards/nets-for-teachers/nets-for-teachers-2008.aspx>

- Facilitate and inspire student learning and creativity
- Design and develop digital-age learning experiences and assessments
- Model digital-age work and learning
- Promote and model digital citizenship and responsibility
- Engage in professional growth and leadership

### **National Educational Technology Standards for Administrators (NETS•A)**

The updated 2009 NETS•A for administrators acknowledges that school leaders must create and sustain a culture of digital age learning through collaboration with colleagues and students around the world while moving forward as leaders of a dynamic learning community.

<http://www.iste.org/standards/nets-for-administrators/nets-for-administrators-sandards.aspx>

- Visionary leadership
- Digital-age learning culture
- Excellence in professional practice
- Systemic improvement
- Digital citizenship

### **Framework for 21st Century Skills**

The Partnership for 21<sup>st</sup> Century Skills is an advocacy organization comprised of business representatives, educational leaders, and policymakers dedicated to developing and promoting a vision for student success in the global economy. The Partnership emphasizes the importance of integrating the following 21<sup>st</sup> Century themes into the core curriculum areas:

- Global Awareness
- Financial, Economic, Business, and Entrepreneurial Literacy
- Civic Literacy
- Health Literacy
- Environmental Literacy

In addition to these interdisciplinary themes, the Partnership has identified the following essential 21<sup>st</sup> century skills:

- Learning and Innovation skills
  - Creativity and Innovation
  - Critical Thinking and Problem Solving
  - Communication and Collaboration
- Information, Media, and Technology Skills
  - Information Literacy
  - Media Literacy
  - ICT (Information, Communications, and Technology) Literacy
- Life and Career Skills
  - Flexibility and Adaptability
  - Initiative and Self-Direction
  - Social and Cross-Cultural Skills
  - Productivity and Accountability
- Leadership and Responsibility

### **Revised Bloom's Taxonomy**

In 2001, a group of cognitive psychologists, curriculum and assessment specialists, and instructional researchers worked together to update Bloom's original taxonomy. The updated version presents the following levels of learning:

- **Remembering:** Retrieving, recognizing, and recalling relevant knowledge from long-term memory
- **Understanding:** Constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining
- **Applying:** Carrying out or using a procedure through executing, or implementing
- **Analyzing:** Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing
- **Evaluating:** Making judgments based on criteria and standards through checking and critiquing
- **Creating:** Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing

## **Alaska State Educational Technology Plan**

The Alaska State Educational Technology Plan was last updated in June of 2005. Its five primary goals include the following:

1. Increase academic achievement across all content areas through the meaningful and effective use of technology by students, teachers, and administrators.
2. Enhance the capacity of professionals and paraprofessionals in technology integration and data-driven instruction through high-quality professional development.
3. Improve and personalize student learning by supporting the collection, collation, and communication of relevant student assessment data for use by the educational community.
4. Expand learning options for all students and schools by developing and maintaining dependable access to advanced technologies and telecommunications connectivity.
5. Engage families and communities in developing relationships with schools, districts, and other educational organizations to promote interactive communication through the use of technology.

## **National Educational Technology Plan**

The National Educational Technology Plan (NETP) of 2010 calls for revolutionary transformation of our education system. The NETP presents five goals along with recommendations for states, districts, and individual schools to achieve them. Some of these include the following:

1. Learning: Engage and Empower
  - Engaging, empowered learning experiences for all learners
  - Focus on what and how we teach to match what people need to know, how they learn, where and when they learn and who needs to learn
  - Brings state-of-the art technology into learning to enable, motivate and inspire all students
  - Leverage power of technology to provide personalized learning
  - Enable continuous and lifelong learning
2. Assessment: Measure What Matters
  - New and better ways to measure what matters
  - Diagnose strengths and weaknesses in the course of learning.
  - Use diagnostics to improve student performance
  - Involve stakeholders in the process of designing, conducting and using assessments
  - Use data driven decisions to determine what is best for each and every student
3. Teaching: Prepare and Connect
  - Build the capacity of educators by shifting to connected teaching
  - Build teams of connected educators
  - Provide classrooms with 24/7 access to data and analytic tools
  - Provide educators access to resources that help them act on insights of data results
4. Infrastructure: Access and Enable
  - Provide students and educators with resources when they need them and where they need them.
  - Include people, process, learning resources, policies, and sustainable models
  - Include broadband connectivity, servers, software, management systems and administration tools
5. Productivity: Redesign and Transform
  - Use technology to implement personalized learning
  - Ensure students make appropriate progress P-16 to graduation

- Leverage technology to plan, manage, monitor, and report spending

## Vision Statement

We believe the effective use of technology resources is a critical component for meeting the needs of every student in the Anchorage School District. We are committed to ensuring that our investment in existing and emerging technologies will continue to empower our staff and students to meet ASD's mission of educating all students for success in life.

Our implementation of technology resources is grounded in research, tied directly to curriculum, and focused on positively impacting student learning. We recognize that ongoing, high quality professional development for staff is a critical ingredient for successful technology infusion.

Understanding why we use technology is as important as the technology use itself. To better articulate why technology plays such a vital role in the teaching and learning process in the ASD, district leaders used the 2010 National Technology Plan and the guiding documents listed above to create a technology infused learning framework as a model of technology use in schools with goals and recommendations in learning, assessment, teaching, infrastructure, and productivity.

Because the Technology Infused Learning framework is the lens through which our goals, initiatives, and evaluations are aligned, we have adopted it as the heart of our district technology plan.

### District Goals, Academic Achievement, and Technology Literacy Goals

**Element:** *The district will set specific and measurable goals, aligned with state academic content and performance standards, for using advanced technology to improve student academic achievement.*

**Acceptable Criteria:** *Goals address specific state content and performance standards across several areas, not only educational technology. Goals are clear and measurable and targeted at student achievement in content areas.*

The five 2010-2011 school board goals and their initiatives drive the focus of technology in the Anchorage School District.

**ASD Board Goal 1:** All students will graduate from high school prepared for post-secondary academic/vocational/career opportunities.

#### Initiatives:

1. Develop a comprehensive plan to address obstacles to expanding career/technical and vocational programs in middle and high schools.
2. Initial implementation of an integrated assessment system district-wide to ensure all students receive instruction based upon individual need
3. Improve student performance in writing across the district
4. Integrate STEM principles into math and science content

5. External site review of K-8 math programs (Post Implementation Review of Curricular Materials)
6. Backmapping of Algebra I is intentionalized within core instruction
7. Provide high quality educational opportunities to supplement the learning options and provide flexibility for ASD students
8. Reduce the number of students at risk of dropping out
9. Increase student and parent awareness of the connections between school and work
10. Increase resources to support Special Education students' access to the regular curriculum
11. Meet the academic and transitional needs of high school students on an IEP to prepare for post-secondary academic/vocational and career opportunities
12. Provide extracurricular opportunities for students to connect to their school and community
13. Integrate civic education into the elementary core subjects, the arts and more intentional and engaging to middle and high school students

Goal one is addressed through a variety of ways: Technology is allowing students to have online opportunities to earn credits which allow them the flexibility to take additional credits at KCC or other CTE electives. A new RTI product has been selected after going through the district RFP process. Fall of 2011 will start the implementation of the assessment tool.

Additionally, the Anchorage School District (ASD) [Assessment and Evaluation Department \(A&E\)](#) is responsible for administration of the state required assessments. The results of these tests are used to fulfill the Federal accountability requirements in the [No Child Left Behind \(NCLB\)](#) laws. The results also do the following:

- assess how well ASD students meet the State's Performance Standards
- support instruction in ASD classrooms
- guide school improvement plans

The A&E Department produces the Annual [Profile of Performance](#), which is the ASD report to the School Board and community. The profile displays academic achievement data of Anchorage students and schools.

The A&E department collaborates with, and relies on many sources to provide the needed information to carry out these tasks. A combined effort is required between the A&E department, ASD employees, and other A&E partners to guide district educational programs towards increased student achievement.

Writing across the curriculum is the goal for the entire district though a variety of programs and support from the language arts and educational technology departments.

A reorganization of the curriculum department created a STEM coordinator position and has allowed a focus by the curriculum and ed tech department on Science, Technology, Engineering and Math.

**ASD Board Goal 2:** The achievement gap between racial, ethnic, and economic groups in the highly diverse ASD will be eliminated through education that is accessible, culturally responsive, supportive of students and safe.

**Initiatives:**

1. Provide more opportunities for non- English speaking students to gain language acquisition so they can access the core curriculum

2. Increase the capacity of regular education teachers to meet the needs of English Language Learners
3. Improve outreach to ASD's diverse community groups
4. Provide support for Alaska Native/American Indian students to increase skills in core areas and reach graduation
5. Develop plans to implement a multi-tiered support system for behavior
6. Enhance instructional leadership to improve the quality of teaching and learning
7. Explore benefits, costs and challenges of restricting Open Campus at ASD high schools

Addressing differentiated learning needs of students, programs like Achieve 3000 and My Access have allowed ELL students in the Newcomer's program to build their individual skills by working at their level of success. Project Puqigtut started in the 2009-2010 school year continues to expand with online resources and classes within Moodle to address non-traditional learning environments for native students.

**ASD Board Goal 3:** ASD will partner with parents and the community for greater educational success for our students

**Initiatives:**

1. Increase parent and student electronic access to student information and registration process
2. Increase partnerships with parents
3. Increase partnerships with community
4. Improve the bond proposition development process

In the 2010-2011 school year, use of Zangle expanded to include student and parent access to information. Our IT department has boosted the capacity of the system and Ed Tech will continue to provide the parent and student training to allow expansion of access. Parent meetings to discuss internet safety will start in the fall to increase partnerships in the community.

**ASD Board Goal 4:** ASD will manage effectively and efficiently all financial and human resources

**Initiatives:**

1. Develop a budget process that identifies the relative value and importance of all ASD programs to inform subsequent budgeting
2. Streamline the procurement process
3. Continued restructuring of ASD departments to increase efficiency and improve utilization of resources
4. Increased use of the Council of Great City Schools' performance measurements to evaluate effectiveness and efficiency within the non-instructional divisions
5. Prepare for district-wide implementation of efforts to reduce energy
6. Increase efficient electronic access to information
7. Review of staff evaluation instruments and process

Decisions to bring new technologies into the district are scrutinized to assure that the infrastructure and training support is available for a successful implementation. An awareness that decisions made six months ago are not viable for technology purchases is also addressed.

