

**DANSVILLE CENTRAL SCHOOL**

“Providing a Technological Vision for  
Students, Staff and Community”



# 2010-2013 Technology Plan

Updated September 1, 2009

DANSVILLE CENTRAL SCHOOL

# ***Technology Plan***

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## ***Technology Mission Statement***

The purpose of educational technology in the Dansville Central School District is to provide the resources for students, staff and community to become:

- ❑ Capable information technology users
- ❑ Information seekers, analyzers, and evaluators
- ❑ Problem solvers and decision makers
- ❑ Creative and effective users of productivity tools
- ❑ Communicators, collaborators, publishers, and producers
- ❑ Informed, responsible, and contributing citizens

Technology will empower students to adapt to our rapidly changing society. They will be able to create, access, exchange, and analyze information readily from electronic sources. Students will have access to information and technologies needed to function as productive members of the 21<sup>st</sup> century society.

Teachers in the district will be able to use relevant technologies to prepare and deliver curriculum. Staff support and development will be provided through appropriate internal and external resources.

Learning environments will include student-centered approaches to teaching and collaborative work. Policies and standards that support the district's initiatives will be written and regularly reviewed.

Technology is an integral component in promoting the highest level of quality in:

- ❑ Delivering instruction.
- ❑ Improving student academic achievement.
- ❑ Improving student motivation and learning.
- ❑ Providing access to a wide array of information.
- ❑ Preparing students for the changing technologies required for advanced learning and in the world of work.
- ❑ Fostering enthusiasm, curiosity, and confidence toward life-long learning.
- ❑ Accommodating different curriculum needs and different learning styles.
- ❑ Maximizing district-wide communication, coordination, and the performance of responsibilities.
- ❑ Delivering administrative services, which provide the foundation of the instructional program.
- ❑ Assisting staff with record keeping, including but not limited to student grades and records.

The District will:

- ❑ Provide district-wide access to relevant technological equipment, materials, and instruction, throughout the year and across the curriculum.
- ❑ Utilize local and world-wide technical resources.
- ❑ Provide district-wide opportunities for continual technological education.
- ❑ Ensure the continuity and coordination of acquisition, application, replacement, and maintenance of changing technology.
- ❑ Promote district-wide educational goals through the use of technology.
- ❑ Assist teachers with the integration of technology into the curriculum to improve student achievement.

## ***District Goals***

### ***Goal 1: To Integrate Technology in the Classroom***

To integrate voice, video and data technologies into the classroom to enhance curriculum delivery and improve student performance. With more networked computers in the classroom, students have ready access to local and wide-area learning resources without traveling to a lab or media center. Multimedia presentations help focus student interest and learning.

#### ***Implementation Plan***

Support in developing and implementing technology into daily instruction is provided by district technology staff, including the Technology Director, technology teaching assistants and the building Principal. Additional outside resources (Edutech, GVBores, Tri-county Teacher Resource Center, relevant third-party vendors) are employed as needed. Provide hardware, including, digital projectors, distance learning, and interactive whiteboard technology to enhance curriculum delivery. Contract with third party vendors to deliver online educational video content. Maintain a district-controlled internet filter to allow teachers ready access to online resources. Maintain a district-owned web server to promote the use of internet/intranet web pages in and out of the classroom. Provide funding for teachers to purchase approved software and receive training to enhance instruction. Pursue appropriate technology-oriented grants. Computers that have been replaced by the cyclical budget plan will be allocated to classrooms where applicable.

#### ***Evaluation Process***

Teacher feedback will be solicited annually via online survey; technology committee will review and make adjustments. Building Principals will evaluate technology use as part of annual teacher review.

Teachers/administrators will review student performance to evaluate effectiveness of software applications and hardware in achieving goals.

#### ***Budget***

The district technology budget provides funds to cyclically replace computers and software in classrooms, labs, and libraries based on an

annually updated five year projection prepared by the Director of Technology. This projection also includes replacement of servers/network hardware and software necessary to maintain the district infrastructure to a high standard. Additional funds are annually budgeted to fund specific hardware/software requests for approved classroom learning initiatives. The wide-area network services (internet) are budgeted through the Wayne-Finger Lakes Edutech Network Coser. The fiber connection which brings local and wide area services to our Middle School and transportation facility is funded through the district budget.

