Wasco County

School District # 29

Technology Plan

2020-2022

Jack Henderson, Superintendent
802 N.E. Fifth Street
Dufur, OR. 97021
Voice: 541-467-2509
Fax: 541-467-2589
Email: jhender@dufur.k12.or.us
Website: www.dufur.k12.or.us

MISSION STATEMENT

Wasco County School District #29 will operate in an environment of collaborative learning where students, staff and community members work together to facilitate the life-long learning process. We will continually endeavor to incorporate current technologies into this process.

BACKGROUND

District #29 is comprised of one K-8 Elementary School and one High School located in one building on one site. There is an additional shop building at the Dufur site. The district still maintains buildings at the Petersburg site. We are a One to One school district. All students are assigned a Chromebook or in some instances, a Windows laptop. Every teacher has a computer and a laptop connected to a ceiling mounted projector along with a document camera. Six teachers use interactive whiteboards in their classrooms. The Dufur School Community Library maintains eight computers for students as well as community member use. There are 5 laptops available for checkout through the library as well. The card catalog is computerized and is available to students as well as the community on the web. This also provides access to other libraries in the Wasco County Library District. There are 48 personal computers in the district and all are on a Windows Enterprise network connected to the Columbia Gorge Education Service District through which we receive our Internet access. We have 172 iPads. Also in our fleet are 369 Windows laptops, 415 Chrome Books and 66 Kindle Fire Paper Whites. There is wireless access in 100% of our building space. We maintain a school website through Apptegy and our heating system is web-based as well. We now have three levels of student robotics teams including grade school, mid-level, and high school. We have implemented the use of Google G Suites for collaboration on classroom assignments and projects. The school district maintains 4 school buses with Wi-Fi which enables it to provide the Rolling Study Hall Program complete with on board tutors. Currently we have 21 cameras in place monitoring our campus 24/7. Our school utilizes Synergy as our SIS and Acellus as our LMS. We have our accounting software "in the cloud" using Infinite Visions.

OBJECTIVE

The goals of this plan are focused on the people that will be influenced by it: our students, staff and community members.

GOAL I

Increase student awareness and expertise in the use and application of technology as a tool in order to enhance and enrich classroom curriculum and aid in the life-long learning process.

I. Provide consistent high quality access to the following technological equipment:

A. One to One distribution of Chromebooks for students and PCs for teachers K-12 in order to provide:

- Tracking of individual student progress
- Remediation/Intervention opportunities and exercises
- Online learning (Core Courses and Credit Recovery)
- Student keyboarding and word processing training
- Applications and simulations to reinforce classroom curriculum
- Platform for Lego Robotics teams
- Evening and Summer programs

B. Classroom equipment:

- K-4 classrooms will house the One to One Chromebooks and 1 teacher workstation/1 projection laptop connected to the LAN with Internet access.
- In case of emergency distance learning, (pandemic) K-4 Chromebooks will be distributed One to One from their classroom
- Balance of classrooms will have 1 teacher workstation/1 projection laptop connected to the LAN with Internet access.
- Every classroom in the district will have a ceiling mounted computer projection system.
- Celilo Education Center shall be loaned a minimum of two computers.
- Wireless ac access points to cover 100% of each building.
- Every classroom in the district will have a document camera.
- Every classroom in the district will have a networked printer.
- Every classroom will have access to an iPad cart complete with 32 iPads, to be checked out as needed.
- Every eligible classroom will have an interactive whiteboard.

C. Computer applications training in the following areas:

- Business applications including collaboration.
- Computerized graphic arts
- Basic computer programming
- Remediation
- Internet browsers and etiquette
- iPad apps

D. Other equipment:

- Multimedia TV, satellite TV, VCR, DVD, scanners, digital cameras, video editing equipment, , and interactive white boards
- Video Conferencing, webcams
- Networked copy machines
- Wi-Fi on School buses

II. Internet access and training in its proper use.

A. Develop and implement a district-wide K-12 Internet Acceptable Use Policy.

- An AUP has been developed for staff and students.
- Implementation of AUP practices and procedures has been developed.
- AUP documents will be made public on the district website, put into student handbooks and inserted in appropriate parent communications (newsletters, etc.).
- AUP will be reviewed annually and revised as needed.

