

WILLOWS UNIFIED SCHOOL DISTRICT Office of the Superintendent

Management Report

DATE:

June 23, 2016

AGENDA TOPIC: Willows Unified School District Education Technology Plan

PRESENTER:

Ellen Hamilton, Director of State & Federal Programs

BACKGROUND INFORMATION:

The purpose of a local educational agency (LEA) educational technology plan is to guide the use of technology, by establishing clear goals and a realistic, comprehensive strategy to improve education through technology. The strategy should include how professional development will support staff in the use of technology in the classroom, as well as how information technology assets and services will be managed to support learning. LEAs are strongly encouraged to develop and implement a technology plan in support of a comprehensive strategy to improve education.

In the 2014-15 year, the California Department of Education (CDE) collaborated with local technologists to consolidate technology plan content into a single template, and set of criteria and guiding questions.

http://www.cde.ca.gov/ls/et/rs/

RECOMMENDATION:

Approval of the Willows Unified School District Education Technology Plan for 2016-2021.

WILLOWS UNIFIED SCHOOL DISTRICT EDUCATION TECHNOLOGY PLAN

July 1, 2016- June 30, 2021



Board Approved: June 23, 2016

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Mission Statement
Preparing today's students for tomorrow's challenges

Vision Statement A safe, enriched, student focused learning environment

Our vision is for students, parents, and educators to use communication and information technologies to enhance and expand the traditional role of education. Technology can improve

- communication,
- enhance thinking skills,
- make instruction more efficient and effective, and
- develop life skills critical to success.

Willows Unified School District will incorporate technology as a means of integrating curriculum across subject areas. Students and educators will be guaranteed opportunities to use technology as an integral part of education. This technology integration plan will outline our strategies for turning this vision into reality.

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District Profile

Willows Unified School District (WUSD) is located in the city of Willows in rural Glenn County, approximately 85 miles north of Sacramento. The city of Willows is the county seat of Glenn County. It is a diverse, evolving rural area of Northern California, distinctively different from large urban areas. The city extends across the west-central portion of the Sacramento Valley. The district boundary is bordered by the mountainous forests of the Mendocino National Forest on the West and the Sacramento River on the East. To the north it extends to include the town of Artois and to the south it extends to the county line. The closest major city is Chico in Butte County to the east. The city of Willows has a population of approximately 6,100.

The district currently serves approximately 1435 students in grades TK – 12. Sadly, the district has been in declining enrollment for several years. The district maintains three comprehensive schools and one alternative education site. The three comprehensive schools include Murdock Elementary, TK-5; Willows Intermediate School, 6-8; and Willows High School, 9-12. There is one alternative education school which includes Willows Continuation High School, 10-12.

District level demographic percentages for 2015-2016 were:

Ethnicity	Enrollment	Percent of Total Enrollment
American Indian	38	2.65
Asian	78	5.44
Pacific Islander	6	.42
Multiple	15	1.05
Hispanic	731	50.94
African American	17	1.18
White	543	37.84
Special Programs	123	.08
English Learners (EL)	381	26.5
Fluent-English-Proficient (FEP)	235	16.38
Free/Reduced Meals	884	61.60

I. Needs Assessment/Objectives

A. District Goals

Goal 1: Integrate Technology to Improve Student Achievement

All District employees will utilize technology to support learning.

In order to achieve this goal, the District and personnel will:

- Provide ongoing Professional Development for staff members in Technology (e.g. GAFE, CAASPP/Digital Library, SWIS (PBIS), Social Media for classroom use, Catapult EMS)
- Create Technology Visionary Groups (each site level)
- Demonstrate proficiency in the use of multimedia software and the applications currently utilizing in the district: Aeries, Catapult EMS, GAFE, etc.

Goal 2: Improve Student Acquisition of technology and Information Literacy Skills All students will be proficient or better with the ISTE (International Society for Technology in Education) profile standards to support achievement of the academic standards in the classroom, district curricular goals, and ultimately, for lifelong learning and success in our digital society.