## ***Goal 2: To Improve District Communication***

Utilize technology to further enhance district communication, record keeping, data availability and efficiency. Deploying these systems will permit teachers and administrators more time to work with students and education-related issues.

### ***Implementation Plan***

Pursue a single district-wide student records database solution (Schoolmaster District) with web access for community. Wayne-Finger Lakes Edutech will migrate application and provide ongoing support. Pursue integration of Food Service and Transportation databases into district-wide student records database. Evaluate products such as Microsoft Sharepoint Services and Adobe Acrobat V9.0 to ease and improve inter-building/inter-department collaboration. Continue expanding district intranet development/use to further efficient district-wide communication. Move to create a single student records database manager responsible for data integrity, district training and data warehouse responsibilities. Use district internet web site to communicate school information to community. Use Blackboard Connect to allow customized voice messages to be efficiently delivered to parents.

### ***Evaluation Process***

Survey staff/community annually to evaluate effectiveness of software/hardware solutions in furthering district communication. Monitor the number of errors and the ease of preparing state reports. Monitor tax inquiries, parental inquiries into student performance, etc. Monitor “hits” on district intranet/internet to gauge usage.

## **Budget**

The Schoolmaster student records database migration from a split database to a single database solution will be funded through the Wayne-Finger Lakes Administration Coser. Internet/intranet development and use are funded locally through the hardware/software budget and existing technology employee's salaries. Any additional software (Sharepoint, Acrobat V9.0) would be funded through the district software budget. The Blackboard Connect system will be funded through a Wayne-Finger Lakes Coser.

## **Goal 3: To Provide Modern Technology**

To ensure teacher and student usage of modern technological resources through equitable distribution of grants, equipment, software, and technical assistance. Reliable, fast networks, computers, and servers promote increased student/faculty use of technology. Using modern equipment and software prepares students for college and work.

## **Implementation Plan**

A cyclical replacement plan is budgeted to provide up-to-date technology in the labs, libraries, and classrooms. Faculty is given the opportunity, annually, to request additional hardware/software to support an approved learning by the technology committee. The Technology Director will be charged with overseeing the infrastructure, ensuring that it is capable of meeting the district goals.

## **Evaluation Process**

The Technology Director will annually assess the district's technology infrastructure and review with the technology committee, who will make recommendations to the superintendent. Additional requests for hardware, software and training will be reviewed by the technology committee. Budget recommendations will be provided to the superintendent, based on demand.

## **Budget**

The local district cyclical replacement hardware/software budget provides up-to-date technology for our users. Additional annual technology purchases are funded through grants.

## **Goal 4: To Improve Student Technology Skills**

The district will provide the necessary curriculum, faculty, staff and facilities to meet the stated district technology goals for students. Skilled technology users have more learning and communication choices available.

### **Implementation Plan**

Using the NETS Standards for Students (See Appendix A) as a template, DCS will provide programs to enhance teaching and learning through the use of educational technologies. Students Kindergarten through 5th grade will be required to complete classes in the building computer labs, where computer skills and curriculum related material will be presented by the computer teaching assistants in conjunction with the classroom teacher. Sixth Grade students are required to complete an 10 week program in the computer lab, which emphasizes core computer skills. Seventh grade students will be required to complete a half year in the MST lab. Additional technology-based classes will be offered on an elective basis for grades 8 - 12. The High School MST lab provides a wide variety of learning opportunities for students interested in technology. Library Media Specialists in all buildings will provide ongoing instruction at all grade levels. Computer labs are staffed by competent teaching assistants who are available to assist teachers and students in accomplishing the district's technology goals.

### **Evaluation Process**

Student progress in the computer labs will be specifically reported to the classroom teacher. General reports will be available to the building Principal and the technology committee by the lab teaching assistant. This group will collaborate in district-sponsored Professional Learning Communities to build and enhance effective programs, while eliminating those that are not working. Feedback from faculty will be annually solicited to gauge the student abilities to use technology to complete assignments. Curriculum will be adjusted in the mandatory technology classes. Elective classes will be tailored to meet additional classroom objectives, as needed.

### **Budget**

The funding for the teachers, computer lab teaching assistants and the Director of Technology is provided through the local district budget and title grants.