B. Students will be trained in using the Internet for:

- Research, publication and preparation for job skills
- Search and sort strategies for informational literacy
- Internet e-mail procedures and protocol
- Google G-Suites including Google Classroom
- On-line collaboration
- Acellus on-line learning

III. Utilization of technology to enhance learning.

A. Student use of technology will include:

- Access to technology to improve and enhance learning goals
- Remediation/Intervention opportunities and exercises
- Online learning (Core Courses and Credit Recovery)
- Evening and Summer programs

- ♦ Skills training in keyboarding to begin in the early elementary grades, increase during the middle school years, and gradually phase out in high school.
- ♦ Training in specific applications as needed for use in other curriculum areas
- ♦ Access to advanced training in both software and hardware technology as needed for curriculum enhancement.

B. On a daily basis, students will utilize a rich set of informational resources such as:

- ♦ Internet access
- ♦ District information via the district intranet and webpage
- ♦ Satellite and cable broadcasts
- ♦ Multimedia library resource center

C. Students will utilize tools the following tools to increase the productivity and quality of their work:

- ♦ Integrated software applications
- ♦ Presentation and authoring software applications
- ♦ Digital imaging equipment and enhancement software
- ♦ Information storage and retrieval equipment and software
- ♦ Communications software
- ♦ E-mail account
- ♦ iPad apps
- ♦ Lego Robotics platform software
- ♦ Collaboration software

D. Students will participate in learning experiences that will enable them to live and work successfully in the technology rich world such as:

- ♦ Presentation of information to others
- ♦ Collaboration with others to complete projects
- ♦ Developing quality finished products
- ♦ Retrieving and utilizing relevant information from many sources
- ♦ Communication and collaboration with students of other cultures

E. There will be student mastery of specific National and State technology standards. These standards will include:

1. Creativity and Innovation

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

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

2. Communication and Collaboration

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

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

3. Research and Information Fluency

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

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

4. Critical Thinking, Problem Solving, 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. Students:

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

5. Digital Citizenship

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

a. advocate and practice safe, legal, and responsible use of information and technology.
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. Students:

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

GOAL II

Increase staff expertise, awareness and implementation in the application and use of technology.

I. Provide ongoing training in the use of current technologies.

A. All staff will be trained in:

- the use of word processing, database, spreadsheet and graphics capabilities
- the use of district and Internet email
- the use of our networked district attendance and grading system
- the use of Internet research tools and how to use them within the curriculum
- integrating technology into the curriculum and managing technology in the classroom
- the use of iPads and their apps
- Integration of Google Classroom
- The use of Acellus online learning platform
- Initiating and attending Zoom virtual meetings

B. Additional training will be made available to the staff in the following areas:

- presentation software and hardware
- multimedia software and hardware

- webpage creation and publishing
- graphics creation, use and publication
- interactive whiteboard use

C. Resources for providing the above training will include:

- regularly scheduled technology related district in-service workshops
- regularly scheduled technology related college courses offered by Columbia Gorge Community College
- content specific training provided by Columbia Gorge ESD as part of their staff development services
- open resources over the Internet
- activities supported through NCLB Title IID funding
- You Tube videos

D. Teachers will exercise actions in compliance with National and State technology standards. Such executions will include:

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. Teachers:

   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 assessment incorporating contemporary tools and resources to maximize content learning in context and to develop the

knowledge, skills, and attitudes identified in the NETS•S. Teachers:

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. Teachers:

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. Teachers:

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. Teachers:

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.

II. Provide consistent high quality access to current technologies for our educators to use across the content standards on a daily basis.

A. Access to informational resources will include:

- the Internet
- district e-mail
- district information via the district network
- satellite and cable broadcasts
- access to our multimedia library resource center
- classroom webpage
- online grading
- YouTube
- Rolling Study Hall (Wi-Fi on buses)
- Google G Suites
- Acellus

B. Access to teaching tools will include:

- assessment, remediation, and curriculum extension software
- informational presentation software
- computer projection system
- secure information storage space
- wireless ac access points to cover 100% of each building
- iPads with apps
- interactive whiteboard
- document camera
- chrome books
- windows laptops
- webcams
- Google Classroom
- Zoom virtual meetings
- Acellus online learning

GOAL III

Provide continual support and maintenance for technology in order for staff and students to fully utilize its benefits. This will be done by supplying the personnel, procedures, and organization to provide the services necessary to keep the technology consistently useful.