In order to achieve this goal, the District and personnel will:

- Use information technology resources to engage in meaningful real world problem solving experiences
- Access to more computer time and computer classes
- Be proficient with grade level ethical use of technology and Internet safety skills standards
 - Basic technology skills:
 - Select and access technology appropriate to needs
 - Use correct starting and exiting procedures
 - Develop keyboarding skills
 - Operate peripheral devices
 - Use technology independently and cooperatively
 - Use technology safely and ethically

Goal 3: Access to Technology Devices

All learners will have access to technology that allows for consumption and interaction with a variety of information and multimedia.

In order to achieve this goal, the District and personnel will:

- Investigate the possibility of providing 1 to 1 ratio or bring your own device
- Develop a Teacher Package: every teaching station will have a mounted projector, a document camera, and printer
- Investigate the possibility of checking out devices for students to take home

Goal 4: Improve Network & Infrastructure

Create a network and maintain a technology infrastructure that will grow sufficient to support all of the needs of instructional delivery and accountability.

In order to achieve this goal, the District and personnel will:

- Establish a security procedure in place for all devices
- Equal access to an online experience on a daily basis
- A completion of wireless access across all District buildings and classrooms, including a guest wireless network for student personal device use
- Create a regular replacement schedule for technology

Goal 5: Improve Communication Among Home, School, and Community All staff members will use technology to improve communication among home, school, and community.

In order to achieve this goal, the District and personnel will:

- Provide Parent Education Nights
- Increase use of Blackboard Connect
- Updates to district & school websites
- Provide school site blogs

B. Technology Inventory

DISTRICT	MURDOCK	WILLOWS INTER.	WILLOWS HIGH
 Portable Hard Disk Recorder- 1 Computers- 11 Laptop- 1 Procurve Switch- 1 HPSB Computers- 2 Quantum Super Loader- 1 HP SB DX2200 D8/2.66- 1 HP SB DL380 G5- 1 Maintenance Fluke Cable IQ- 1 HP SB Computer- 1 Transportation/Custodial HP SB Computer- 1 HP SCan- 1 	 Computers- 37 Monitors- 7 Printers- 12 Keyboards- 6 Pedometers- 45 Walkie talkie- 1 TVs- 7 VCR Players- 3 VHS rewinder- 1 Speakers- 9 Projectors- 20 Doc. Cameras- 10 VCR/DVD Combo- 4 Laptops- 2 Record Player- 1 Comp. Towers- 5 DVD player- 1 VCR player- 1 Cameras- 2 CD Player- 1 	 Chromebooks- 3 Chrome cart- 1 Central Processing Units (CPU)- 7 Monitors- 21 Ipads- 4 Projector Screens- 19 Mobi Views- 2 Laptops- 8 Doc. Cameras- 1 Printers- 20 TVs- 9 Computers- 22 VHS- 1 Cassette Decks- 3 Ampliphier- 1 TV & Cart- 1 VCR/DVD Players-10 Scanner- 1 Cameras- 2 T-Shirt Printer -1 Speakers- 2 Karaoke Machine- 1 	 Computers- 189 Monitors- 124 Towers- 7 Keyboards- 60 Printers- 43 Fax Machine- 1 IPad Mini- 2 Laptops- 15 Projectors- 20 Cameras- 11 Scanner- 3 DVD/VHS- 4 DVD Player- 5 Tower- 5 Video Camera- 1 In focus- 1 Copier- 1 TV/VCR- 1 TV- 14 VCR/VHS Player- 3 Speakers- 4 Doc. Cameras- 6 Chrome Cart- 2 Chromebooks- 59 Laminator- 2 Sound System- 1 Multiplexer- 7 Fax/copy/scanner- 1

WILLOWS COMMUNITY

- VCRs- 2
- Projectors- 1
- Color TV- 1
- Towers- 8
- Monitors- 8
- Printers- 2
- Keyboards- 8
- 2 Speed Video Recorder- 1
- Laminator- 1
- Copier/fax machine- 1

C. Maintenance Plan

Willows Unified School District employees will utilize technology in the following ways:

- Teachers will use technology to engage students in learning as they present content aligned to standards.
- All staff will demonstrate proficiency in the use of multimedia software and the applications currently utilizing in the district (e.g. Aeries, Catapult EMS, GAFE, etc.).
- Teachers will remain current on the use of both computer applications and web based programs (e.g. Microsoft Word, Excel, & PowerPoint) to both instruct students and monitor student performance.
- Teachers will continue to remain current on the use of the following peripherals.
 - A. Chromebooks
 - B. Document Cameras
 - C. Scanners
 - D. Google Apps for Education

II. Access

Willows Unified School District will have a reliable network system to provide a variety of media and formats, including telecommunications and the school Web site and email access, to communicate, interact, and collaborate with peers, experts, other educational professionals, parents, and the community.

III. Staff Professional Development

Willows Unified School District will offer a variety of training options such as face-to-face training, online training, collaboration time, and one-on-one coaching. We will maximize the use of existing and free technology and site resources to support the goals and objectives for curriculum, instruction, intervention, and assessment.

IV. Integration

Willows Unified School District is committed to the integration of technology in all curricular areas. The utilization of technological resources will enhance the learning environment of students and staff. WUSD staff will integrate technology as an effective tool to improve, support, and increase student learning to meet the academic content standards. WUSD staff will provide powerful learning opportunities for all students. Students will be provided with additional tools to address their particular learning style. In addition, staff and students will have an alternate means to creatively express ideas and display knowledge.

WUSD Staff will integrate technology into the curriculum in various ways.

- > Virtual field trips
- > Research tools used by both staff and students
- > Word processing skills to communicate to students, teachers, and paraprofessionals
- > Multimedia presentation prepared by both staff and students
- > Record-keeping tasks
- > Distance learning, video conferencing
- > Reinforcement and remedial practice

- > Individualized instruction
- > Teacher created units / materials
- > Software programs aligned with state standards

V. Technology Support

A Technology Visionary Group is made up of members at each school site to help teachers receive assistance in meeting their individual curriculum technology needs and assist teachers in meeting their instructional needs as it relates to student achievement.

The District will provide training in the area of troubleshooting and identification of potential network problems. All staff will provide basic care, safe setup, and simple maintenance of classroom technology equipment.

VI. Public Relations

WUSD will encourage and promote parent participation at the district and school level. Parents will be informed by newsletters as to where they might access technology in our school or district. Parents will be provided information on how to access their child's information through the parent portal. Parents will be notified by Blackboard Connect about important events. The District and schools' web-pages will provide contact information for parents and teachers, as well as, information on current events.

VII. Funding

Our school district plans to fund our technology needs through General Funds, federal, state and/or local grants, and community members' donations. These funds will be allocated to meet the individual needs of students to ensure academic success for all.

VIII. Program Evaluation

The District School Leadership Team, Educator Effectiveness Committee, Technology Committee, School Principals, Director of State & Federal Programs, and District Superintendent will annually assess and recommend improvements. Guiding questions will be used for evaluation of the plan. Staff will be monitored on how well they can design and implement learning experiences (e.g., units of instruction) that empower students to solve authentic problems relating to an overall theme/concept using the available technology (e.g., multimedia applications, Internet, databases, spreadsheets, word processing).

After being reviewed, staff may be encouraged to add technology professional development components to their personal growth plan.

2016-2017	Objective: What are we going to do?	Roles & Responsibilities	Timeline	Evaluation Instruments & Schedule for Evaluation	Resources Needed? (Personnel/Funding/Other)
Goal 1: Support Learning	 Provide PD Create a Technology Visionary Group at each site 	 All WUSD Staff Admins and staff members at each site 	All through the year	All through the year; determined by admin	GCOE TREE TrainingTeam Players
Goal 2: Student Learning & Achievement	 Access to more computer time 	Site admins and teachers	All through the year	All through the year measured by log books for computer labs, etc.,	More technology equipment
Goal 3: Access to Devices	 Make sure all classrooms have mounted projectors Purchase equipment: Doc. Cameras, chrome carts at each site, 3-D Printer (WIS) 	• WUSD Admins	All through the year	All through the year measured by Inventory log books	District/Site Funds
Goal 4: Network & Infrastructure	 Create and maintain technology infrastructure at WIS Set up a tech replacement schedule 	GCOE Tech & WUSD Admins	Summer 2016	All through the year measured by the capability of the infrastructure	 network switches, cabling, wireless access District Funds Create a Log Book for a replacement schedule
Goal 5: Communication	 Communication (Blackboard Connect, Websites, Aeries, Catapult EMS) 	Site admins and teachers	All through the year	All through the year measured by emails and Blackboard	 Training for new staff