## **Goal 5: To Improve Teacher Technology Skills**

The district will provide the necessary training, staff and resources to meet the stated district technology goals for teachers.

### **Implementation Plan**

Using the NETS Standards for teachers (See Appendix B) as a template for professional development, DCS will provide programs to enhance teaching and learning through the use of educational technologies. Teachers will have the opportunity to learn technology skills and strategies by working with district technology personnel (Technology Director, computer teaching assistants) as well as outside resources including Edutech, GVBoces and other third-party consultants/trainers. Teachers will be encouraged to attend technology conferences such as NYSCATE. Technology support will be offered on superintendent conference days.

### **Evaluation Process**

Building Principals will evaluate the effective use of technology in the classroom as part of the teacher's annual review. Results will be reported to the superintendent and the technology committee.

### **Budget**

The funding for the teachers, computer lab teaching assistants and the Director of Technology is provided through the local district budget and title grants.

## **Goal 6: To Improve Administration Technology Skills**

Every administrator will be technologically literate; will provide leadership in integrating technology into curriculum, instruction, and student learning activities; and will have access to technology resources that support them in

developing management systems and in creating a school climate and culture that results in high student achievement.

### ***Implementation Plan***

Using the NETS Standards for Administrators (See Appendix C) as a template for professional development, DCS will provide programs to help district administration meet these goals.

### ***Evaluation Process***

The Superintendent will evaluate administrative technology progress.

### ***Budget***

The funding for the teachers, computer lab teaching assistants and the Director of Technology is provided through the local district budget and title grants.

## ***Goal 7: To Improve Student Performance***

The district will provide technological resources to help students attain high levels of achievement on tests.

### ***Implementation Plan***

Continue to contract with software vendors such as Everyday Math Games , School Island, and Study Island to help students prepare for and improve performance on tests. Evaluate new programs that are beneficial to student preparation for state and national tests.

### ***Evaluation Process***

The building principals will annually review test performance and evaluate the effectiveness of the employed technology in achieving results. An attempt will be made to measure the overall effect of technology on student test performance. Successful programs will be continued, failing applications will be dropped.

### ***Budget***

The funding for the teachers, computer lab teaching assistants and the Director of Technology is provided through the local district budget and title grants. Software applications related to this area are funded through the local district software budget.

### **Goal 8: To Annually Update Technology Plan**

The district technology plan will be reviewed on an annual basis.

#### **Implementation Plan**

The technology committee will review the technology plan at the monthly June meeting. Necessary changes will be made based on feedback from the users and district technology personnel. Meeting this goal will ensure that students, teachers, and administrator's needs are being formally evaluated.

#### **Evaluation Process**

Approval of technology plan by superintendent.

#### **Budget**

The funding for the teachers, computer lab teaching assistants and the Director of Technology is provided through the local district budget and title grants.

### **Goal 9: To offer Elective Technology Courses**

To offer elective technology classes to students, staff, and community.

#### **Implementation Plan**

Meet with district administration to develop elective technology curriculum for students, staff and community. Instructors will be selected from areas of proficiency within current staff. Advertise course offerings through guidance dept., local news sources, and district web site.

#### **Evaluation Process**

Approval of curriculum offerings by district administration. Enrollment in final course offerings. Course feedback will be solicited by survey.

## ***Budget***

The funding for the teachers, computer lab teaching assistants and the Director of Technology is provided through the local district budget and title grants. These people will run the classes as needed without requirement for additional funds. Adult education classes will be funded by fees charged to attend the class.

## ***Technology Assessment***

The District Technology committee conducts an annual assessment of the district technology needs, including telecommunication services, hardware, software, networking, and other services. This committee (see Appendix D) will annually review the results of the regional NETS survey data and other district survey data to guide purchasing priorities and adequate resource distribution to meet established goals. The district professional development plan adopted annually will reflect professional development in student achievement goals that incorporate technology-related components.

## **Technical Professional Development Plan**

To ensure that DCS staff is proficient in using district technology resources a specific professional development plan has been adopted. All staff will complete sections I and II outlined below. The remaining sections will be completed on an “as-needed “ basis, depending on grade level, need, and resource allocation. The plan will be annually reviewed by the District Technology Committee/ Administrative team to verify that it meets current and anticipated technology requirements. Individual progress will be evaluated by the building principal for teaching staff as part of a periodic review. Feedback will be provided to the Superintendent and the Technology Committee.