**ASD Board Goal 5:** All ASD departments will support the mission of the District with good customer service, both internally and externally

**Initiatives:**

1. Increase quality of customer service internally and externally
2. Recognize outstanding examples of customer service
3. Increase success of newly hired ASD teachers

Recognizing the importance of a good start, newly hired ASD teachers will be provided access to the New Teacher Institute. The educational technology department is adding an Internet safety component to the new teacher workshops which will complement their training and competence in using technology in the classroom.

**Academic Achievement & Technology Literacy Strategies**

**Element:** *The district will develop strategies for improving academic achievement and technology literacy of all students.*

**Acceptable Criteria:** *Specific strategies will be identified to improve academic achievement and technology literacy of all students. Specific strategies will be identified for assessment of technology literacy on an annual basis for at least 8th graders.*

Anchorage School District's (ASD) frameworks had been developed and revised over a period of 13+ years. Previously the standards addressed many of the technical skills required by students, but lacked the critical thinking, creative and problem solving skills that were being addressed in national standards, such as those developed by the International Society for Technology in Education (ISTE) and the National Technology Plan and other documents listed in the guiding documents list. The revision of ASD's standards is a dynamic process that involves many steps and consistent vetting at all levels.

Using the National Technology Plan as a guide, ASD again reviewed existing standards and organized them into a working document. These standards follow the current research done on a national level.

Concurrently, research was being reviewed from the national 21st century standards that were already developed or being developed. Organizations such as ISTE, The American Association of School Librarians, and The Partnership for 21st Century Skills all play a role in identifying what is important in the ever-changing needs of students living in this rapidly changing society. Skills such as critical thinking, problem solving, creativity, and digital citizenship are critical to their success.

The new ASD frameworks match the National Technology Plan addressing district plans in the categories of teaching, learning, assessment, infrastructure, assessment, and productivity. There is an acknowledgement that all components must work optimally together for student success.

Throughout this process the standards were put in front of many stakeholders. An advisory committee of parents, teachers, students and principals was formed to help provide guidance while developing the standards.

**8th Grade Technology Evaluation**

The Anchorage School District has purchased access to the Atomic Learning student and teacher assessments. Initial piloting of the 8th grade assessment has not been positive. Teachers found that it took longer than one class period and many students had some difficulty with the questions. The assessment did not seem to be an accurate reflection of student technology skills. It also focused exclusively on the ISTE standards while excluding the wider array of 21st century skills and standards recommended by the Association of School Librarians and included in the Anchorage School District Technology GLEs.

We are working with the state in the evaluation of a survey tool for all 8th grade students and a measure of the effective integration of technology into the curriculum. The survey tool will be used to determine student technology skills. We are hopeful that the state of Alaska will make available to school districts a more appropriate assessment that is grounded in research and has proven validity.

### **E-Rate Funds**

**Element:** *The district will develop a strategy for using information technology and telecommunication to improve education.*

**Acceptable Criteria:** *Description of how E-rate funds will be used to improve education through information technology and telecommunications.*

For 2011-2012 ASD has proposed a budget of over \$3.2 million for data, voice, long distance, Internet, and cellular phone services. From these budgeted funds, we are projected to receive a 63% discount for E-Rate eligible services. ASD uses information technology and telecommunication to improve education through network based applications, Internet connectivity, and phone communication.

Strategies for ERate funding include but are not limited to:

- Improve achievement, including technology literacy, for all students
- Expand the capacity of teachers to integrate technology effectively into curriculum and instruction through staff development for target groups including principals, building technology coordinators and contacts, librarians, the Technology Integration Educator program, and the Technology Teacher Leader program
- Ensure all students and teachers have increased access to technology
- Integration of technology (including software and electronically delivered learning materials) into curricula and instruction
- Promote parental involvement and increase communication with parents

Also in 2010-2011 the ASD used \$155,000.00 dollars of ARRA State Fiscal Stabilization Funds to purchase a new library management system and Online Public Access Catalog system from The Library Corporation (TLC). TLC Library Solutions is used for student access and library management of district library collections. In addition SFSF funds were used to purchase \$870,000.00 dollars worth of new computers, interactive white boards, projectors, NetBooks, scanners and other equipment for the libraries. All school libraries use WorldBook Online as part of their collections and are increasing their numbers of E-books and online databases.

# Technology Integration

## 1. Curricula and Teaching Strategies: Relevant Research

**Element:** *The district will use curricula and teaching strategies that integrate technology effectively leading to improvements in student academic achievement that are based on relevant research.*

**Acceptable Criteria:** *Use research-based practices to integrate technology (includes citing the research)*

ASD uses a multi-pronged approach to reviewing, identifying, and selecting relevant research to support technology integration throughout the curriculum. Successful implementation requires relevant research specific to the intended use of the technology. For example, when students are learning *from* computers, the computers deliver the curriculum, often at a student's own pace and individualized instructional level. In learning *with* computers, students use technology as a tool that can be applied to a variety of goals in the learning process. WestEd (<http://www.wested.org/cs/we/view/rs/619>) research findings indicate that both integration approaches are beneficial in improving student academic achievement, as long as research-based best practices are followed during implementation. Both approaches are utilized in the Anchorage School District, and both approaches require different strategies for reviewing, identifying, and selecting relevant research.

When an instructional need is identified and there is a technological solution available to meet the need, the following process is followed:

Identify whether the most appropriate solution is to learn *from* or learn *with* computers

1. If the most appropriate solution is to learn *from* computers:
  - Review the What Works Clearinghouse (<http://ies.ed.gov/ncee/wwc>), which is a resource created by the Institute of Education Sciences to evaluate common technology-based programs using rigorous research standards
  - The What Works Clearinghouse review team identifies a designation of *Meets Evidence Standards, Meets Evidence Standards with Reservations, or Does Not Meet Evidence Standards*
  - These designations allow ASD review teams from curriculum committees and the Educational Technology Department to research and compare programs with confidence
  - Any district-wide technology program must be grounded in research demonstrating the efficacy of the program
  - For programs not reviewed in the What Works Clearinghouse, ASD review teams will gather information in other ways, such as contacting other school districts who have experience with the program
  - When a technology program is implemented as an intervention (i.e., MyAccess), ASD's Assessment and Evaluation Department often conducts an internal program evaluation to measure student growth and determine the efficacy of the intervention
2. If the most appropriate solution is to learn *with* computers:

- Review the International Society for Technology in Education’s (ISTE) Center for Applied Research in Educational Technology (CARET) to identify best practices regarding technology integration and professional development in the area of educational technology
- Reference the ASD Technology Infused Learning’s Alignment of ASD Vision with Guiding Documents to determine the appropriate resource to meet the technology integration or professional development goal (Guiding Document Alignment - Appendix A)
- Guiding Documents are as follows:
  - ISTE National Educational Technology Standards for Students (NETS\*S)
  - ISTE National Educational Technology Standards for Teachers (NETS\*T)
  - ISTE National Educational Technology Standards for Administrators (NETS\*A)
  - Partnership for 21<sup>st</sup> Century Skills
  - Alaska’s Educational Technology Plan
  - National Educational Technology Plan
  - Revised Bloom’s Taxonomy
- Conduct research into other relevant resources
- Use the information gathered to inform the development of the technology integration or professional development initiative to incorporate best practices and relevant research

## 2. Curricula & Teaching Strategies: Alignment to State Content & Performance Standards

**Element:** *The district will use curricula and teaching strategies that integrate technology effectively and are aligned to the Alaska State Content and Performance Standards.*

**Acceptable Criteria:** *A description of the district process to select appropriate Alaska State Content and Performance Standards not only the technology content standards*

The selection of appropriate Alaska State Content and Performance Standards is conducted through an iterative process that is implemented by teachers from around the district who comprise the various curriculum committees. Each curriculum committee works under the direction of the respective Curriculum Coordinator, and they meet regularly throughout the academic year. The regular meetings allow for an in-depth review of potential changes to existing curriculum and curricular resources, as well as facilitate timely integration of evolving technological resources.

The curriculum committees include members from the Educational Technology department. who assist with the review of state content and performance standards to further best practices regarding technology integration into curricula and teaching strategies. Educational Technology Department initiatives are grounded in the ISTE teacher and student standards, as well as the National Staff Development Council (NSDC) standards.

Through the process of writing the 21st century frameworks, it was apparent that in order for the standards to be implemented in the classroom there was a need to begin developing lesson plans that included the new frameworks.

This was first done in a partnership with the Curriculum and Instructional Support department. Curriculum teams were paired with Educational Technology staff to develop lesson plans that addressed the new frameworks and embedded technology in a meaningful way. Many of the lesson plans were then taken to the classroom and run through a vetting process. Feedback was used to help improve the lesson plans.

Continuing into the next year (2010 – 2011) the partnership continued in a committee titled “Model Instructional Planning.” This committee focused on developing an instructional planning template that could be used by teachers to develop plans that focused on good teaching practices and infusing technology to improve instruction. The committee developed the plan using UBD practices and the University of Washington’s 5 Dimensions of Teaching and Learning™. To date, the templates have been used in developing activities and lesson in math, science, and art.

### **3. Curricula & Teaching Strategies: Student Academic Achievement Measures**

**Element:** *The district will use curricula and teaching strategies that integrate technology effectively and lead to improvements in student academic achievement.*

**Acceptable Criteria:** *A description of how the district will identify the measures that indicate improvements in student academic achievement.*

A variety of Intervention programs are used by the district to increase student achievement at both the elementary and secondary levels including, Lexia Reading, Read Naturally, Waterford Early Learning, SuccessMaker Math, My Access, Achieve 3000, Fast ForWord, and KeyTrain.

All of these intervention tools have been selected to support ASD adopted curriculum and are assessed annually through the use of ASD’s academic measures which include: HSGQE, DRAs. and SBAS.

Transformation to a technology infused educator is a process that takes commitment and dedication over time through a mutual collaboration between the teacher involved and the district. To help evolve education throughout ASD, a number of initiatives have been developed and/or implemented. Although each of the initiatives uses unique measures that indicate improvements in student academic achievement, they each specifically address quantifiable measures of student academic achievement. A complete picture of these initiatives appears throughout the ASD Six-Year Instructional Plan (ASD Six-Year Instructional Plan – Appendix B) which is evaluated annually according to the identified measures included in the plan, and a report is made to the ASD School Board.

