

VALLEY CENTER PUBLIC SCHOOLS

DISTRICT TECHNOLOGY PLAN

July 1, 2017 – June 30, 2020

Valley Center Public Schools
143 S Meridian Ave
Valley Center, KS 67147
www.usd262.com



MISSION AND VISION

The staff and students will develop the knowledge, skills, and character necessary for current and future success.

INSTRUCTIONAL TECHNOLOGY VISION

To be a premier school district known for excellence in education, innovative instruction, outstanding programs, and dedication to students.

DISTRICT SUMMARY OF PROGRESS

In the last technology plan we outlined four learning goals:

1. By June 2017, 90% of 8th grade students will demonstrate technology literacy skills aligned to ISTE National Technology Standards.
2. By June 2017, 100% of students will be educated in digital citizenship and internet safety.
3. By June 2017, 100% of Valley Center teachers will demonstrate 21st Century teaching through technology integration within classroom curriculum and instruction.
4. By June 2017, 100% of Valley Center students will demonstrate age appropriate 21st Century learning through the use of technology.

We have implemented new technology to help increase student achievement. We have continued to promote and use a Mimio Teach in all classrooms grades K-6 which allows the students and teachers to be more interactive. We have also implemented a 1:1 Chromebook initiative at grade 5-12. These devices allow the students to be more creative and collaborative than they have in the past. We have increased the number of devices in the K-4 classroom to twenty to help facilitate both independent and small group learning. In addition, we have continued to maintain fully equipped computer labs in all district buildings.

Professional Development focused on technology has increased proficiency in technology use by both students and staff. For the last three years, we allocated PD dedicated to educational technology teaching tools and strategies, including Intel Thinking with Tools, Intel Elements Online, Edmodo, Windows 7 and 10, Microsoft Office, etc. Some members of the Technology Leadership Team attended PD, such as the MACE Conference, Podstock, and toured other districts to assess their technology resources and uses. As a result of these PD experiences, members of the team brought back their knowledge to share with staff and students. The majority of technology PD has been provided by members of the Technology Leadership Team and other proficient staff. The use of these "in-house" resources to address professional development and promote 21st Century learning represents a significant cultural shift from the previous years.

TECHNOLOGY NEEDS ASSESSMENT

The technology needs assessments provides the data necessary to determine how technology is currently being utilized, drive future technology purchases, and plan for needed professional development. We adopted a new three-year strategic plan with which we will be aligning our technology needs. Technology needs are assessed regularly using multiple methods of data collection including formal and informal sources. These sources include:

- District Level Comprehensive Action Plan for Curriculum, Instruction and Assessment
- School Improvement Plans
- Student Intervention Plans
- Technology professional development course evaluations
- 8th Grade Technology Literacy Assessment
- Research of current best practices for professional development and other technology resources
- Analysis of current technology in each building
- Building Technology Prioritized Needs Surveys
- PLC feedback surveys
- Student and community surveys
- Technology help desk requests
- Usage logs of current hardware, software, and web-based tools
- Current budget resources
- Observations from visiting area school districts
- Information acquired by attending out-of-district technology workshops and conferences
- PTO / PTA Meetings
- School Site Council needs

From the results of these surveys and the other sources listed above, the District Leadership Team utilizes this information to plan for professional development and to drive decisions about technology purchases. One of the needs most recently identified from these assessments was the need for more devices with keyboards for student use. To determine the most effective and economical distribution, we surveyed staff and students, piloted various laptops/iPad/Chromebooks in the classroom, evaluated

feedback from staff and students, and researched available options. Based on the results, we switched to a 1:1 Chromebook solution for the grades 5-12 for school year 2016-17.

USD 262 will be developing and distributing yearly surveys to monitor current technology use and to assess and identify future needs. The surveys will be given to staff, students, and community most often utilizing Survey Monkey, which allows for immediate and accurate feedback. The data from these surveys will continue to help guide decisions regarding the needs for purchasing telecommunications, hardware, software, and other technology resources and services.

DISTRICT TECHNOLOGY INFRASTRUCTURE GOALS AND OBJECTIVES.

District Technology Infrastructure Goals/Objectives:

- **Required Goal:** District technology infrastructure, telecommunications, hardware, software, Internet access, services and resources support the educational and administrative needs of the district.
 - Provide, maintain, and expand the technology needed by USD262 in order to achieve district goals and objectives.