2017-2018	Objective: What are we going to do?	Roles & Responsibilities	Timeline	Evaluation Instruments & Schedule for Evaluation	Resources Needed? (Personnel/Funding/Other)
Goal 1: Support Learning	ProvidePD/Collaboration	All WUSD Staff	Every other Wed/ All through the year	All through the year; determined by admin	GCOE TREE Training
Goal 2: Student Learning & Achievement	 Access to more computer time 	Site admins and teachers	All through the year	All through the year measured by log books for computer labs, etc.,	 More technology equipment
Goal 3: Access to Devices	 Purchase equipment: Doc. Cameras, chrome carts at each site, 3-D Printer (WHS), 	• WUSD Admins	All through the year	All through the year measured by Inventory log books	District/Site Funds
Goal 4: Network & Infrastructure	 Create and maintain technology infrastructure at MES & WHS 20% replacement schedule 	• GCOE Tech & WUSD Admins	Summer 2017	All through the year measured by the capability of the infrastructure	 network switches, cabling, wireless access District Funds Create a Log Book for a replacement schedule
Goal 5: Communication	 Communication (Blackboard Connect, Websites, Aeries, Catapult EMS) 	 Site admins and teachers 	All through the year	All through the year measured by emails and Blackboard	 Training for new staff

2018-2019	Objective: What are we going to do?	Roles & Responsibilities	Timeline	Evaluation Instruments & Schedule for Evaluation	Resources Needed? (Personnel/Funding/Other)
Goal 1: Support Learning	● Provide PD	All WUSD Staff	Every other Wed/ All through the year	All through the year; determined by admin	● GCOE TREE Training
Goal 2: Student Learning & Achievement	Access to more computer time	Site admins and teachers	All through the year	All through the year measured by log books for computer labs, etc.,	More technology equipment
Goal 3: Access to Devices	 Purchase equipment: Doc. Cameras, chrome carts at each site, 3-D Printer (MES), 	• WUSD Admins	All through the year	All through the year measured by Inventory log books	District/Site Funds
Goal 4: Network & Infrastructure	 Student Access (BYOD) at WIS 20% replacement schedule 	• GCOE Tech & WUSD Admins	All through the year	All through the year measured by the capability of the infrastructure	 network switches, cabling, wireless access District Funds Create a Log Book for a replacement schedule
Goal 5: Communication	 Communication (Blackboard Connect, Websites, Aeries, Catapult EMS) 	Site admins and teachers	All through the year	All through the year measured by emails and Blackboard	 Training for new staff

2019-2020	Objective: What are we going to do?	Roles & Responsibilities	Timeline	Evaluation Instruments & Schedule for Evaluation	Resources Needed? (Personnel/Funding/Other)
Goal 1: Support Learning	● Provide PD	All WUSD Staff	Every other Wed/ All through the year	All through the year; determined by admin	GCOE TREE Training
Goal 2: Student Learning & Achievement	 Access to more computer time Start Thinking about Holographic education Virtual Reality for all Sites 	 Site admins and teachers 	All through the year	All through the year measured by log books for computer labs, etc.,	 More technology equipment More technology equipment PD on Virtual Reality
Goal 3: Access to Devices	 Purchase equipment: Doc. Cameras, chrome carts at each site, 3-D Printer (MES), 	• WUSD Admins	All through the year	All through the year measured by Inventory log books	 District/Site Funds
Goal 4: Network & Infrastructure	 Student Access (BYOD) at MES & WHS 20% replacement schedule 	• GCOE Tech & WUSD Admins	All through the year	All through the year measured by the capability of the infrastructure	 network switches, cabling, wireless access District Funds Create a Log Book for a replacement schedule
Goal 5: Communication	 Communication (Blackboard Connect, Websites, Aeries, Catapult EMS) 	Site admins and teachers	All through the year	All through the year measured by emails and Blackboard	 Training for new staff