Because technology is now embedded in all facets of the instructional process, we will not attempt to provide a comprehensive list of all initiatives currently underway that involve technology integration. We will instead focus on the most relevant examples to highlight how technology is being utilized to support academic content and performance standards to meet the school board goals.

During the 2010-2011 school year, the Educational Technology Department partnered with the Curriculum and Instruction Division to form joint Action Committees focusing on a number of key initiatives. Committees were comprised of EdTech staff as well as curriculum coordinators and other key district personnel. Each of the following initiatives are multi-year projects designed to support

school board goals as well as effective technology integration and development of 21st century skills for all students. A brief description of each action committee is as follows:

***STEM:***

In an effort to foster collaboration between the district's Educational Technology (EdTech) and STEM Curriculum Specialists, a joint committee was formed at the beginning of the 2010-2011 school year. The committee is composed of EdTech and STEM Science support staff representing both elementary and secondary levels. The district's STEM Department Coordinator also participates in the EdTech-STEM Committee meetings.

The committee goals for the 2010-2011 school year include facilitating the creation of technology infused lessons tied to the district's K-6 STEM Science curriculum kits, and assisting with writing a grant for updating the Salmon Life Cycle curriculum to include the use of science probes to facilitate data gathering and analysis. Both goals speak directly to the need to develop strategies for improving academic achievement and technology literacy of all students.

The STEM science kit technology infusion project has paired Educational Technology Teachers with classroom teachers known for their expertise using the district science kits. EdTech Teachers have met with classroom teachers as a group for half-day work sessions facilitated jointly by STEM Science and EdTech staff to review the science kit teacher's guides and find natural connections for the use of technology in existing kit lessons and activities. During the work sessions, the teams have aligned the technology-infused activities using the International Society for Technology in Education's National Educational Technology Standards for Students and the relevant Alaska State Content and Performance standards for science as identified in the science kit teacher's guides. Emphasis on student engagement and deep learning has been a fundamental goal for the lessons and activities being developed now and in the future.

We expect that through these EdTech-STEM projects students will demonstrate improved academic achievement in a variety of ways, including performance on Alaska State Science SBA testing.

***21st Century Model Lesson Plan Development:***

The EdTech Department has been collaborating with Curriculum and Instruction for the past three years to update ASD's district's 21st Century Learning framework and will seek board approval in June, 2011 (at that time a link will be available on ASD's web site--the current draft is available in the Appendices). Curriculum teams were paired with Educational Technology staff to develop lesson plans that addressed the new technology frameworks and embedded technology in a meaningful way. Many of the lesson plans were then taken to the classroom and run through a vetting process. Feedback was used to help improve the lesson plans.

A critical phase of this project has been working to integrate the standards with existing core curriculum and field test 21st Century model lessons in our schools. This committee has focused on the development of an Instructional Planning Template that can be used by teachers to develop plans focused on good teaching practices while infusing technology to improve instruction. The committee developed the plan using UBD practices and the University of Washington's 5 Dimensions of Teaching and Learning™. To date, the templates have been

used in developing activities and lessons at various grade levels in math, science, and art. Future developments will be expanded to the other curricular areas..

**My Access:**

A systemic adoption of My Access seats were provided. All students in 7<sup>th</sup> and 9<sup>th</sup> grades across the Anchorage School District were funded to provide for seats in the My Access program, as well as dependable and regular access to the Internet, through the funding and distribution of netbook carts. This distribution occurred throughout the district, regardless of whether the students were in high-poverty or high-needs schools. In addition, after this initial distribution plan came to fruition, the remaining seats in the program were allocated to any teachers across the district that were interested in the program and were committed to the stated expectations of regular and bi-weekly usage of the program.

**Digital Tools:**

As interactive white boards, netbooks, handheld devices, and other digital tools proliferate, it is critical that we assist with the evaluation of emerging technologies, assist with curriculum integration plans, and plan appropriate professional development opportunities for teachers.

The Digital Tools Committee has worked to develop best practices guidelines for use of interactive white boards and has been evaluating a number of student response systems that work with interactive white boards or independently via netbooks or other online technology. As new digital tools become available the Digital Tools Committee will continue its mission to find tools appropriate for use in ASD classrooms.

**Moodle Integration:**

Moodle Integration: Moodle (Modular Object-Oriented Dynamic Learning Environment) is the open-source course management system that is being utilized to deliver many of our MyHigh online courses. Additionally, Moodle is available for all ASD staff as a supplementary resource to establish online forums and utilize digital curriculum with their students. As the power of this resource is realized, the demand for professional development is growing rapidly. Since 2008 when Moodle was first launched in the district, use of the system has expanded exponentially. Since launching in 2008 with approximately 200 users, the system has grown to over 13,500 users to date. Continued and expanded use of Moodle is expected with additional online courses and blended classrooms.

**Google Apps Integration:**

The Educational Technology Department has collaborated with the Information Technology and Curriculum and Instruction Departments to implement Google Apps for Education.

Google Apps is a suite of online collaboration tools that enable students and teachers to collaborate real-time on word processing documents, spreadsheets, and presentations. It allows student work to be stored securely online, all without the need for student email accounts. All work stored in the ASD Google online container is accessible from any computer at school or at home, and from any platform, including netbooks and other mobile devices such as iPods or smart phones.

After months of research and preparation, the IT Department automated the creation of ASD Google accounts for all staff and students. EdTech and Curriculum created a committee to formulate an implementation plan, including the following goals:

- Organize a pilot of Google Apps with several schools
- Create documentation for best practice implementation of the tools
- Collect feedback from early adopters
- Create a Professional Development training plan
- Formulate a support plan once implementation had begun

The pilot phase was completed December 2010. Ninety-nine percent of our K-12 school have had at least one or more trainings at their school. Additionally, many teachers and their students and departments have also been trained. Documentation is live on the ASD web site, and teachers and students are already realizing the tremendous potential of this free and powerful resource.

### **Touch Technologies:**

The flood of new touch technologies has led us to form a Touch Technologies Committee in 2011. The committee is composed of EdTech teachers and one Assistive Technology Integration Specialist.

The committee goals for the spring of 2011 include the investigation of what devices will suit our school districts needs and how touch technology devices can be used in an educational environment K-12. Before giving schools the ability to purchase these devices the committee wants to be sure that they will be used in accordance with achievement and technology standards.

While researching touch devices the committee found that the iPod Touch and iPad, (IOS devices) made by Apple Computer Inc. fit the criteria that we were looking for. A consideration list that compares touch devices, netbooks, laptop, and desktop computers will be distributed to schools so they can make decisions on what technology tool to purchase that best fits their needs.

There are numerous educational apps available for the iPod Touch and iPad that are designed to encourage creativity and the practice of specific skills at all grade levels and subject areas. These apps are highly engaging and can be infused into the classroom to enhance academic achievement and technology literacy. With the device's ability of a wireless internet connection students and staff can access any non-Flash websites, search for educational multimedia content, and collaborate through the recently district adopted Google Applications. Peripherals like scientific probes and sensors can be paired with the IOS devices to strengthen the current STEM curriculum. The IOS devices can take the place of many tools that are purchased separately by schools. Tools like a world clock, timer, stopwatch, calculator, calendar, unit converter, compass, maps, digital camera (currently only iPod Touch), music player, audio recorder, note pad, and digital book reader are included on the IOS device or can be installed for free. The Touch Technology Committee has been looking at Apple's Volume Purchase Program that makes buying apps easy and at a discount for schools. One fourth of the apps at the Apple App store are free and many range from \$.99 - \$9.99.

Through our collaboration with Apple and the Kodiak School District we have found out that there are many different ways to manage and implement the IOS devices. The initial “sync” of the device is pertinent to setting up the device’s naming convention and installing school wide apps. Letting classroom teachers decide which apps to install seems to be the best way to have schools manage their apps. This will enable the teachers to customize the IOS device to best meet their students academic needs.

**Achieve3000:**

The EdTech Dept. has funded seats in Achieve3000 (aka KidBiz, TeenBiz, Empower) for all the 7<sup>th</sup> and 9<sup>th</sup> graders in the district. This has been a 2-year commitment, which included providing netbook carts to all 7<sup>th</sup> and 9<sup>th</sup> grade teams in order to assure Internet access to the program. In the past year, access to Achieve3000 has been extended to interested elementary-level teams as well as any other teachers in the district that are willing to comply with district-created program use expectations. To assure fidelity to the program and its proven outcomes of improved reading proficiency and writing skills, teachers with student seats in Achieve3000 have been expected to use the program at least 2 times a week. Achieve3000 solutions are fully aligned to state-specific standards in the content areas of ELA, Social Studies, Math, and Technology. Achieve3000 features a reporting system that enables the teacher (and district program managers) to view a snapshot of how students using the program in the district are performing, as well as drill down to assess individual student performance. Administrators and teachers can see how students perform overall, on individual activities and even individual questions. The reporting system also reports student progress relative to Alaska state standards. In addition, Achieve3000 allows administrators to monitor how and when students use the program, as well as which features they use.

The Anchorage School District has recently completed the purchase of an integrated assessment system that will offer formative assessments for an online Response to Intervention academic implementation in fall of 2011.

**4. Curricula & Teaching Strategies: Timeline for Integration**

**Element:** *The district will use curricula and teaching strategies that integrate technology effectively and includes a timeline for integration.*

**Acceptable Criteria:** *The timeline details the actions to be taken throughout the length of the plan to integrate technology in core curriculum.*

Specific timelines are identified by the National Technology Plan areas of Learning, Teaching, Infrastructure, and Productivity for actions to be taken throughout the length of the plan in the Anchorage School District’s Technology Infused Learning framework document located on the following five pages:

# ASD Technology Infused Learning Timeline

## 2011-14 Anchorage School District Technology Plan

### School board goals 2010-11

1. All students will graduate from high school prepared for postsecondary academic/vocational/career opportunities.
2. The achievement gap between racial, ethnic and economic groups in the highly diverse ASD will be eliminated through education that is accessible, culturally responsive, supportive of students and safe.
3. ASD will partner with parents and the community for greater educational success for our students.
4. ASD will manage effectively and efficiently all financial and human resources.
5. All ASD departments will support the mission of the District with good customer service, both internally and externally.