District Technology Infrastructure Narrative Description:

We continually assess the needs of the district's infrastructure, telecommunications, hardware, software, Internet access, services, support, and resources. Driving the decisions for these are curriculum goals and needs, along with our strategic plan. They help to determine the hardware and software required in the classroom, and those needs define the infrastructure, telecommunication, etc. which need to be in place first before providing the classroom technology. This decision-making method ensures the effective and reliable integration of technology.

A primary goal of USD 262 is to move toward an environment that promotes online learning and the attainment of 21st Century skills. One step we have taken in this direction is to provide a Chromebook for every student in grades 5-12. In addition, each elementary classroom was increased from nine to twenty devices.

With the addition of more computers and online resources to the district, a need for improved Internet connectivity was found. We are consistently using over 80 percent of our 250 Mbps Internet connection. This high utilization causes slow access and interruptions of service. In order to improve connectivity, in the Summer of 2017, we plan to upgrade to at least 300 Mbps Internet connection. This new Internet allows us to meet the 100mb per 1000 student requirement. This upgrade will not be possible without E-rate funding, which provides our district with a 60% discount for Internet connections and other telecommunications services. The competitive bidding process allows us to upgrade our Internet bandwidth for a very minimal price increase. This initiative not only provided staff and students with faster, more reliable access to web-based resources, but it will also allow for future growth. We anticipate our staff and students will increase the usage of online resources in the future, which will require continued monitoring and upgrading of bandwidth.

With the increase of mobile computers in our district, the need for an improved wireless infrastructure was determined. We purchased an additional wireless controller to manage our access points throughout the district more efficiently and provide redundancy. During the summer of 2016 we have installed an access point for every 2 classrooms in our 3 elementary buildings. Funding for this initiative was provided through the use of category 2 funding. With the continued addition of devices, as well as the move to a one-to-one initiative in grades 5-12, ongoing evaluation of access point density will be needed.

We currently have a centralized data center with high-speed fiber optic connectivity to each building. This provides us with a 10 Gbps connection to each building. The High School currently has a redundant (dual) 10 Gbps connection back to the data center. The other schools only have a single 10 Gbps connection to the data center. We plan to activate a second 10 Gbps connection at those schools for increased throughput and redundancy. We also plan to add redundant routers for both the phone system connection to our provider, as well as the district's connection to the Internet. Servers accessed by all users have been fully virtualized to save money on hardware and electricity costs. UPS battery backups and a generator were recently installed to ensure uptime during a power outage. We recently purchased a blade server that can more readily handle our current and future growth. Along with our virtual servers, we also upgraded our storage platform to meet the ever increasing demand of the servers and file needs across the district. We will continue to evaluate our district's communications infrastructure regularly.

With the increased integration of technology, a strong support system to resolve issues and to implement new projects needs to be in place. We currently employ a district technology director, network administrator, system administrator, and four computer support technicians. These positions are essential in ensuring the successful completion of new projects and for current technology to run smoothly. Without this foundation, integration of technology into the curriculum and the honing of 21st

Century learners would not be possible. In the past six years, we have almost doubled the amount of technology in the district but have not increased staff. Though adequate support has been possible because of increased efficiencies, the ability to support additional technology growth now requires more support personnel—whether hired within district or contracted to an outside provider—to ensure continued satisfactory support. New construction, additional hardware and software, telecommunication needs, and Internet access will require continued evaluation of the support needed to maintain the district’s technology advancements. In addition, the hiring of a technology integration specialist is recommended to support classroom integration of technology and the development of grade appropriate technology rich projects within each PLC as district funding allows.

Evaluating District Technology Infrastructure Goals And Objectives

USD 262 has various means of ensuring our district’s technology infrastructure goal has been met. The District Needs Assessment—as well as other individual requests—are used to help determine the classroom technologies purchased. This, in turn, requires the assessment of the infrastructure to determine if additional needs are required. Some of the means of infrastructure assessment include the following:

- Meet goal deadlines indicated in the narrative section and for future initiatives that arise.
- Measuring technology systems uptime is done by looking at data—reports, logs, and device statistics—throughout the school day. If the network, devices, Internet, and other resources positively impact student learning (because there are infrequent interruptions due to downtime), then we have a strong infrastructure. Though interruptions are inevitable, technology personnel prioritize issues to resolve the ones that directly influence student learning before addressing less pressing issues.
- Other ways of assessing the infrastructure are to look at the number of support tickets submitted and to analyze data related to the tickets, such as type of issue, length of time to resolve the issue, frequency of similar issues occurring, etc. This data can also be used to help determine technology personnel needs.
- Regular evaluation of rotation cycles of all equipment will be used to assess the continued needs of the district. Reports, logs, and device statistics will help to determine if replacements, upgrades, or new hardware are needed.
- Surveys will be given annually to students and staff. User satisfaction data taken from these surveys will be used to analyze how effectively the district has provided, maintained, and expanded technology and resources.