<b>What</b>	<b>How</b>
<b>1. DCS Network Architecture, Resources and Usage</b> a. Accessing the local network b. understanding of district infrastructure c. Available resources d. Network security and filtering e. Acceptable Use Policy	<ul style="list-style-type: none"> <li>• September of the current school year</li> <li>• Building administrators to determine schedule</li> </ul>
<b>2. Software/Productivity Programs</b> a. Microsoft Office	<ul style="list-style-type: none"> <li>• All district employees will be proficiently trained in district productivity software</li> <li>• TAs and district “expert” users provide advanced training</li> </ul>
<b>3. Student Records Programs</b> a. SchoolMaster, GradeBook, attendance, etc.	<ul style="list-style-type: none"> <li>• Edutech will provide training</li> </ul>
<b>4. Internet Safety</b>	<ul style="list-style-type: none"> <li>• Training conducted by BOCES</li> </ul>
<b>5. Library electronic catalogs / Databases</b>	<ul style="list-style-type: none"> <li>• Training provided by and obtained by district librarian/media specialists</li> </ul>
<b>6. Specialized Software</b> School Island, Clear Track, Photoshop, Finance Manager, etc.	<ul style="list-style-type: none"> <li>• Presented by TAs, program vendors, and BOCES</li> </ul>
<b>7. Specialized Hardware</b> Promethean, Digital cameras, Distance	<ul style="list-style-type: none"> <li>• Presented by TAs, program vendors, and BOCES</li> </ul>

learning units, etc.	
<b>8. IT Training</b>	<ul style="list-style-type: none"><li>• Attending conferences workshops, program vendors, BOES, online, etc.</li></ul>

# **Infrastructure**

## **Current Status: 2010-2013**

To meet district goals, the following equipment/software/services are used:

1. **Server Platform** – Windows 2003 Server. By using Microsoft's cost-effective, highly-supportable, business-class server operating system we are able to meet all our academic and administrative computing goals. All the applications we have chosen run successfully. Student learning is enhanced through high resource availability, protected data storage, and software compatibility. Being able to run the widest variety of student-centered software gives us the flexibility to meet our goals. The ability to offer a common desktop providing a seamless interface to all computers in the district means students spend more time learning and less time trying to get access to software and hardware resources. The same benefits apply to administrative computing tasks, resulting in better efficiency and communication. The low cost software made available to school systems by Microsoft enables us to provide more resources, further enhancing student learning. These application and infrastructure servers are scheduled for cyclical replacement to ensure high uptime and high data throughput.
2. **Desktop Platform** – Windows XP Professional/Windows Vista. By running the latest defacto standard, desktop operating system, our students and staff have the greatest choices in academic and business software available. This also ensures they will have experience using the most common user interface they are likely to encounter in college and the workplace. A common desktop interface lets our users spend more time working. Ease in creating multi-media presentations attracts greater student/faculty interest in employing technology in the classroom. As we move to Vista, advanced features including video editing and greater digital device storage flexibility options will continue to motivate our learners to use technology. Desktop systems are scheduled for cyclical replacement to ensure users are trained on modern equipment and to minimize down time due to hardware failure.

3. **Network Protocol** – TCP/IP. This standard ensures vendor inter-operability and fault tolerant, efficient communication between devices.
4. **Hardware Vendor(s)** – hardware is purchased from state-bid approved vendors offering tier one equipment. By purchasing reliable, low-cost hardware we are able to offer more resources to our learning communities. Low down time due to quality components and ready parts availability ensures more technology-based learning time.
5. **Local Network Infrastructure** - inter-building switched fiber optic backbone with 100/1000 mbs copper connections to servers/desktops. The fiber connection to our Middle School and Transportation office is leased through Time-Warner. Dansville's district-owned, high-speed network provides the reliability and speed to run demanding applications including streaming audio and video. Wireless, mobile notebook resources offer additional computing flexibility by allowing as many as 25 networked computers to travel to any classroom on the campus. The fiber connection to our remote Middle School offers reliable, high-speed access to campus resources while saving on hardware costs. Likewise, the fiber connection to our remote transportation department allows high-speed access to a web-based transportation routing application and the student records database.
6. **Wide-Area Network Infrastructure** - 5 mbs fiber (Time-Warner contracted through Edutech). The move to our new fiber connection has made streaming video, audio, and distance learning over the internet a reality. Students and teachers benefit from rapid internet searching and downloads allowing more time spent learning rather than waiting for information on congested links. The expanded resources offered via the internet promote advanced student research and learning opportunities to world-wide resources. Remote access to school resources is available through Edutech's Cisco VPN solution. This allows teachers and administrators the flexibility to work from home. Increased, stable bandwidth allows us to run more web-based applications which reduce our local hardware and support costs.
7. **Internet Service Provider** – Time-Warner contracted through Edutech provides reliable, managed services resulting in high up time.
8. **Internet Information Server** – Microsoft Internet Information Services (V6.0) running on a dedicated, district-owned server. By