### National Technology Plan-2010

#### Learning:

All learners will have engaging and empowering learning experiences both in and out of school that prepare them to be active, creative, knowledgeable and ethical participant in our globally networked society.

- Focus on what and how we teach to match what people need to know, how they learn, where and when they learn, and who needs to learn
- Bring state-of-the art technology into learning to enable, motivate, and inspire all students
- Leverage power of technology to provide personalized learning
- Enable continuous and lifelong learning

### ASD Strategies-Timeline

- Blended, hybrid, and reverse classrooms will be standard in 50% of secondary classrooms 2013-2014
- Netbook classroom sets will be maintained for all 7<sup>th</sup> and 9<sup>th</sup> grade teams using MyAccess 2010-2014
- Expand training and access to Achieve 3000 for K-12 teachers who are using recommended guidelines of program 2011-2012
- Continue to research technologies to determine fiscally responsible point to start systemic one-to-one initiative 2011-2014
- Move pilot of Pre-Algebra classes for 6th graders in elementary schools to permanent online offering 2011-2012
- Partner with Assistive Technology to pilot Touch Technologies 2012-2013
- Expand use of Google apps to include 20% of 7-12 students 2011-2012
- Continue expanding use of Google apps to include 40% of 7-12 students and 20% of 4-6 students 2012-2013
- Identify ways to use student personal devices to enhance their education
- Expand Google Education Domain creating cloud computing resources to enable and encourage collaboration, communication and access for students and teachers with the use of Google Apps. 2011-2012
- Develop digital citizenship brochure for staff and students. 2010-2011
- Pilot SPED portfolios using Google to create Career Portfolios as post-secondary personal guides. 2011-2012
- Use ASDTube to expand on professional development topics for teachers, 2011-2014
- Train presenters at school sites to deliver presentation on Internet Safety 2011-2012
- Digital Citizenship becomes embedded into every curricular area 2011-2012
- Assist with writing a grant for updating the Salmon Life Cycle curriculum to include the use of science probes to facilitate data gathering and analysis. 2011-2012

# ASD Technology Infused Learning Timeline

## 2011-14 Anchorage School District Technology Plan

### School board goals 2010-11

6. All students will graduate from high school prepared for postsecondary academic/vocational/career opportunities.
7. The achievement gap between racial, ethnic and economic groups in the highly diverse ASD will be eliminated through education that is accessible, culturally responsive, supportive of students and safe.
8. ASD will partner with parents and the community for greater educational success for our students.
9. ASD will manage effectively and efficiently all financial and human resources.
10. All ASD departments will support the mission of the District with good customer service, both internally and externally.

### National Technology Plan-2010

#### Assessment:

Our education system at all levels will leverage the power of technology to measure what matters and use assessment data for continuous improvement.

- Find better ways to measure what matters
- Diagnose strengths and weaknesses in the course of learning
- Use diagnostic data to improve student performance
- Involve stakeholders in designing, conducting and using assessment
- Use data driven decisions to determine what is best for each and every student

### ASD Specifics Strategies-Timeline

- Continue administration and coordination with UAA of the Accuplacer placement test to enable juniors and seniors to be properly prepared for college math and language arts classes. 2011-2014
- Train trainers and pilot new formative assessment tool-RTI, 1<sup>st</sup> semester 2011-2012
- District roll out of RTI tool and training material creation 2011-2012
- Conduct WorkKeys interpretation sessions for students to understand results of the test 2011-2012
- Provide online learning resources for students so they can access their test records within Zangle 2012-2013
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# ASD Technology Infused Learning Timeline

## 2011-14 Anchorage School District Technology Plan

### School board goals 2010-11

11. All students will graduate from high school prepared for postsecondary academic/vocational/career opportunities.
12. The achievement gap between racial, ethnic and economic groups in the highly diverse ASD will be eliminated through education that is accessible, culturally responsive, supportive of students and safe.
13. ASD will partner with parents and the community for greater educational success for our students.
14. ASD will manage effectively and efficiently all financial and human resources.
15. All ASD departments will support the mission of the District with good customer service, both internally and externally.

National Technology Plan	ASD Specifics Strategies-Timeline
<p><b>Teaching:</b>            Professional educators will be supported individually and in teams by technology that connects them to data, content, resources, expertise, and learning experiences that enable and inspire more effective teaching for all learners.</p> <ul style="list-style-type: none"> <li>• Build the capacity of educators by shifting to connected teaching</li> <li>• Provide classrooms with 24/7 access to data and analytic tools</li> <li>• Create teams of connected educators</li> <li>• Provide educators access to resources that help them act on insights of data results</li> </ul>	<ul style="list-style-type: none"> <li>• Continue to develop interactive whiteboard cohorts to formulate grade level support groups for designing lessons and supporting each other in becoming more proficient using their interactive boards. 2011-2012</li> <li>• Continue the creation of lesson bank of lessons for interactive whiteboards 2011-2013</li> <li>• Conduct trainings for teachers to use the instructional planning template created in 2010-11 to develop plans that focus on good teaching practices and infuse technology to improve instruction. 2011-2012</li> <li>• Use the instructional planning template to continue to develop activities and lesson in math, science, and art. 2011-2012</li> <li>• Continue using Moodle to allow teachers to share learning objects and lessons with other teachers 2011-2014</li> <li>• Continue to facilitate the creation of technology infused lessons tied to the district's K-6 STEM Science curriculum kits for grades 3, 4, and 5, 2011-2014</li> <li>• Continue to facilitate the creation of technology infused lessons tied to the district's K-6 STEM Science curriculum kits for grades 2 and 6, 2011-2014</li> <li>• Digital Citizenship training is incorporated into core curriculum professional development opportunities 2012-2013</li> <li>• Expand the use of Nettrekker for student personalized use 2011-2012</li> <li>• Create resources to provide training on all levels for the new library management system and Online Public Access Catalog system from The Library Corporation (TLC) which was ARRA funded 2011-2013</li> <li>• Building of training resources and training for ARRA purchased content management system 2011-2012</li> <li>• Software Standards Committee will develop a web-based "Recommended Software" list, modeled after the existing "Recommended Hardware" list, where staff members could search for software solutions by subject, current availability, vendor, cost etc. 2010-2011</li> <li>• Software Standards Committee will develop a process in which staff members could request new software products not currently on the approved list. 2011-2012</li> </ul>

# ASD Technology Infused Learning Timeline

## 2011-14 Anchorage School District Technology Plan

### School board goals 2010-11

16. All students will graduate from high school prepared for postsecondary academic/vocational/career opportunities.
17. The achievement gap between racial, ethnic and economic groups in the highly diverse ASD will be eliminated through education that is accessible, culturally responsive, supportive of students and safe.
18. ASD will partner with parents and the community for greater educational success for our students.
19. ASD will manage effectively and efficiently all financial and human resources.
20. All ASD departments will support the mission of the District with good customer service, both internally and externally.

National Technology Plan	ASD Specifics Strategies-Timeline
<p><b>Infrastructure:</b>  <a href="#">All students and educators will have access to a comprehensive infrastructure for learning when and where they need it.</a></p> <ul style="list-style-type: none"> <li>• Provide students and educators with resources when they need them and where they need them</li> <li>• Ensure that every student has at least one internet access device either at home or available to them at school</li> <li>• Provide and manage broadband connectivity, servers, software, management systems and administration tools</li> </ul>	<ul style="list-style-type: none"> <li>• District wide network refurbishment, installation of robust wireless and upgraded connectivity 2011-2012</li> <li>• Complete Casper and Altiris inventory, tracking and imaging installation district wide 2011-2012</li> <li>• Implement consistent server and disk array configuration and support throughout the district 2011-2012</li> <li>• Implement software applications: Individual Education Plan (IEP), phase I Progress Monitoring and Universal Screening, Help Desk System, Online Registration, Content Management system 2011-2012</li> <li>• Implement district wide Active Directory service 2011-2012</li> <li>• Data Center relocation 2011-2012</li> <li>• Pilot alternate student response systems 2011-2012</li> <li>• Continue to utilize Elluminate and Second Life enabling teachers to participate remotely in meetings, training and staff development 2011-2012</li> <li>• Continue using Elluminate for distance delivery of the Current Issues credit class 2011-2012</li> <li>• Continue expansion of records management training and archiving throughout the district 2012-2013</li> <li>• Evaluation, selection, purchase and implementation of a data warehouse 2012-2013</li> <li>• VoIP Planning and Conversion 2012-2013</li> <li>• Financial system upgrade 2012-2013</li> <li>• Establish a district wide data backup and retention policy and solution 2012-2013</li> <li>• Re-implementation of district wide technology refresh 2012-2013</li> <li>• Continued centralization of enterprise level software licensing 2013-2014</li> <li>• Establish and maintain internal and external security policies 2013-2014</li> <li>• Continued increase in bandwidth 2013-2014</li> <li>• Establish district wide records retention/disposition and forms creation procedures 2013-2014</li> <li>• Formalize and schedule application development, update and release management 2013-2014</li> <li>• Phase out funding technology through grants and construction</li> </ul>

	funds 2013-2014
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<b>ASD Technology Infused Learning Timeline</b>	
<b>2011-14 Anchorage School District Technology Plan</b>	
<p><b>School board goals 2010-11</b></p> <ul style="list-style-type: none"> <li>21. All students will graduate from high school prepared for postsecondary academic/vocational/career opportunities.</li> <li>22. The achievement gap between racial, ethnic and economic groups in the highly diverse ASD will be eliminated through education that is accessible, culturally responsive, supportive of students and safe.</li> <li>23. ASD will partner with parents and the community for greater educational success for our students.</li> <li>24. ASD will manage effectively and efficiently all financial and human resources.</li> <li>25. All ASD departments will support the mission of the District with good customer service, both internally and externally.</li> </ul>	
<b>National Technology Plan</b>	<b>ASD Specifics Strategies-Timeline</b>

**Productivity:**

Our education system at all levels will redesign processes and structures to take advantage of the power of technology to improve learning outcomes while making more efficient use of time, money, and staff.