2020-2021	Objective: What are we going to do?	Roles & Responsibilities	Timeline	Evaluation Instruments & Schedule for Evaluation	Resources Needed? (Personnel/Funding/Other)
Goal 1: Support Learning	● Provide PD	• All WUSD Staff	Every other Wed/ All through the year	All through the year; determined by admin	GCOE TREE Training
Goal 2: Student Learning & Achievement	 All students will have access to technology- purchase new software Investigate Holographic education 	 Site admins and teachers 	All through the year	All through the year measured by log books for computer labs, etc.,	 More technology equipment More technology equipment District/Site Funds
Goal 3: Access to Devices	 Teacher Package; purchase remaining up to date equip for teachers 1-1 ratio 	• WUSD Admins	All through the year	All through the year measured by Inventory log books	 District/Site Funds
Goal 4: Network & Infrastructure	 Provide access points for all 20% replacement schedule 	• GCOE Tech & WUSD Admins	All through the year	All through the year measured by the capability of the infrastructure	 network switches, cabling, wireless access District Funds Create a Log Book for a replacement schedule
Goal 5: Communication	 Communication (Blackboard	Site admins and teachers	All through the year	All through the year measured by emails and Blackboard	 Training for new staff

ISTE (International Society for Technology in Education) Standards for Students

1. Creativity and innovation

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

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

2. Communication and collaboration

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

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

3. Research and information fluency

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

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

4. Critical thinking, problem solving, and decision making

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

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

5. Digital citizenship

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

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

6. Technology operations and concepts

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

- a. Understand and use technology systems
- b. Select and use applications effectively and productively
- c. Troubleshoot systems and applications
- d. Transfer current knowledge to learning of new technologies

ISTE (International Society for Technology in Education) Standards for Teachers

Effective teachers model and apply the ISTE Standards for Students as they design, implement, and assess learning experiences to engage students and improve learning; enrich professional practice; and provide positive models for students, colleagues, and the community. All teachers should meet the following standards and performance indicators.

1. Facilitate and inspire student learning and creativity

Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.

- a. Promote, support, and model creative and innovative thinking and inventiveness
- b. Engage students in exploring real-world issues and solving authentic problems using digital tools and resources
- c. Promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning, and creative processes
- d. Model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments

2. Design and develop digital age learning experiences and assessments

Teachers design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context and to develop the knowledge, skills, and attitudes identified in the Standards.

- a. Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity b. Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress
- c. Customize and personalize learning activities to address students' diverse learning styles, working strategies, and abilities using digital tools and resources
- d. Provide students with multiple and varied formative and summative assessments aligned with content and technology standards, and use resulting data to inform learning and teaching

3. Model digital age work and learning

Teachers exhibit knowledge, skills, and work processes representative of an innovative professional in a global and digital society.

- a. Demonstrate fluency in technology systems and the transfer of current knowledge to new technologies and situations
- b. Collaborate with students, peers, parents, and community members using digital tools and resources to support student success and innovation
- c. Communicate relevant information and ideas effectively to students, parents, and peers using a variety of digital age media and formats
- d. Model and facilitate effective use of current and emerging digital tools to locate, analyze, evaluate, and use information resources to support research and learning

4. Promote and model digital citizenship and responsibility

Teachers understand local and global societal issues and responsibilities in an evolving digital culture and exhibit legal and ethical behavior in their professional practices.

- a. Advocate, model, and teach safe, legal, and ethical use of digital information and technology, including respect for copyright, intellectual property, and the appropriate documentation of sources
- b. Address the diverse needs of all learners by using learner-centered strategies providing equitable access to appropriate digital tools and resources
- c. Promote and model digital etiquette and responsible social interactions related to the use of technology and information
- d. Develop and model cultural understanding and global awareness by engaging with colleagues and students of other cultures using digital age communication and collaboration tools

5. Engage in professional growth and leadership

Teachers continuously improve their professional practice, model lifelong learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources.