running our own internet/intranet web server, we are able to offer students and teachers the opportunity to create large web pages at very low cost. Dynamic video and audio content is possible when deploying these presentations over the high-speed district intranet. Also sensitive information cannot be viewed from the outside. Teacher web pages enhance curriculum, allowing student access even outside the classroom. Projects requiring student-authored web pages teach students valuable 21<sup>st</sup> century communication methods and inspire learning and creativity. The district internet web site (<http://www.dansvillecsd.org>) provides a wealth of school information to the community. Everything from the lunch menu to teacher authored web pages contributes to efficient communication and learning. Webcam broadcasts over the internet have allowed the public to view school ceremonies and activities in a new and interesting way. The district intranet allows uniform, efficient, and rapid communication of information to the entire district. Online forms also promote efficiency and make information gathering much more efficient.

9. **Email Services** – Microsoft Exchange Server 2003 running on dedicated, district-owned server. Efficient communication between teachers, administrators, staff and parents is facilitated through our mail server. Large mailbox quotas, shared calendars, and large message size allowances are features that make the district mail server a valuable communication tool. The ease of use promotes good parent-teacher communication.
10. **Internet Filter** – Cisco Series 500 Content Engine running N2H2 filtering software, contracted through Edutech. With a district-controlled internet filter we are able to customize the configuration to allow teachers the freedom they need to efficiently search the internet for learning resources, while preventing students from visiting inappropriate sites. Without all the bothersome and time-consuming blocks, teachers are much more willing to incorporate internet resources into their lesson plans. Without the distraction of inappropriate web sites, students are able to use the internet in a positive way to enhance research and learning.
11. **Wireless Voice/Data Services** – District administrators are able to work more effectively by being able to communicate anytime, anyplace via voice or email.

12. **Office Automation** – Microsoft Office 2007. By standardizing on MS Office, our users are able to communicate information effectively using word processing, spreadsheets, databases, desktop publishing, multimedia presentations, and a common email interface.
13. **Network Packet Shaping** – network bandwidth is prioritized the use of a Packeteer 3500 packet shaper.
14. **SPAM Filter** – Barracuda Networks spam appliance greatly reduces unwanted email.

## ***Budget Plan***

The Technology Committee will prepare an annual budget recommendation. This recommendation will be reviewed by the District administrative team as a part of their budget planning and submitted to the Superintendent. The budget plan will seek to provide a multiyear plan that implements the needs identified in the assessment.

# ***Internet Safety Plan***

## ***Introduction***

It is the policy of the Dansville Central School District that all employees and students within the Dansville Central School District shall adhere to the Dansville Central School District Acceptable Use Policy (AUP). Compliance with the Children's Internet Protection Act [Pub. L. No. 106-554 and 47 USC 254(n)].

## ***Definition***

Key terms are as defined in the Children's Internet Protection Act.\*

## ***Access to Inappropriate Material***

As per the Dansville Central School District's AUP, filtering software is in place to block or filter the internet and other forms of electronic communication.

Specifically, as required by the Children's Internet Protection Act, blocking applies to all written as well as visual depictions of material deemed obscene or child pornography, and to any material deemed harmful to minors.

Subject to staff supervision, technology protection measures may be disabled or, in the case of minors, minimized only for bona fide research or other lawful purposes.

## ***Inappropriate Network Usage***

As per the Dansville Central School District's AUP, all forms of electronic communications are blocked by filtering software for student users.