CURRICULUM INTEGRATION

Curriculum Integration Goals and Objectives:

- Students at all grade levels will demonstrate technology literacy skills aligned to ISTE National Technology Standards. (Vision 2020 Objective 1.1.C, *state board goals: social-emotional and character development, civic engagement; KESA -results, relevance, responsive culture, rigor, relationships*)
 - USD 262 will continue to implement the ISTE National Educational Technology Standards for students encouraging learning that is relevant, authentic, engaging, and challenging through the use of technology.
 - USD 262 will align the scope and sequence of student technology skills.
 - Students will practice responsible use of technology systems, information, and software.
 - Students will maintain an online portfolio that includes projects which demonstrate the attainment of grade appropriate technology literacy skills.
- Students in all grade levels will be educated in digital citizenship and internet safety. (Vision 2020 Objective 1.1.C, *state board goals: social-emotional and character development, civic engagement; KESA -results, relevance, responsive culture, rigor, relationships*)
 - Students will understand the ethical, cultural, and societal issues related to technology.
 - Students will practice responsible use of technology systems, information, and software.
- Valley Center teachers will demonstrate 21st Century teaching through technology integration within classroom curriculum and instruction. (Vision 2020 Objective 2.2.A, *KESA - rigor, responsive culture, relevance*)
 - USD 262 will integrate the use of technology within local, state, and national content standards and curricula to support learning.
 - USD 262 will provide every learner the opportunity to explore and integrate technological tools to foster the application of college and career ready skills.

Curriculum Integration Narrative:

Technology literacy is vital to the development of the whole child and the attainment of college and career ready skills; therefore the belief that current technologies should be utilized in every classroom and across every discipline, is supported by USD 262. No longer can curricula be mastered by relying solely on the textbook. In a technology-rich world, curricula should incorporate supplemental resources that not only promote understanding of course content but also ensure technology literacy and development of relevant college and career ready skills. In all uses of technology, professional learning communities will analyze current instructional practices to determine if instruction is appropriate to meet individual needs of students and to determine what changes need to occur.

Goal 1: Students at all grade levels will demonstrate technology literacy skills aligned to ISTE National Technology Standards.

(Vision 2020 Objective 1.1.C, state board goals: social-emotional and character development, civic engagement; KESA -results, relevance, responsive culture, rigor, relationships)

USD 262 will continue to align technology standards to ensure that all students demonstrate grade level appropriate technology literacy skills. Using the ISTE standards within our curriculum maps, each PLC will implement activities and lessons that provide students the opportunity to use technology in ways that extend and deepen learning as well as continually address Internet safety.

Technology skills, such as keyboarding and computer applications, will be introduced in kindergarten and will continue to expand and deepen in each grade level thereafter. Students will move on to advanced technology courses in high school that allow the application of various technology programs and tools utilized in relevant business and industry pathways.

Via an electronic portfolio, students will demonstrate the appropriate application of technology skills for various projects and assignments. Projects may be related to specific business and industry pathways of study, interest and skills inventories, career exploration, internships, project-based learning, and the student's Individual Plans of Study.

Goal 2: All students will be educated in digital citizenship and internet safety. *(Vision 2020 Objective 1.1.C, state board goals: social-emotional and character development, civic engagement; KESA -results, relevance, responsive culture, rigor, relationships)*

A top priority is to extend the safety awareness of students to prevent victimization and increase self-confidence whenever they go online. USD 262's Library Media Services PLC will enhance and promote the responsible use of technology taught in general classrooms by teaching the use of the district network, appropriate internet navigation, the use of electronic indexes, accessing online databases, and proper documentation to avoid plagiarism. Media Specialists will serve as the digital citizenship liaison and instructional guide to other licensed educators within each building. During the previous strategic plan, the Library Media Services PLC developed a district wide implementation plan for the Common Sense Media K-12 curriculum, which will be integrated into classroom lessons and supported by all teachers. Media specialists will support professional learning at the building and classroom levels that equip all staff with the information and lessons to be taught in order to help students learn and apply the concepts related to the safe and responsible use of the internet.