- Apply technology to implement personalized learning
- Ensure students make appropriate progress preschool to high school graduation
- Leverage technology to plan, manage, monitor, and report expenditures

- Phased implementation of RTI Universal Screening (Grades 5-10) and Progress Monitoring for students in Grades K-4 (2011-2014)
- Continue expansion of online curricular resources that personalize instruction for students at all ability levels 2011-2012
- Continue expansion of online courses in order to increase flexibility for students in grades 6-12 2011-2014
- Continue integration of Google Apps into the curriculum to increase collaboration 2011-2012

## Access

### Increased Access for All Students & Teachers

**Element:** *The district will ensure all students and teachers have increased access to educational technology in all schools.*

**Acceptable Criteria:** *Description includes how Ed Tech funds (Title II-D) will be used to help students in high-poverty and high-needs schools, or Title I schools in school improvement status (identified as level 2 or above). Provide data for high-poverty or High-needs schools or an explanation if it is not relevant.*

Currently, ASD has a total of 24 Title I schools, 16 of which are classified as Level 2 or higher. Each school in Level 2 or above has created a plan that includes changes in instructional practices to address the academic needs of students represented in subgroups not making AYP.

Although the focus remains on using technology to extend content and core instruction, changes identified in Level 2 plans also include an emphasis on formative assessment tools and computer programs that can be used as supplemental interventions for students struggling in the areas of math and literacy. These interventions may include one or more of the following programs: Waterford, Lexia, SuccessMaker, MyAccess Writing, Achieve 3000, Fast ForWord, Read Naturally, and ELLIS. These resources are made available by avenues other than Ed Tech funds in order to extend the scope and impact of available Ed Tech funding. Educational Technology Department personnel support these interventions and work cooperatively with other district departments as needed.

#### **Title II-D Funded-Technology Infused Leader (TIL) Program:**

The Technology Infused Leader (TIL) is the successor program to the successful Technology Teacher Leader (TTL) program. The goal of the TIL program is to empower teachers that are proficient infusing technology into their curriculum to mentor a colleague, strengthening our foundation of teachers skilled at using technology, thus transforming the teaching and learning process throughout the district.

The TIL program is designed in partnership with the *Anchorage Education Associate (AEA) and ASD Mentoring/Coaching Program*. The *Mentoring Program* is a collaborative effort by AEA and ASD to "promote professional development as a means of improving student performance." Twenty (20) TIL participants became official mentors in the *Mentoring Program* and spent the first year working with three (3) colleagues at the TIL's school, mentoring them through a process of technology integration awareness and use. From the second year on, TILs will be mentors in the *Mentor Program*, available to be matched with teachers throughout the district who are eligible to request a mentor. The participants that participated in this program did not take a pre and post survey. The feedback from the TIL Mentors indicated this program to be a great success in having veteran teachers become more comfortable using technology themselves, as well as using it with students. Each mentor and mentee created 2 lesson plans that integrated technology into ASD adopted curriculum.

Ensuring that all students and teachers have increased access to educational technology is a growing priority for the district. The Instructional Division in conjunction with the Information Technology Department have advocated successfully to continue to expand Internet bandwidth. Over \$11 million dollars in American Recover and Reinvestment Act project funds has provided the opportunity to

strengthen the district's network to meet the ever-increasing demand for connectivity and to continue efforts to install robust wireless networks at all schools. Educational tools based on new technologies continue to grow within the district at an ever-increasing rate. These tools include hardware such as Netbooks, interactive white boards, projectors, networked printers and digital cameras; classroom applications like Fast ForWord, Lexia, Comic Life, and Everyday Math Games; network applications like My Access, Achieve 3000, APEX, and tools for notifying parents and increasing home communication using Zangle and Student Messenger. These applications and supporting tools use the local area network (LAN), the wide area network (WAN), and the Internet, increasing the need to ensure the infrastructure required to support these applications is in place and has the capacity to meet the current and anticipated near future needs.

[http://www.asdk12.org/school\\_board/archives/2009-2010/20100524/H09M216.pdf](http://www.asdk12.org/school_board/archives/2009-2010/20100524/H09M216.pdf)

Digital Equity has also become a primary goal throughout the district. An example of how our demand for equitable access is growing is that curriculum committees now routinely evaluate technology resources as an integral part of the curricular adoption process, and they are requiring online access to technology resources prior to adoption. Entire curriculum all have access to the same resources.

Netbook expansion was done across the district to support systemic purchase of My Access to support the district's writing goals.

### **Innovative Delivery Strategies**

**Element:** *The district will encourage the development and use of innovative delivery strategies through the use of technology.*

**Acceptable Criteria:** *Description of strategies for the delivery of specialized or rigorous courses and curricula through the use of technology, including distance learning technologies, particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources.*

The Anchorage School District is committed to harnessing the power of emerging technologies to provide innovative delivery strategies to meet the diverse needs of our students. Some of these technologies, such as interactive white boards and other digital devices, are utilized in traditional classroom settings.

Currently, the Anchorage School District utilizes Moodle, ASD Tube, Google Apps, and Elluminate to supplement traditional courses, deliver online courses to ASD students, and provide professional development opportunities for staff. Courses are listed on the MyHigh site, linked here. Link to My High- URL: <http://www.asdk12.org/schools/MyHigh/pages/index.html>

In addition to MyHigh courses, ASD has contracted with APEX to provide a full slate of courses, including regular and Advanced Placement (AP) curriculum. The AP curriculum has been particularly important for students with scheduling conflicts or attending a school without enough enrollments to support a particular class. Whenever possible, ASD teachers are trained to deliver the courses, and we are committed to increasing the number of teachers trained to teach online each year. To this end, ASD has partnered with the University of Alaska Anchorage campus to create a cohort of ASD teachers pursuing a graduate certificate in e-learning.

The Anchorage School District also utilizes ClassTools Achieve (also provided by APEX) to provide credit recovery opportunities for students. Students who have failed one or more classes have the opportunity to work in an e-learning lab during the school day where they access online curriculum designed for remediation purposes. E-learning coaches work with students to keep them motivated and on-track, and as a result of our online resources combined with other district initiatives, our HSGQE passing rates continue to climb while our drop-out rates have begun to fall.

## **Online Course Committee and Online Teaching/Learning & Resources**

### **Technology Integration:**

Currently ASD's online high school, MyHigh, offers a host of online classes in most of the core subject areas and several elective classes. The classes are aligned to Alaska State Content Standards and model best practices in online instruction.

Over the course of the 2010-2011 school year enrollment in MyHigh has doubled and projected enrollment for the 2011-2012 school year is expected to continue to increase. Hence, online courses have been successfully integrated into the ASD Program of Studies and serve as viable options for obtaining HS credit.

The goal of the committee was to ensure that classes met ASD's rigorous curriculum standards as well as develop a plan to complete modifications of the purchased courses. The committee also made recommendations about future implementation.

ASD uses Moodle to house purchased online curriculum. For some students, online learning is a better delivery method than sitting in a face-to-face class. ASD also uses APEX learning for some courses, although those licenses will be decreasing in usage over the next few years as we purchase and modify our own courses to use with our own teachers.

### **Access:**

The ASD Moodle server is available wherever there is internet connectivity; students and teachers do not need to be behind a firewall to access their courses and resources. Accounts are tied to Active Directory, so any student or teacher can log onto the Moodle server automatically using their ASD Network login. To access a particular class or resource site, users simply enter an Enrollment Key. We are hoping that in the next year, IT will have integrated Zangle and Moodle so that a student scheduled in a class that uses Moodle will be automatically enrolled in the course.

Currently, for most students, MyHigh operates outside the traditional school day and students are responsible to finding access to computers from home or the public library. In January 2011, MyHigh began a pilot program to increase the access of computers for students in the schools during the course of the school day. Struggling students who needed to recover credit were enrolled in MyHigh classes and assigned to a credit recovery computer lab where they were given time and computer access to work on a MyHigh course. Furthermore, MyHigh began working in conjunction with the Department of Defense to purchase laptops and mobile internet keys for military students to ensure accessibility to classes.

In order to increase the level of parent involvement, MyHigh is now working to integrate online grade books and grade reporting through Zangle, the district's student information system. In the future,

MyHigh can possibly collaborate with adult literary services to extend online course offerings to post high school students.

The courses which have been purchased can also provide much needed resources to face-to-face classrooms. Ed Tech will be working with Curriculum to find the learning objects that would be most beneficial in classes around the district. Social Studies is one area requesting use of resources to enhance older material they currently have available. Ed Tech will start offering training on “blended learning” so teachers will develop and use innovative delivery strategies in their face-to-face classes.

Moodle growth (accessibility) as shown by number of ASD users:

May 2008:	0
Jan 2010:	5,000
August 2010:	10,000
February 2011:	13,400

2010-11 was the first school year to have Online Pre-Algebra for 6th graders in elementary schools. In the past, these students would have taken Zero-Hour at a Middle School and then been transported daily back to their elementary school. The need for daily transportation meant that some students were not able to participate in the class simply because their parents weren’t available to drive them to it everyday. With the course moving to online format this year, there was an increase in the number of students taking the course.

2011-12 will be the first time that non-ASD students will be able to take ASD online courses. In this pilot year, up to 100 out-of-district students will be allowed to enroll at a cost of \$400 each. The number of out-of-district students taking online ASD courses will likely grow after the pilot.

**Professional Development:**

MyHigh currently provides two levels of professional development. The first offering is a 1 credit course titled iTech Online 101 which is targeted towards ASD HQ teachers who are interested in learning about and/or teaching online courses. The second level of professional development is designed to support current online teachers who work for MyHigh. Teachers are encouraged to take iTech Online 102 as well as meet in subject area cohorts to discuss course concerns and modifications. The members of the online course committee were invited

Currently, all MyHigh teachers work on addenda. Future plans do include having full-time online teachers in the district.

The ASD Moodle provides a place for regular face-to-face teacher to collaborate and share resources. Moodle sites with shared resources have been created by Elementary Social Studies, Career and Technical Education, Physical Education, World Language, Special Education, Educational Technology, and others. Using a Moodle site allows teachers across the district to share learning objects and lessons with other teachers.

Educational Technology’s Technology Integration Educators (TIE) program conducts regularly scheduled beginning and advanced Moodle trainings for ASD teachers. We plan to get more resources available online to reduce the need for face-to-face trainings, and to keep up with demand for training in Moodle (sustainable prof dev).

**Resources:**

Currently the district is utilizing ARRA funding and well as monies from a Department of Defense grant. The online course committee worked directly with the Department of Social Emotion Learning to fulfill the requirements of the Department of Defense grant which funded course purchases and modifications.

The ASD IT department supports the Moodle infrastructure. They ensure that the server is operational daily and troubleshoot whenever there is a problem.