The Dansville Central School District's AUP strictly forbids inappropriate network usage as outlined within the illegal activities section.

## ***Education, Supervision and Monitoring***

It shall be the responsibility of all staff members of the Dansville Central School District to educate, supervise and monitor appropriate usage of the online computer network and access to the Internet in accordance with this policy, the Children’s Internet Protection Act, the Neighborhood Children’s Internet Protection Act, and the Protecting Children in the 21<sup>st</sup> Century Act.

Procedures for the disabling or otherwise modifying any technology protection measures shall be the responsibility of the Technology Coordinator or designated representatives.

**Adoption**

The Dansville Central School District School Board has approved and adopted the Internet Safety Policy as part of the District Technology Plan.

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\*CIPA definitions of terms

TECHNOLOGY PROTECTION MEASURE. The term “technology protection measure” means a specific technology that blocks or filters Internet access to visual depiction that are:

1. OBSCENE, as that term is defined in section 1460 of title 18, United States Code;
2. CHILD PORNOGRAPHY, as that term is defined in section 2256 of title 18, United States Code; or
3. Harmful to minors.

HARMFUL TO MINORS. The term “harmful to minors” means any picture, image, graphic image file, or other visual depiction that:

1. Taken as a whole and with respect to minors, appeals to a prurient interest in nudity, sex, or excretion;
2. Depicts, describes, or represents, in a patently offensive way with respect to what is suitable for minors, an actual or simulated sexual act or sexual contact, actual or simulated normal or perverted sexual acts, or a lewd exhibition of the genitals; and
3. Taken as a whole, lacks serious literary, artistic, political, or scientific value as to minors.

SEXUAL ACT; SEXUAL CONTACT. The terms “sexual act” and “sexual contact” have the meanings given such terms in section 2246 of title 18, United States Code.

# ***Addendum***

APPENDIX A: NETS for Students

APPENDIX B: NETS for Teachers

APPENDIX C: NETS for Administrators

APPENDIX D: Technology Committee Membership

# **Appendix A: Nets for Students**

## **Technology Foundation Standards for All Students**

The technology foundation standards for students are divided into six broad categories. Standards within each category are to be introduced, reinforced, and mastered by students. These categories provide a framework for linking performance indicators within the Profiles for Technology Literate Students to the standards. Teachers can use these standards and profiles as guidelines for planning technology-based activities in which students achieve success in learning, communication, and life skills.

### Technology Foundation Standards for Students

- 1 Basic operations and concepts
  - ❑ Students demonstrate a sound understanding of the nature and operation of technology systems.
  - ❑ Students are proficient in the use of technology.
- 2 Social, ethical, and human issues
  - ❑ Students understand the ethical, cultural, and societal issues related to technology.
  - ❑ Students practice responsible use of technology systems, information, and software.
  - ❑ Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.
- 3 Technology productivity tools
  - ❑ Students use technology tools to enhance learning, increase productivity, and promote creativity.
  - ❑ Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.
- 4 Technology communications tools
  - ❑ Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.

- ❑ Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.
- 5 Technology research tools
- ❑ Students use technology to locate, evaluate, and collect information from a variety of sources.
  - ❑ Students use technology tools to process data and report results.
  - ❑ Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.
- 6 Technology problem-solving and decision-making tools
- ❑ Students use technology resources for solving problems and making informed decisions.
  - ❑ Students employ technology in the development of strategies for solving problems in the real world.

## **Appendix B: Nets for Teachers**

### **Educational Technology Standards and Performance Indicators for All Teachers**

Building on the NETS for Students, the ISTE NETS for Teachers (NETS•T), which focus on preservice teacher education, define the fundamental concepts, knowledge, skills, and attitudes for applying technology in educational settings. All candidates seeking certification or endorsements in teacher preparation should meet these educational technology standards. It is the responsibility of faculty across the university and at cooperating schools to provide opportunities for teacher candidates to meet these standards.

The six standards areas with performance indicators listed below are designed to be general enough to be customized to fit state, university, or district guidelines and yet specific enough to define the scope of the topic. Performance indicators for each standard provide specific outcomes to be measured when developing a set of assessment tools. The standards and the performance indicators also provide guidelines for teachers currently in the classroom.