Goal 3: All Valley Center teachers will demonstrate 21st Century teaching through technology integration within classroom curriculum and instruction. *(Vision 2020 Objective 2.2.A, KESA - rigor, responsive culture, relevance)*

USD 262 has various means of integrating technology into the curriculum, including but not limited to the following:

- PLCs are integrating the use of technology into all aspects of curriculum and instruction as noted on curriculum maps. Each content area will incorporate the ISTE National Educational Technology Standards that best enhance its curriculum.
- To move toward more student-centered learning, technology integration strategies will be part of each building's school improvement plan. USD 262 will use means such as multi-media labs, wireless mobile computers, and multimedia classrooms supported by Internet access in every classroom. All of our schools have computers accessible to all students. This access gives students a tool to complete project-based lessons, which will require them to gather information, create multimedia projects, and share lessons with global learning communities.
- Professional learning opportunities will continue to be offered to provide teachers relevant ideas and strategies for technology integration to support student learning.

- Online learning technologies and curriculum programs are utilized to deepen and enhance student learning. For example Lexia Reading Core 5, Moby Max, IXL Math, Read 180 and AIMSweb are utilized systemically to increase and monitor student achievement. Discovery Education Streaming provides teachers and students with a growing library of video resources.

USD 262 will continue to provide extended use of online resources and/or software and provide technology integration support for students and staff. A needed resource to support these technology integration and student learning goals is the addition of a **Technology Integration Specialist** to assist teachers with professional learning and classroom support, which will lead to increased student achievement.

Evaluating Curriculum Integration

Goal 1: Students at all grade levels will demonstrate technology literacy skills aligned to ISTE National Technology Standards.

(Vision 2020 Objective 1.1.C, state board goals: social-emotional and character development, civic engagement; KESA -results, relevance, responsive culture, rigor, relationships)

The District Leadership Team (DLT) will support the implementation of technology rich instruction and integration that meets the ISTE National Technology Standards at each grade level or content area. This team will provide staff training regarding technology integration, the development of projects that require students to demonstrate grade appropriate technology skills, and the use of rubrics and checklists at each grade level to assess these skills. A minimum of one technology rich student project that demonstrates the student's abilities to utilize grade level appropriate technology skills will be added to the students online portfolio at each grade level each year.

Goal 2: All students will be educated in digital citizenship and internet safety. *(Vision 2020 Objective 1.1.C, state board goals: social-emotional and character development, civic engagement; KESA -results, relevance, responsive culture, rigor, relationships)*

Our Media Specialists PLC will develop rubrics and/or checklists to evaluate student understanding digital citizenship and internet safety. These will be used to evaluate the content and skills taught at every grade level to ensure all students attain this learning. Media specialists, in collaboration with classroom teachers, will assess the responsible and ethical use of technology through various activities, projects, and assignments. Assessments may include an evaluation of proper citation of sources, netiquette guidelines during online discussions, validation of sources, etc. In addition, ongoing, grade-level appropriate training in ethical, cultural, and societal issues related to technology will be completed.

Goal 3: All Valley Center teachers will demonstrate 21st Century teaching through technology integration within classroom curriculum and instruction. *(Vision 2020 Objective 2.2.A, KESA - rigor, responsive culture, relevance)*

Data related to teacher technology integration and application will be obtained by administrators when conducting walk-throughs and/or classroom observations. This walk-through data will provide ongoing feedback on how technology is currently being utilized by teachers and will lead to suggestions on how technology can be used more effectively and authentically in the learning environment.

TECHNOLOGY PROFESSIONAL DEVELOPMENT

Technology Professional Development Goals and Objectives:

- Improve the capacity of teachers to integrate technology effectively into curriculum and instruction.
 - Teachers will work to integrate appropriate technologies within the classroom environment to meet the needs of the learners, as documented in School Improvement Plans and Individual Professional Development Plans.
- Encourage effective integration of technology through teacher training and curriculum development to establish replicable best practices.
 - Teachers will collaborate with peers, PLCs, and participate in other professional development opportunities to learn current technology usages that foster 21st Century learning skills.
- Improve the capacity of classified staff to effectively use technology to fulfill their duties.
 - All classified staff and substitute teachers will receive required software and hardware training to enhance student learning or as needed for job efficiency and requirements.