I. Provide technology support.

A. Funding will be pursued through multiple sources such as:
- community and student activity groups
- supplemental technology grants
- legislative solutions (E-Rate)
- corporate donations

B. Job specific staff to include:
- a full-time technology specialist
- a full-time technical support person to work with the area specialists
- ESD technology specialists in our district on a weekly basis and for planned in-service dates
- trained students qualified for specific technology tasks

C. Personnel training to include:
- technology courses for which tuition reimbursement and district credit is provided
- regional and district employees trained to provide technology instruction for local staff
- in-service time for technology related topics

- technology courses through the district as well as local area education institution

II. Provide technology maintenance.

A. Software maintenance to include:

- a complete set of teacher resources such as grade book, attendance program email and Internet connectivity software, basic integrated application software suite with word processor, spreadsheet, database, and presentation capabilities, also Google G Suites and Zoom
- basic integrated application software suite with word processor spreadsheet, database, and presentation capabilities, Internet access for those who meet district criteria
- Acellus
- iPad apps

B. Hardware maintenance to include:

- continuous upgrading of hardware based on bi-annual needs assessment with the priority being placed on improvement of instruction and student achievement
- distribution of new computers in such a manner that old machines are replaced every 4 years or as needed
- distribution of new iPads, Paper Whites and Chromebooks in such a manner that old machines are replaced every four years or as needed
- Interactive boards, projection units and document cameras will be replaced as needed.
- Wireless access points, network switches, surveillance cameras and network servers\data storage arrays will be replaced when necessary.
- Digital signage displays replaced when visual quality degrades

C. Technology review procedure as follows:

- bi-annual review of technology needs of each building in the district
- bi-annual review of district Technology Plan
- reviews to be completed in August for staff development and installation of software and equipment, and in March, for the year's progress and the next year's needs assessment
- Technology Committee reports to be given to the school board twice a year: status report in January and year-end report and proposal for next year in June.

ADDENDUM I

2008 - 2010 PROJECTS

AGRICULTURE COMPLEX LAB

- CONSTRUCTION
- WIRING
- HARDWARE (COMPUTERS ETC.)
- SOFTWARE
- FURNITURE

GRADE SCHOOL LAB MIGRATION

- HARDWARE
- COUNTERS
- ELECTRICAL
- WIRING

ADDENDUM II

2011 - 2013 PROJECTS

- WIRELESS AC ACCESS POINTS
- IPAD PROGRAM BEGINS
- FIRST TECH CHALLENGE AND FIRST ROBOTICS COMPETITION BEGINS

ADDENDUM III

2014 - 2016 PROJECTS

- EXPAND THE IPAD PROGRAM TO ENCOMPASS A 1:1 IPAD TO STUDENT RATIO
- INSTALL CEILING MOUNT PROJECTION UNITS IN ALL CLASS ROOMS
- NURTURE FIRST TECH CHALLENGE TEAMS (ROBOTICS)
- Implement use of Kindle Fire Paper Whites
- Replace all lab computers with laptops

ADDENDUM IV

2017-2019 PROJECTS

- Gigabit internet access to building
- Rewire entire building and replace switches to accommodate gigabit speeds
- Install twenty plus security cameras
- Replace all StRUT based computers with units purchased or leased by the school district
- Continue printer/copier lease program with Ricoh
- 2 laptop carts with 32 laptops for English Dept
- 2 laptop carts with 32 laptops for Science Dept
- iPads for sports stats
- Hudl to host football and basketball films on cloud
- Time Clock Plus
- Wireless access at bus barn
- Reader board at front entry on street
- Rolling Study Hall (Wireless access on 3 busses)
- 110 Chrome Books, 60 for RSH and 50 for classrooms
- New website host—Apptegy
- Facebook, You Tube and Twitter page/accounts for school
- Digital signage in new front entry.
- Implement use of Google G Suites
- New SIS, Synergy
- Additional bus with wireless access
- Securly web filter implementation

ADDEMDUM V

2020-2022 PROJECTS

- Hosted Visions accounting program
- Acellus adopted as primary LMS
- One to One Chromebook implementation
- Addition of student accounts K-2
- Migration of domain to Google e-mail
- Establishment of district Zoom account
- Webcams on all computers to aid distance learning