- a. Participate in local and global learning communities to explore creative applications of technology to improve student learning
- b. Exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community building, and developing the leadership and technology skills of others
- c. Evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning
- d. Contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community

ISTE (International Society for Technology in Education) Standards for Coaches

1. Visionary leadership

Technology Coaches inspire and participate in the development and implementation of a shared vision for the comprehensive integration of technology to promote excellence and support transformational change throughout the instructional environment.

- a. Contribute to the development, communication, and implementation of a shared vision for the comprehensive use of technology to support a digital-age education for all students
- b. Contribute to the planning, development, communication, implementation, and evaluation of technology-infused strategic plans at the district and school levels
- c. Advocate for policies, procedures, programs, and funding strategies to support implementation of the shared vision represented in the school and district technology plans and guidelines
- d. Implement strategies for initiating and sustaining technology innovations and manage the change process in schools and classrooms

2. Teaching, learning, and assessments

Technology Coaches assist teachers in using technology effectively for assessing student learning, differentiating instruction, and providing rigorous, relevant, and engaging learning experiences for all students.

- a. Coach teachers in and model design and implementation of technology-enhanced learning experiences addressing content standards and student technology standards
- b. Coach teachers in and model design and implementation of technology-enhanced learning experiences using a variety of research based, learner-centered instructional strategies and assessment tools to address the diverse needs and interests of all students
- c. Coach teachers in and model engagement of students in local and global interdisciplinary units in which technology helps students assume professional roles, research real-world problems, collaborate with others, and produce products that are meaningful and useful to a wide audience
- d. Coach teachers in and model design and implementation of technology-enhanced learning experiences emphasizing creativity, higher-order thinking skills and processes, and mental habits of mind (e.g., critical thinking, metacognition, and self-regulation)
- e. Coach teachers in and model design and implementation of technology-enhanced learning experiences using differentiation, including adjusting content, process, product, and learning environment based upon student readiness levels, learning styles, interests, and personal goals
- f. Coach teachers in and model incorporation of research-based best practices in instructional design when planning technology-enhanced learning experiences
- g. Coach teachers in and model effective use of technology tools and resources to continuously assess student learning and technology literacy by applying a rich variety of formative and summative assessments aligned with content and student technology standards h. Coach teachers in and model effective use of technology tools and resources to systematically collect and analyze student achievement data, interpret results, and communicate findings to improve instructional practice and maximize student learning

3. Digital age learning environments

Technology coaches create and support effective digital age learning environments to maximize the learning of all students.

- a. Model effective classroom management and collaborative learning strategies to maximize teacher and student use of digital tools and resources and access to technology-rich learning environments
- b. Maintain and manage a variety of digital tools and resources for teacher and student use in technology-rich learning environments
- c. Coach teachers in and model use of online and blended learning, digital content, and collaborative learning networks to support and extend student learning as well as expand opportunities and choices for online professional development for teachers and administrators
- d. Select, evaluate, and facilitate the use of adaptive and assistive technologies to support student learning
- e. Troubleshoot basic software, hardware, and connectivity problems common in digital learning environments
- f. Collaborate with teachers and administrators to select and evaluate digital tools and resources that enhance teaching and learning and are compatible with the school technology infrastructure
- g. Use digital communication and collaboration tools to communicate locally and globally with students, parents, peers, and the larger community

4. Professional development and program evaluation

Technology coaches conduct needs assessments, develop technology-related professional learning programs, and evaluate the impact on instructional practice and student learning.

- a. Conduct needs assessments to inform the content and delivery of technology-related professional learning programs that result in a positive impact on student learning
- b. Design, develop, and implement technology rich professional learning programs that model principles of adult learning and promote digital age best practices in teaching, learning, and assessment
- c. Evaluate results of professional learning programs to determine the effectiveness on deepening teacher content knowledge, improving teacher pedagogical skills and/or increasing student learning

5. Digital citizenship

Technology coaches model and promote digital citizenship.