Technology Professional Development Narrative:

Teachers must promote the attainment of college and career ready skills and behaviors by learning and incorporating appropriate technologies that increase student engagement, achievement, and higher-order thinking. In order for this to happen, teachers must embrace change and adapt instructional practices to meet the needs of 21st Century learners. Therefore, teachers must build confidence in their abilities to integrate technology and facilitate learning as outlined in the scope and sequence of ISTE technology skills. Effective professional development for teachers will not only ensure that all students are technology literate by 8th grade but will also help the classroom transition to a student-centered learning environment. In order to meet these goals and objectives, USD262 will:

- Give teachers time for lesson development, skills practice, and collaboration to increase their technology integration skills.
- Provide Intel Education training to promote project-based and student directed learning.
- Offer various technology training opportunities through large group, small group, and individual settings.
- Support members of the district leadership team as they lead efforts to implement the technology plan.
- Research emerging technologies, pilot instructional practices, and network via study groups and conferences.
- Allow teachers to visit other classrooms in and out of the district to observe best practices supporting 21st Century learning environments.
- Encourage teachers to access online learning opportunities such as blogs, webinars, Professional Learning Networks, and YouTube.
- Ensure new teachers receive technology embedded professional learning through the district mentoring program.

Classified staff and substitute teachers are an integral part of the district to support student learning. Therefore, they too, need to be able to use technology effectively to fulfill their job requirements. In order to meet the goal and objective, USD 262 will:

- Offer various technology training opportunities through large group, small group and individual settings to both new and existing classified staff and substitute teachers.
- Make available online training sessions to support and improve skills needed to complete their job description.
- Provide training on current or changing district hardware and software.

Learning responsible use of communication and collaboration tools, such as social networking sites, wikis, and blogs is required for all staff and students. In order to ensure ethical use, USD 262 will:

- Provide training in Internet safety, digital citizenship and the prevention of cyberbullying.
- Implement a policy to address state and federal requirements to educate students regarding cyberbullying, Internet safety, digital citizenship and appropriate online behavior—including interactions in social networking sites, forums, and chat rooms.

Evaluating Technology Professional Development

USD262 will evaluate the effectiveness of professional development and assess through a variety of formal and informal means. Data will be collected and evaluated from the following:

- Participation in technology professional development opportunities that address awareness, application, and impact levels as documented on MyLearningPlan.
- Evaluations collected after each technology professional development activity. These evaluations include satisfaction of learning, suggestions for future offerings, and application goals. The Technology Department and Professional Development Council utilize the data from these evaluations to plan future technology professional development activities.
- Administrator walk-throughs, observations, and student surveys to gauge the level of implementation and changes in student and staff learning.
- The reflection component of our district evaluation process, in which staff evaluate their level of implementation on their individual professional development plan. In addition, Building Improvement Teams will reflect upon the impact of integration.
- Annual review of the District Improvement Plan to ensure that it aligns with the building school improvement plans and the strategic plan.
- Administrative review of teacher evaluations through the McRel Evaluation System.

DISTRICT TECHNOLOGY PLAN BUDGET

School Year: 2017-2018

<u>Budget Area</u>	<u>Costs</u>	<u>Funding Sources with amount per Sources</u>
Professional Development	\$2,777	<u>General Fund</u>
Telecommunications and Internet Access	\$37,872	<u>E-rate - \$22,723 / General Fund - \$15,149</u>
Materials and Supplies (i.e. Software)	\$97,000	<u>General Fund</u>
Equipment (i.e. Hardware)	\$143,151	<u>General Fund</u>
Maintenance and Support	\$50,000	<u>General Fund</u>
Other	\$0	<u></u>
Total	\$330,800	

School Year: 2018-2019

<u>Budget Area</u>	<u>Costs</u>	<u>Funding Sources with amount per Sources</u>
Professional Development	\$2,500	<u>General Fund</u>
Telecommunications and Internet Access	\$38,872	<u>E-rate - \$23,323 / General Fund - \$15,549</u>
Materials and Supplies (i.e. Software)	\$97,000	<u>General Fund</u>
Equipment (i.e. Hardware)	\$231,000	<u>General Fund</u>
Maintenance and Support	\$75,000	<u>General Fund</u>
Other	\$0	<u></u>
Total	\$444,372	

School Year: 2019-2020

<u>Budget Area</u>	<u>Costs</u>	<u>Funding Sources with amount per Sources</u>
Professional Development	\$2,500	<u>General Fund</u>
Telecommunications and Internet Access	\$38,872	<u>E-rate - \$23,323 / General Fund - \$15,549</u>
Materials and Supplies (i.e. Software)	\$97,000	<u>General Fund</u>
Equipment (i.e. Hardware)	\$256,000	<u>General Fund</u>
Maintenance and Support	\$75,000	<u>General Fund</u>
Other	\$0	<u></u>
Total	\$469,372	