#### **1 TECHNOLOGY OPERATIONS AND CONCEPTS.**

*Teachers demonstrate a sound understanding of technology operations and concepts. Teachers:*

- ❑ Demonstrate introductory knowledge, skills, and understanding of concepts related to technology (as described in the ISTE National Education Technology Standards for Students)
- ❑ Demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

#### **2 PLANNING AND DESIGNING LEARNING ENVIRONMENTS AND EXPERIENCES.**

*Teachers plan and design effective learning environments and experiences supported by technology. Teachers:*

- ❑ Design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.

- ❑ Apply current research on teaching and learning with technology when planning learning environments and experiences.
- ❑ Identify and locate technology resources and evaluate them for accuracy and suitability.
- ❑ Plan for the management of technology resources within the context of learning activities.
- ❑ Plan strategies to manage student learning in a technology-enhanced environment.

### 3 TEACHING, LEARNING, AND THE CURRICULUM.

*Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning. Teachers:*

- ❑ Facilitate technology-enhanced experiences that address content standards and student technology standards.
- ❑ Use technology to support learner-centered strategies that address the diverse needs of students.
- ❑ Apply technology to develop students' higher order skills and creativity.
- ❑ Manage student learning activities in a technology-enhanced environment.

### 4 ASSESSMENT AND EVALUATION.

*Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies. Teachers:*

- ❑ Apply technology in assessing student learning of subject matter using a variety of assessment techniques.
- ❑ Use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.
- ❑ Apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication, and productivity.

### 5 PRODUCTIVITY AND PROFESSIONAL PRACTICE.

*Teachers use technology to enhance their productivity and professional practice. Teachers:*

- ❑ Use technology resources to engage in ongoing professional development and lifelong learning.
- ❑ Continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.

- Apply technology to increase productivity.
- Use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.

## 6 SOCIAL, ETHICAL, LEGAL, AND HUMAN ISSUES.

*Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply those principles in practice. Teachers:*

- Model and teach legal and ethical practice related to technology use.
- Apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.
- Identify and use technology resources that affirm diversity
- Promote safe and healthy use of technology resources.
- Facilitate equitable access to technology resources for all students.

# **Appendix C: Nets for Administrators**

## Educational Technology Standards and Performance Indicators for Administrators

### I. LEADERSHIP AND VISION.

Educational leaders inspire a shared vision for comprehensive integration of technology and foster an environment and culture conducive to the realization of that vision. Educational leaders:

- A. facilitate the shared development by all stakeholders of a vision for technology use and widely communicate that vision.
- B. maintain an inclusive and cohesive process to develop, implement, and monitor a dynamic, long-range, and systemic technology plan to achieve the vision.
- C. foster and nurture a culture of responsible risk-taking and advocate policies promoting continuous innovation with technology.
- D. use data in making leadership decisions.
- E. advocate for research-based effective practices in use of technology.
- F. advocate on the state and national levels for policies, programs, and funding opportunities that support implementation of the district technology plan.

## II. LEARNING AND TEACHING.

Educational leaders ensure that curricular design, instructional strategies, and learning environments integrate appropriate technologies to maximize learning and teaching. Educational leaders:

- A. identify, use, evaluate, and promote appropriate technologies to enhance and support instruction and standards-based curriculum leading to high levels of student achievement.
- B. facilitate and support collaborative technology-enriched learning environments conducive to innovation for improved learning.
- C. provide for learner-centered environments that use technology to meet the individual and diverse needs of learners.
- D. facilitate the use of technologies to support and enhance instructional methods that develop higher-level thinking, decision-making, and problem-solving skills.
- E. provide for and ensure that faculty and staff take advantage of quality professional learning opportunities for improved learning and teaching with technology.

## III. PRODUCTIVITY AND PROFESSIONAL PRACTICE.

Educational leaders apply technology to enhance their professional practice and to increase their own productivity and that of others. Educational leaders:

- A. model the routine, intentional, and effective use of technology.
- B. employ technology for communication and collaboration among colleagues, staff, parents, students, and the larger community.
- C. create and participate in learning communities that stimulate, nurture, and support faculty and staff in using technology for improved productivity.
- D. engage in sustained, job-related professional learning using technology resources.
- E. maintain awareness of emerging technologies and their potential uses in education.
- F. use technology to advance organizational improvement.