- a. Model and promote strategies for achieving equitable access to digital tools and resources and technology-related best practices for all students and teachers
- b. Model and facilitate safe, healthy, legal, and ethical uses of digital information and technologies
- c. Model and promote diversity, cultural understanding, and global awareness by using digital age communication and collaboration tools to interact locally and globally with students, peers, parents, and the larger community

6. Content knowledge and professional growth

Technology coaches demonstrate professional knowledge, skills, and dispositions in content, pedagogical, and technological areas as well as adult learning and leadership and are continuously deepening their knowledge and expertise.

- a. Engage in continual learning to deepen content and pedagogical knowledge in technology integration and current and emerging technologies necessary to effectively implement the standards.
- b. Engage in continuous learning to deepen professional knowledge, skills, and dispositions in organizational change and leadership, project management, and adult learning to improve professional practice
- c. Regularly evaluate and reflect on their professional practice and dispositions to improve and strengthen their ability to effectively model and facilitate technology enhanced learning experiences

ISTE (International Society for Technology in Education) Standards for Administrators

1. Visionary leadership

Educational Administrators inspire and lead development and implementation of a shared vision for comprehensive integration of technology to promote excellence and support transformation throughout the organization.

- a. Inspire and facilitate among all stakeholders a shared vision of purposeful change that maximizes use of digital-age resources to meet and exceed learning goals, support effective instructional practice, and maximize performance of district and school leaders b. Engage in an ongoing process to develop, implement, and communicate technology-infused strategic plans aligned with a shared vision
- c. Advocate on local, state and national levels for policies, programs, and funding to support implementation of a technology-infused vision and strategic plan

2. Digital age learning culture

Educational Administrators create, promote, and sustain a dynamic, digital-age learning culture that provides a rigorous, relevant, and engaging education for all students.

- a. Ensure instructional innovation focused on continuous improvement of digital-age learning
- b. Model and promote the frequent and effective use of technology for learning
- c. Provide learner-centered environments equipped with technology and learning resources to meet the individual, diverse needs of all learners
- d. Ensure effective practice in the study of technology and its infusion across the curriculum
- e. Promote and participate in local, national, and global learning communities that stimulate innovation, creativity, and digital age collaboration

3. Excellence in professional practice

Educational Administrators promote an environment of professional learning and innovation that empowers educators to enhance student learning through the infusion of contemporary technologies and digital resources. a. Allocate time, resources, and access to ensure ongoing professional growth in technology fluency and integration

- b. Facilitate and participate in learning communities that stimulate, nurture and support administrators, faculty, and staff in the study and use of technology
- c. Promote and model effective communication and collaboration among stakeholders using digital age tools
- d. Stay abreast of educational research and emerging trends regarding effective use of technology and encourage evaluation of new technologies for their potential to improve student learning

4. Systemic improvement

Educational Administrators provide digital age leadership and management to continuously improve the organization through the effective use of information and technology resources.

- a. Lead purposeful change to maximize the achievement of learning goals through the appropriate use of technology and media-rich resources
- b. Collaborate to establish metrics, collect and analyze data, interpret results, and share findings to improve staff performance and student learning
- c. Recruit and retain highly competent personnel who use technology creatively and proficiently to advance academic and operational goals
- d. Establish and leverage strategic partnerships to support systemic improvement
- e. Establish and maintain a robust infrastructure for technology including integrated, interoperable technology systems to support management, operations, teaching, and learning

5. Digital citizenship

Educational Administrators model and facilitate understanding of social, ethical and legal issues and responsibilities related to an evolving digital culture.

- a. Ensure equitable access to appropriate digital tools and resources to meet the needs of all learners
- b. Promote, model and establish policies for safe, legal, and ethical use of digital information and technology
- c. Promote and model responsible social interactions related to the use of technology and information
- d. Model and facilitate the development of a shared cultural understanding and involvement in global issues through the use of contemporary communication and collaboration tools