**Accountability:**

MyHigh uses several indicators to gage the effectiveness of online learning. The first method is to monitor student success rates; another means of measuring effectiveness is through student and staff surveys. The committee monitored success and suggested course changes based on student success.

Ed Tech’s TIE trainings in Moodle help increase the ability of teachers to teach and enables students to reach challenging state academic standards. Many students retake a course fully online to increase achievement.

The goal of the committee was to ensure that classes met ASD’s rigorous curriculum standards as well as develop a plan to implement modifications of the purchased courses. The committee also made recommendations about future growth.

<b>Strategies to Promote Parental Involvement</b>
<p><b>Element:</b> <i>The district will ensure effective use of technology to promote parental involvement and increase parent communication.</i></p> <p><b>Acceptable Criteria:</b> <i>Description of strategies to promote parental involvement and increase communication with parents.</i></p>

Communication with home and community is taken very seriously by the Anchorage School District and there has been a concerted effort to harness technology to partner with parents and the community for greater educational success for our students. A variety of methods are used to accomplish our communication goals including the use of popular social networking sites. Most of the tools the district uses to communicate with parents and community members are online and include the use of:

- The ASD website, a comprehensive website with information about all schools, departments administration and school board
- A Monthly newsletter is delivered both online and through email
- E-mail lists sent out as news happens. Users can decide which one they prefer, then sign up to receive one or all three.
  - **News:** notices about student and staff achievements, events, breaking news and more
  - **Board:** notices for school board activities, meeting agendas and more
  - **Closures:** instant e-mail notification about any school closures

- Robo calls used by schools to notify parents of absences, emergencies and general announcements
- A Facebook site which includes ASD news, photos and events reported on the popular social networking Web site
- Twitter Accounts which deliver up-to-the-minute announcements sent to followers' cell phones. We offer two selections for announcements:
  - **ASD\_Info**
    - News, information and links
  - **ASD\_Closures**
    - Just closures, nothing else
- Fact Check has official ASD responses and corrections to erroneous or misleading rumors, media stories and public discussions.

Our new student information system, Zangle, allows parents and students to access individual student information online. Information accessible through the Zangle system and available online through a secure login includes:

- **News** - This page allows access to school-wide and class-specific announcements.
- **Demographics** – Parents can review this page to be sure that the school has the most up-to-date information.
- **Contacts** – This page lists the child's contact information, including parent or legal guardian, and Emergency Contacts. Here again, parents can review this information to be sure that the school has the most up-to-date information.
- **Schedule** – This page lists the child's current class schedule.
- **Attendance** – This page contains any pertinent information regarding a child's attendance.
- **Assignments** – Here you can view your child's progress in their classes.
- **Marks** – This screen will display a list of all the report card marks that have been posted to the system for the selected student in the current school year.
- **Standards** – Currently Anchorage School District is using this area to show the Kindergarten Report Card and the Work Habits section of the Elementary Report cards.
- **Testing** – This view will display your student's score history in standardized testing.

The following is data about Zangle use by students and parents as of March 25, 2011. There are:

- 55,232            Student accounts in Zangle in the current school year
- 13,134           Students have accessed Student Connect at least once during the current school year
- 80,296           Parent/guardian accounts in the system in the current school year
- 20,595           Number of parent/guardians who have accessed Parent Connect at least once in the current school year

In addition to all of the communication systems listed above, librarians in the Anchorage Public Schools are involving parents in working with students to use the new library system. Some libraries have built

increasing parent participation using the book review functionality of the new library system into their school goals.

## Adult Literacy Services

**Element:** *The district will describe how its schools will develop technology-based programs in collaboration with adult literacy services.*

**Acceptable Criteria:** *Describe a measurable strategy to work with adult literacy services. If not applicable, a description must be provided for the absence of a program.*

There are a variety of adult literacy services available throughout the Anchorage area. Consequently, ASD does not provide a wealth of resources this area; however, a number of ASD departments do offer services that compliment and enhance other resources available in the community. For example, the Bilingual/Multicultural Education Program has a family literacy program that supports students with Limited English Proficiency (LEP) while helping parents develop literacy skills using Achieve 3000 with the parents so they share the same experience as their students.. The family literacy program helps parents become literate and obtain the knowledge and skills needed for employment and self-sufficiency.

## Professional Development

### Plan for Ongoing & Sustainable Professional Development

**Element:** *The district will provide ongoing, sustainable professional development for teachers, principals, administrators, and school library media personnel to further the effective use of technology in the classroom or library media center.*

**Acceptable Criteria:** *Plans for professional development program are clear. Technology professional development includes training in some content areas. A staff technology needs assessment survey is used which can be a part of needs assessment for Title II A. Specific strategies will be identified for assessment of skills in technology of all certified personnel on an annual basis.*

The Anchorage School District is committed to providing ongoing professional development to promote effective integration of technology into the curriculum. In order to prioritize professional development needs and meet accountability requirements for No Child Left Behind, ASD conducts a Needs Assessment annually, administered through a district training portfolio resource called My Learning Plan (NCLB Needs Assessment – Appendix J). This assessment surveys staff to determine preferred training methods and current uses of technology, allowing district personnel to plan future professional development opportunities. The Needs Assessment is based on the State of Alaska’s Technology Standards for Students.

### **Anchorage School District Summer Academy (ASDSA):**

The Anchorage School District Summer Academy (ASDSA) is a 2 week academy immediately following the end of the school year. Teachers have the opportunity to take up to 4 credit classes during

the academy. All departments have the ability to sponsor credit classes. The Educational Technology Department sponsors credit classes that promote technology integration. The EdTech ASDSA committee is the body within the department that encourages staff members to submit proposals for classes that will promote technology integration. Once the department determines which proposals best meet their criteria, the committee works with the instructors and submits the finished syllabi to both the university (UAA) and the school district Training and Professional Development Dept. for approval so they can be entered into the ASDSA online catalog. This year the EdTech Dept. is submitting 30 integrating technology credit classes, which is a 33<sup>1</sup>/<sub>3</sub>% increase from last year. (insert link to list of classes this year or note that it is in appendix)

### **Alaska Society for Technology in Education (ASTE):**

Each year the Ed Tech department is able to provide funds to pay for registration at the Alaska Society for Technology Education conference that occurs in February in Anchorage. Funds are provided to Ed Tech staff as well as curriculum coordinators, math, science and language arts support teachers and school based staff who will be presenting sessions. This allows for continuing professional development for those who provide professional development to site based staff.

### **Current Issues in Education**

Each year a flexible credit class is offered and has become a very popular course. A wide range of technology integration topics are covered each year, affording teachers from throughout the district the opportunity to explore emerging technologies.

### **ISTE Webinars**

A subscription to ISTE webinars provide access to national level presenters discussing cutting edge technologies for the staff housed at the Anchorage Education Center. The Educational Technology and curriculum departments evaluate and pursue promising curricular programs.

### **Atomic Learning**

Just in time training on specific applications extend the reach of the educational technology department. Atomic Learning continues to be a mainstay of application training.

### **Teacher Needs Assessment**

The 2010-2011 Needs Assessment is conducted annually by the Training and Professional Development Department to comply with the NCLB requirements. As a result of this survey, professional development efforts will target innovative, higher-order technology integration skills that foster the expression of ideas and the exchange of information.

In addition to the annual Title II-D Technology Needs Assessment where teachers self-assess their technology skills and use, we also piloted an online teacher assessment tool from Atomic Learning in March 2011. We had 60 teachers from all of our elementary schools take the assessment and discuss it afterward. The pilot group was overwhelmingly agreed that this assessment was not very useful. Questions were poorly worded, sometimes confusing and the results seem to have little connection or correlation with the actual skills of the teachers taking the assessment. The scores ranged from 52 to 95 with most of them reporting in the 60's or 70's. We didn't think this assessment has much validity. Neither the district or the teachers got the information they really needed about their technology skills. As a result of the poor reception of this teacher assessment, we will continue to look at both other vendors and the state of Alaska to supply an online teacher technology assessment tool which can offer

both the district and the teachers the information they need to improve their skills and allow them to improve their teaching using technology.

As technology becomes an increasingly critical facet of our students' educational experience, it is imperative that teachers, principals, administrators, and librarians receive ongoing training in best practices of technology integration not only from the Educational Technology Department but also from the Curriculum and Instructional Support Department, which includes librarians and all academic content areas. To accomplish this goal, specific strategies have been developed and are articulated on the ASD Technology Infused Learning's Curricular & Teaching Strategies document (page 6). Additionally, training must be available in a variety of formats using a multitude of credible models.

### **On-site Professional Development Support**

Currently, elementary schools each have a building technology contact (BTC) that receives an addendum to provide leadership and assist with technology issues in the school. However, in most cases the BTC is also a full-time teacher, which severely limits the amount of in-school support that is available at the elementary level. Consequently, elementary schools also rely upon Elementary Educational Technology Department teachers to assist with on-site professional development.

In an ideal world, every school would have a dedicated technology coach who could collaborate with teachers and administrators on a daily basis; however, budget constraints currently prohibit that model in our large district with over 100 sites. This year (2010-2011) the EdTech department led Secondary Educational Technology Coordinators (SECTECs) in preparing to transition to a new job as Educational Technology Collaborators. The goal of this job transition is to improve the support classroom teachers receive in integrating technology into their curriculum. The new roles begin in Fall 2011, but we have been working on the transition all year preparing staff for the new duties. Part of the preparation work has been to work with Information Technology (I.T.) in hiring and placing I.T. Technicians to assume the technical roles so that Collaborators can focus on the curriculum and integration goals.

A major focus of this year has been in professional development. Four people were sent to the National Staff Development Council conference where they learned about coaching techniques and other professional development models. The individuals then hosted a year-long series of trainings for the 27 people whose job is being transitioned. A two-credit and one-credit course was also offered. All Collaborators were given copies of *Instructional Coaching: A Partnership Approach to Improving Instruction* and *ISTE's Technology Facilitation and Leadership Standards* that were used as the basis of the trainings. Professional Development for the Collaborators will be an ongoing process

In addition to school personnel providing professional development, ASD has invested in a number of technologies to assist in the process of providing on-going and sustainable professional development in the area of technology. A district-wide site license to Atomic Learning allows staff to access short online training videos that help users learn how to use a software program, as well as curricular resources that support teachers in using technology with students. ASD also has an Elluminate server, which allows for synchronous web conferencing. Currently Indian Ed is using Elluminate for Project Pugigtut meetings and trainings. The Gifted Ed Department uses Elluminate for staff meeting and trainings. Assessment and Evaluation have been using Elluminate to deliver mandatory training for assessment like Terra Nova. The EdTech Department is exploring using Elluminate to deliver credit courses to allow teachers that are not able to travel to the ASD Ed Center for these classes. Using Elluminate saves money for departments that have meetings by substantially reducing funds used for

mileage expenses, and by allowing staff to devote time to instructional issues rather than travel. The Elluminate sessions can be archived for future viewing.