## IV. SUPPORT, MANAGEMENT, AND OPERATIONS.

Educational leaders ensure the integration of technology to support productive systems for learning and administration. Educational leaders:

- A. develop, implement, and monitor policies and guidelines to ensure compatibility of technologies.

- B. implement and use integrated technology-based management and operations systems.
- C. allocate financial and human resources to ensure complete and sustained implementation of the technology plan.
- D. integrate strategic plans, technology plans, and other improvement plans and policies to align efforts and leverage resources.
- E. implement procedures to drive continuous improvement of technology systems and to support technology replacement cycles.

#### V. ASSESSMENT AND EVALUATION.

Educational leaders use technology to plan and implement comprehensive systems of effective assessment and evaluation. Educational leaders:

- A. use multiple methods to assess and evaluate appropriate uses of technology resources for learning, communication, and productivity.
- B. use technology to collect and analyze data, interpret results, and communicate findings to improve instructional practice and student learning.
- C. assess staff knowledge, skills, and performance in using technology and use results to facilitate quality professional development and to inform personnel decisions.
- D. use technology to assess, evaluate, and manage administrative and operational systems.

#### VI. SOCIAL, LEGAL, AND ETHICAL ISSUES.

Educational leaders understand the social, legal, and ethical issues related to technology and model responsible decision-making related to these issues.

Educational leaders:

- A. ensure equity of access to technology resources that enable and empower all learners and educators.
- B. identify, communicate, model, and enforce social, legal, and ethical practices to promote responsible use of technology.
- C. promote and enforce privacy, security, and online safety related to the use of technology.
- D. promote and enforce environmentally safe and healthy practices in the use of technology.
- E. participate in the development of policies that clearly enforce copyright law and assign ownership of intellectual property developed with district resources.



## **Appendix D: Technology Committee**

### **CURRENT COMMITTEE MEMBERS**

<i>Name</i>	<i>Title</i>	<i>E-Mail</i>
<i>Matt McGarrity</i>	Superintendent	<a href="mailto:mcgarritym@dansvillecsd.org">mcgarritym@dansvillecsd.org</a>
<i>Mike Falzoi</i>	Principal, High School	<a href="mailto:falzoim@dansvillecsd.org">falzoim@dansvillecsd.org</a>
<i>Amy Schiavi</i>	Principal, Middle School	<a href="mailto:schiavia@dansvillecsd.org">schiavia@dansvillecsd.org</a>
<i>Dan Dixon</i>	Vice Principal, Middle School	<a href="mailto:dixond@dansvillecsd.org">dixond@dansvillecsd.org</a>
<i>Jeremy Palotti</i>	Principal, Elementary School	<a href="mailto:palottij@dansvillecsd.org">palottij@dansvillecsd.org</a>
<i>Chris Lynch</i>	Principal, Primary School	<a href="mailto:lynchc@dansvillecsd.org">lynchc@dansvillecsd.org</a>
<i>Jim Blum</i>	Dir of Computer Services	<a href="mailto:blumj@dansvillecsd.org">blumj@dansvillecsd.org</a>
<i>Don Ptak</i>	Library/ Media Specialist	<a href="mailto:ptakd@dansvillecsd.org">ptakd@dansvillecsd.org</a>
<i>Lynne Blum</i>	Library/ Media Specialist	<a href="mailto:bluml@dansvillecsd.org">bluml@dansvillecsd.org</a>
<i>Cris Reidel</i>	Library / Media Specialist	<a href="mailto:reidelc@dansvillecsd.org">reidelc@dansvillecsd.org</a>
<i>Kim Mease</i>	TA, High School	<a href="mailto:measek@dansvillecsd.org">measek@dansvillecsd.org</a>
<i>Velma Kahn</i>	TA, Middle School	<a href="mailto:kahnv@dansvillecsd.org">kahnv@dansvillecsd.org</a>
<i>Dave Cranston</i>	TA, Elementary School	<a href="mailto:cranstond@dansvillecsd.org">cranstond@dansvillecsd.org</a>
<i>Lynne Garippa</i>	TA, Primary School	<a href="mailto:garippal@dansvillecsd.org">garippal@dansvillecsd.org</a>