Over the next three years we will provide professional development and training on Elluminate to curriculum department heads. We will provide materials and help documents to end users. We will support curriculum department heads in providing training for their staff.

In addition to Elluminate, a Media-site server, ASDTube, delivers streaming professional development content that can be viewed independently on a computer by all staff associated with the school district. The district is in the process of converting much of their mandatory training to this format.

### **Centralized Professional Development Support**

In previous years, centralized Educational Technology Department staff has focused on technical responsibilities that naturally limited their ability to provide ongoing professional development. However, ASD is in the process of reversing this trend. In the 2010-11 school year, ASD expanded both the Information Technology (IT) and the Educational Technology Departments. This enables centralized staff to collaborate more easily with curriculum departments, administrators, principals, teachers, and librarians and provide more frequent and coordinated professional development opportunities. Additionally, the Training and Professional Development Department offers a variety of professional development activities and provides support for teachers and administrators throughout the district, with many of these initiatives supporting state and federal mandates that involve the use of technology.

In addition to on-site and centralized professional development support, the Educational Technology Department supports initiatives designed to promote the growth of technology leaders in our schools.

### **Technology Integration Educator (TIE) Program**

The TIE program, which was launched in the spring of 2007, involves a cadre of ASD teachers who are trained to provide guidance and instructional support for technology-enhanced curriculum programs such as Fast ForWord, Achieve 3000, APEX, and other programs prioritized by division directors and the curriculum departments.

Since September of 2008, the TIE (Technology Integration Educator) program has offered 27 training sessions, some sessions after-school or part-day sessions, for teachers using the Achieve3000 program. To date, the TIE program has trained 257 teachers in everything from the basics of using and navigating through the Achieve3000 program, to analyzing and using the various reports, and then to creating curriculum-specific units within the program. In addition to the TIE-led trainings, the ASD EdTech Department has completed a Train-the-Trainers model in which Achieve3000 professional trainers worked with teacher mentors in order to roll out the program. Along with this, we have offered model lessons at all division levels and consistently conducted on-site teacher trainings, as needed or requested by the teacher. Finally, we have effectively used EdTech teachers as well as our professional trainer to conduct on-going, on-site student training where the trainer circulates among the classrooms in a school and trains students to use Achieve3000.

The TIE program is tailored to meet the specific need of providing training for prioritized technology-infused programs. The TIE program is funded through a combination of Title IIA, Title IID, and ASD Operating funds.

### **Annual ASD Technology Conference:**

The EdTech Department has begun sponsoring an annual fall technology conference, funded by Title II D, for any ASD staff member interested in attending. The first conference was held in October, 2010 at East High School. 167 ASD staff as well as several guest teachers and administrators from other districts attended at least one of the available 17 sessions.

The following are descriptions of two unique and popular sessions designed to promote critical 21st Century skills:

**Teaching With Geospatial Technology, Presenter--Michael Warren (Central Middle School):** This presentation will introduce educators to geospatial tools for use in ASD LA/SS classrooms. Participants will learn the history, use and functionality of the Global Positioning System (GPS), Geographic Information Systems (GIS), and Google Earth, including Google Lit-Trips. This how-to presentation is a good first on-ramp for any educator new to geospatial technologies.

**Scratch Programming, Presenter--Denise Trujillo (EdTech Department) :** This session will introduce you to the basics of computer programming using Scratch, a free drag-and-drop computer language appropriate for grades 2-12. Engaging and easy to learn, your students will benefit by learning to think and create digitally.

### **Library Resource Training**

Recognizing the need to fully leverage the functionality of the new Library System in supporting district wide writing goals we will increase the collaboration between libraries and classroom teachers and use the review functionality of Online Public Access Catalog to provide students with authentic audience for their writing. Additionally we will increase the number of trainings provided for on site for staff on use of WorldBook Online, Statewide Library Electronic Doorway (SLED) and Digital Pipeline, LS2Pac, and NetTrekker. Finally we will develop a plan for training parents on the new LS2Pac and how they and their students can use it to find materials, link to databases, and create reviews.

### **Strategies for Technology Integration**

**Element:** *The district will ensure that teachers are prepared to integrate technology effectively into curricula and instruction.*

**Acceptable Criteria:** *Description of strategies to improve the capacity of teachers to integrate technology across several academic content areas in the three-year time period is included.*

The ASD Technology Infused Learning documents describe specific strategies to improve the capacity of teachers to integrate technology in each academic content area. A timeline for initial implementation of each strategy is included on these documents, and the timelines span the three-years associated with the ASD Technology Plan.

Information technology integration is on the forefront with the adoption of a new library catalog system with a student directed interface.

The library staff plan to:

- increase the collaboration between libraries and classroom teachers to support the writing GLEs.

- provide training in the use of review functionality of Online Public Access Catalog to provide students with authentic audience for their writing.
- increase the number of trainings provided by librarians for school based staff on use of WorldBook Online, Statewide Library Electronic Doorway (SLED) and Digital Pipeline, LS2Pac, and NetTrekker.

## Resources

**Element:** *The district will coordinate federal, state, local, and other funding sources to support student academic achievement, technology literacy, and integration of technology into curricula and instruction.*

**Acceptable Criteria:** *Description of how the district will coordinate activities funded through the Ed Tech Program (Title II-D) with technology related activities supported with funds from other sources.*

Funding from Title II-D pays for teachers to participate in the TIL program. This is a portion of all the resources that are used to fund our professional development training and all the resources that support curricular activities using technology. Funding for technology comes from a variety of sources and are used in a coordinated effort to provide support and integration of technology into the curriculum. Professional development funding is critical to use of technology in the district.

## Technology -Types and Cost

**Element:** *The district will ensure the supporting resources to ensure successful and effective uses of technology.*

**Acceptable Criteria:** *Description of supporting resources, such as services, software, other electronically delivered learning materials, and print resources in the inventory and to be acquired.*

The Educational Technology and Information Technology Departments provide support for the use of the following software and web-based resources. Additionally, division levels (i.e., elementary, middle, and high school) provide financial support for many of the following resources. (Annual Subscription means To be Acquired)

Software Name	Format	Funding	Purpose
Accuplacer	Web-Based	Annual Subscription	College Placement Assessment
Achieve 3000	Web-Based	Annual Subscription	Individualized Lexile-based reading
All the Right Type	Software	Purchased	Keyboarding software
APEX	Web-Based	Annual Subscription	Online courseware
Atomic Learning	Web-Based	Annual Subscription	Online tutorials and resources
Boardmaker	Software	Purchased	Comprehensive SPED
Carnegie	Web-Based	Annual Subscription	Math curriculum
Comic Life	Software	Purchased	Writing curriculum

Discovery OnePlace	Web-Based	Annual Support	Online content management system
Discovery Streaming	Web-Based	Annual Subscription	Academic video and teacher resources
District Connection	Web-Based	In-house Support	ASD Intranet
Dreamweaver	Software	Purchased	Webpage design
ELLIS	Software	Purchased	English Language Learner software
Elluminate	Web-Based	Annual Support	Synchronous online communication
Fast ForWord	Software	Purchased	Reading curriculum
Filemaker Pro	Software	Purchased	Database
iLife 11	Software	Purchased	Creativity tools
Inspiration	Software	Purchased	Visual mapping tool
iWork 11	Software	Purchased	General productivity
Kid Pix	Software	Purchased	Creativity tool
LS2Pac	Software	Annual Support	New Library Catalog System
Lexia Reading	Software	Purchased	Reading curriculum
Microsoft Office	Software	Purchased	General productivity
MyAccess	Web-Based	Annual Subscription	Writing curriculum
NetTrekker	Web-Based	Annual Subscription	Educational websites and resources
Open Office	Software	Open Source	General Productivity
Read Naturally	Software	Purchased	Reading Fluency
Reading A-Z	Software	Purchased	Reading Curriculum
Read180	Software	Purchased	Reading curriculum
SiteBuilder	Web-Based	In-house Support	Teacher webpage development
Waterford Early Learning	Software	Purchased	Reading & Math/Science curriculum
WIN/WorkKeys	Web-Based	EED Support	Career readiness assessment
WorldBook	Web-Based	Annual Subscription	Reference material
Zangle	Web-Based	Phased purchase	Student information system

Additionally, librarians provide training to staff and students on the use of the Statewide Library Electronic Doorway (SLED) and the Digital Pipeline, Worldbook Online, and Nettekker.

ASD has had two standing committees related to the use of technology in the schools: the Hardware Standards Committee (HSC) and the Software Standards Committee (SSC). These two groups have had the responsibility of articulating what is supported regarding hardware and software options. The recommendations for both committees have always been specific and have set the standard regarding purchases.

The Software Standards Committee meets quarterly during the school year with the goal of articulating the student software and resources endorsed by the various departments responsible for establishing curriculum. It has established the District-Endorsed Student Software/Resources list which is intended to articulate the student software and resources that are aligned with our curriculum, work within our technical infrastructure, and for which we are prepared to provide training.

When an instructional need is identified and new resources are considered, software and/or web-based tools go through a variety of evaluation processes prior to final adoption. The first step for curriculum-based resources begins within the Curriculum and Instructional Support Department where resources go through a departmental as well as teacher review process. Throughout this process, the Educational Technology and Information Technology Departments provide support and consultation. Ongoing management of the adopted technology resources sometimes resides with the Curriculum and Instructional Support Department, and sometimes with the Educational Technology or Information Technology Departments.

## **Ed Tech Funds Budget – Technology to be Acquired and Inventory**

**Element:** *The district will maintain an inventory of technology including provisions for interoperability.*  
**Acceptable Criteria:** *Description of the type and costs of technology to be acquired with Ed Tech Funds. (Title II-D) Description of how the district will gather information to meet the computer count requirement on an annual basis.*

The ASD Fixed Asset system documents and tracks all equipment that is used throughout the district. This includes technology used by students, teachers, staff, and administrators. Ed Tech funds (Enhancing Education Through Technology - Title IID) are used primarily to support district-wide professional development initiatives, and are managed by the Educational Technology Department. Examples of the district-wide professional development initiatives include but are not limited to the following:

- Alignment of refreshed International Society for Technology in Education's (ISTE) National Educational Technology Standards for Students (NETS\*S) with ASD Technology Frameworks and curriculum grade level expectations
- Technology Integration Educator (TIE) program
- Technology Integration Leader (TIL) program.

At the present time, ASD's Operating Budget for the Educational Technology Department is currently limited to staff salaries and funds needed to support the operation of the department.

Regarding interoperability within the current client/server infrastructure, ASD has a 22 member Hardware Standards Committee that produces the District Recommended Technology List. This list is updated regularly throughout the school year and as needed when available technology changes. Purchases are limited to items included on the District Recommended Technology List except for low-cost items (e.g., digital cameras) where the district does not provide certified, technical support.

Hardware inventory is maintained through the ASD purchasing department maintenance of asset tracking. Additional, computer hardware inventory is dynamically maintained through use of Casper and Alteris. These applications track the computers in use throughout the district.

## **Accountability**

### **Measure Effectiveness of Technology Integration**

**Element:** *The district will measure the effectiveness of integrating technology into curricula and instruction, increasing the ability of teachers to teach, and enabling students to reach challenging State academic standards.*

**Acceptable Criteria:** *Description of the process and accountability measures that will be used to evaluate the integration of technology, the increased ability of teachers, and the ability of students to increase achievement.*

The Anchorage School District has created a comprehensive accountability system designed to measure progress towards the school board goals. Two of the ASD School Board goals focus specifically on the educational environment and student achievement. All initiatives and objectives included in the ASD Six-Year Instructional Plan (ASD Six-Year Instructional Plan – Appendix B) support the ASD School Board goals, and measurable indicators are developed and evaluated each year by the Assessment and Evaluation Department. Results are published annually in the Profile of Performance report.

### **Measure Effectiveness of the Plan**

**Element:** *The district will measure the effectiveness of the educational technology plan and the district's progress toward meeting the plan's goals.*

**Acceptable Criteria:** *Description of the process that enables the district/schools to monitor progress toward the specified goals and make mid-course corrections in response to new developments and opportunities as they arise.*

The ASD Educational Technology Plan supports the ASD Six-Year Instructional Plan (Appendix \_\_\_ ) and is updated and evaluated annually, in line with the changing needs of the district. The Six-Year plan has distinct, measurable goals, and progress towards those goals is measured annually and reported to the ASD School Board. During the on-going planning and evaluation process, the Educational Technology Department collaborates with all divisions and departments to identify priorities, adjust professional development plans, and abandon, expand, or create new initiatives as necessary.

ASD has a Technology Plan Steering Committee that consists of the Executive Director for Curriculum and Instructional Support, the Supervisor of AV and Voice Services and Library Automation, the Curriculum Coordinator for Libraries, and the Supervisor of Educational Technology. This Steering Committee meets twice a year in coordination with the annual evaluation and the annual update process to the ASD Six-Year Instructional Plan. This allows for adequate monitoring and mid-course corrections as new developments and opportunities arise.

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

**Element:** *The district will provide a list of persons involved in crafting this plan.*

**Acceptable Criteria:** *Representatives of the following five groups are included: administration, teachers, students, community, and staff.*

The development of the ASD Educational Technology Plan has gone through an iterative process. An EdTech Planning Committee has met throughout the 2010-2011 school year to review the plan, seek input from key stakeholders, and make necessary revisions based on emerging district priorities.

By leveraging the power of Google Docs, shared responsibility for editing and updating became a reality, and many stakeholders helped craft the final version. The committee also sought input from the community throughout the year by making an online survey available through our district's web site.

Below is a list of contributors to the plan:

Name	Role
Kristin Main	Elementary Building Technology Contact/Teacher
Laurel Vorachek	Executive Director, Assessment & Evaluation
Ann Morgester	Curriculum Coordinator, Libraries
Jason Bent	SPED Technology Staff Development
Jessica Cook	Anchorage Education Association Representative
Joe Hackenmueller	College & Career Readiness Online Resource Facilitator
Dr. Enid Silverstein	Executive Director, Curriculum and Instructional Support
Jane Berglund	Chief Information Officer
Trisha Grega	Community/University of Alaska-Anchorage
Brandon Boyer	Student Advisory Board President
Leslie Walker	Elementary Principal
Kendra Pecci	Parent
Trisha Flanigan	Educational Technology Teacher -Title 1
Darla Jones	Supervisor, Educational Technology
Craig Kasemodel	Secondary Technology Collaborator/Teacher
Ed Graff	Assistant Superintendent, Instruction
Marty Lang	Secondary Principal
Lance Smith	Assistive Technology Support
Duane Moran	Supervisor, AV and Voice Services and Library Automation
Wes Bell	Supervisor, Information Technology
Mary St. John	Educational Technology teacher, Elementary
Jan Thompson	Educational Technology Teacher, Secondary
Julie Besch	Educational Technology Teacher K-12, TIE Coordinator

As the ASD Educational Technology Plan evolved, additional participants were brought into the input process. These individuals included upper district administration, broader departmental involvement, school-based technology collaborators, survey input, and additional student representation.

### **Technology Plan Review**

**Element:** *Technology Plan Review.*

**Acceptable Criteria:** *Processes for periodic review of district needs and revision of the plan*

The ASD Technology Plan is based on the ASD Six-Year Instructional Plan (ASD Six-Year Instructional Plan – Appendix B), which goes through a rigorous annual evaluation and update process that includes discussion and presentation to the ASD School Board twice a year. As the ASD Six-Year Plan is updated, an ASD Technology Plan Steering Committee will meet and continue to update the EdTech Plan as needed.

The ASD Technology Plan Steering Committee consists of the following members:

- Supervisor, Educational Technology
- Supervisor AV and Voice Services and Library Automation
- Curriculum Coordinator, Libraries
- Executive Director for Curriculum and Instructional Support

## Children's Internet Protection Act (CIPA) Compliance

*The District assures that CIPA compliance has been met.*

**Element: Technology Protection Measure:** *Specific technology has been identified that will be used to **block** or **filter** Internet access. It must protect against access by adults and minors to visual depictions that are obscene, child pornography, or – with respect to use of computers with Internet access by minors – harmful to minors. **It may be disabled for adults engaged in bona fide research** or other lawful purposes.*

**Acceptable Criteria:** *Description of the technology measure that the district has in place and how the measure can be disabled for adults engaged in bonafide research for lawful purpose.*

In order to address the issue of inappropriate web-based material, the District has installed an Internet filtering system using M86 technologies at the district's Information Technology Center.

- All Internet web-based content accessed through computers connected to the district network is filtered through this system
- Installation and operation of this, or any, Internet filtering system on ASD computers by no means precludes staff, students and community members from their responsibility to use ASD network services responsibly, as outlined in ASD's student and staff user agreements (ASD Internet and Electronic Mail Use Agreement - Appendix O, and ASD Internet and Electronic Mail Student Agreement – Appendix P).
- Categories of web content to be filtered are determined by the Internet Policy Committee with input from district staff
- Specific exceptions to content filtering are forwarded to the Chief Information Officer for review
- Differentiated access using Active Directory authentication is available for specific adults (teachers and administrators) engaged in bonafide research for lawful purpose

The Anchorage School District filters web traffic in the district's LAN. Additional information related to filtering can be found in the ASD Internet Guidelines (ASD Internet and Electronic Communication Guidelines - Appendix Q) and in the categories of web sites blocked (District Internet Filter – Appendix R).

To allow teachers access to some resources that may be restricted for the student population, their active directory logins allow them to over-ride the filter. This over-ride is tracked to monitor teacher activity. This over-ride is not for student use, but for teacher use only. Teachers may not use this over-ride for student access.

**Element:** *The Internet Safety Policy addresses the following issues:*

- a) *access by minors to inappropriate matter on the Internet and World Wide Web;*
- b) *the safety and security of minors when using electronic mail, chat rooms and other forms of direct electronic communications;*
- c) *unauthorized access, including so-called “hacking,” and other unlawful activities by minors online;*
- d) *unauthorized disclosure, use and dissemination of personal information regarding minors; and*
- e) *measures designed to restrict minors’ access to materials harmful to minors.*

**Acceptable Criteria:** *Description of the Internet safety policy that addresses all the items outlined and includes the monitoring of online activities of minors.*

Training students to be safe digital citizens is a responsibility we take seriously. Plans are to have all new to district teachers trained in Internet safety. The presentation and support materials are being created now for delivery in August of 2011 for new teachers hired.

In addition, the EdTech Internet Safety Committee, comprised of EdTech and curriculum staff, has developed a K-12 Internet Safety Plan centered on Internet Safety and Digital Citizenship Guidelines. The committee adopted the self and social themes for these guidelines:

- I am safe
- I am secure
- I am ethical

For each theme, grade level expectations have been outlined for grade bands K-2, 3-5, 6-8, and 9-12. The complete list, along with a brochure also developed by the committee, is available online at the following link: [http://www.asdk12.org/depts/EdTech/internet\\_safety.asp](http://www.asdk12.org/depts/EdTech/internet_safety.asp)

The committee has also been focused on developing training videos for staff and students to be posted to ASDTube to introduce the central themes for the various grade bands.

Parents also must learn how to assist their children in safely navigating the Internet. Parent meetings will be held beginning in the fall of 2011 to address concerns and issues hindering the use of the Internet as a resource.

**Element: *Public Notice and Hearing:*** *The authority with responsibility for administration of the school or library has provided **reasonable public notice** and held at least **one public hearing** to address a proposed Technology Protection Measure and Internet Safety Policy.*

**Acceptable Criteria:** *Documentation of the public notice and agenda/minutes of the public hearing to address the Technology Protection Measure and Internet Safety Policy within the last three years.*

Anchorage School Board will update the Internet Safety Policy at a public meeting in April 2011 to add social media guidelines.

ASD School Board policy 346.6 further identifies acceptable uses of the Internet (ASD School Board Policy 346.6 Electronic Information Networks, Use of the Internet – Appendix S).