



Canandaigua
City School District

Instructional Technology Plan 2016 - 2017

143 North Pearl Street
Canandaigua, New York 14424

Canandaigua City School District LEA Information (2014-2015)

- Total Student Enrollment – 3,660
- UPK Enrollment – 106
- K – 2 Enrollment – 733
- 3 – 5 Enrollment – 794
- 6 – 8 Enrollment – 844
- 9 – 12 Enrollment – 1,159
- Ungraded Enrollment – 24

This plan was entered by Daniel Bowman, Director of Technology.

Instructional Technology Vision and Goals

The Canandaigua City School District will lead and inspire a community of learners to fulfill their academic and creative potential.

Canandaigua City School District Mission Statement

We demonstrate our commitment to the whole child by:

- Providing rigorous opportunities in academics, the arts, and athletics;
- Supporting the social, emotional, and developmental needs of all students;
- Maintaining a focus on character development; and
- Engaging families and our community

Technology Mission Statement

The Canandaigua City School District will use technology to enhance instruction, strengthen communication, insure security and increase efficiency of operations while providing opportunities for students and staff to acquire the skills and knowledge necessary to succeed in an increasingly technology based global society.

Technology Vision Statement

It is the vision of the Canandaigua City School District to create an environment where students, teachers and staff have safe, secure, and reliable access for all to technology that fosters creativity, critical-thinking and higher learning. Teachers will be facilitators of student learning through proficient and meaningful use of learning technologies to address multiple learning styles, to motivate and engage students, and to support student exploration and growth. Staff will also leverage technology to enable the most efficient and effective administration of K-12 education.

Technology Purposes and Goals

Technology at Canandaigua City School District will:

- Enable graduating student to have the necessary technology skills and proficiencies to be successful in the work force and/or higher education.
- Be integrated into all areas of the curriculum to meet the needs of all learners.
- Support ongoing staff development opportunities.
- Be current, available and accessible to all student, faculty, staff and administration.
- Improve the effectiveness of administrative tasks.
- Be used to collect, assess, and share performance information.

- Provide access to global information resources.
- Will be periodically re-evaluated to ensure that we are providing the most effective teaching and learning tools to our students and staff within the districts means.
- Will include technology training to all students, faculty, staff and administration in an effective systematic, and on-going manner.
- Be secure, stable, reliable, inventoried, and well-maintained, including the use of appropriate back-up systems.
- Provide differentiated technology-based learning options to meet individual needs of students; explore alternative delivery of distance learning options for students and; provide student with anytime/anywhere access to electronic content to support classroom instruction.
- Support communication, collaboration, and effective sharing of resources.
- Enable active communication between the school and community by providing a means of access to program descriptions, school activities, and student information.
- Provide opportunities for staff to utilize new and emerging technologies that enhance teaching and learning.
- Be used in a way to understand, practice and encourage the legal and ethical use of technology to maintain the highest level of security possible for confidential information.

District Technology Committee Membership (2017 – 2018)

Dan Bowman – Director of Technology (Co-Chair), Parent

Tracy Lindsay – School District Data Specialist (Co-Chair)

Michele Pedzich - Community Member, Parent

Matt Schrage - Assistant Superintendent of Instruction

Stephanie Knapp – Director of Special Programs

Vern Tenney – High School Principal, Community Member, Parent

Katie McFarland – Director of Staff Development, Community Member, Parent

Steve Holmes – Technology Staff Developer, Community Member

Rose Rhode – Technology Support, Community Member

Greg Kane – High School Music Teacher

Dave Platten – High School Science Teacher, Community Member, Parent

Keith Pedzich – High School English Teacher, Community Member, Parent, Technology Staff Developer

Melanie Dyroff – Middle School Media Specialist

Caroline Chapman – Middle School Social Studies Teacher, Technology Staff Developer

Jean Cirone – Primary-Elementary Teacher (Grade K)

Heather Carson – Primary-Elementary Teacher (Grade 3), Community Member, Parent

Joan Lambert - Primary-Elementary Teaching Assistant, Technology Staff Developer

John Arthur - Middle School Principal, Community Member, Parent

Emily Tatar - Primary-Elementary Vice Principal

Gaps in Technology and the District's stated Vision and Goals

The gaps in the current level of technology vs. the desired goals of the district are caused by a few factors.

- Devices
- Professional Development
- Staffing

The main reason for each of the three identified gaps is the lack of budget due to other expenses that are deemed a higher priority coupled with the desire to keep the taxes low for the community. Providing time for staff development within the current schedule has also been a challenge to allow proper time for staff development.

Instructional Technology Infrastructure

The contracted Internet bandwidth access and the identified capacity of the telecommunications line coming into the district network hub is 100 Mbps - < 1 Gbps. The district's primary Internet access service is provided by GV/WFL Education Technology Services (Edutech).

The minimum circuit speed at which the classrooms are connected to the school's network are 10 Gbps. The minimum port speed of the switches, less than 5 years old, is 1 Gbps. The maximum port speed of these switches is 10 Gbps.

The district has wireless access points with a wireless controller and a 100% instructional space coverage.

The district does not foresee any barriers to prevent the testing 100% of its grade 3 – 8 students and NYSAA students on computer by the year 2020.

Technology Devices Inventory (2017)

Device	Number in use that are less than 5 years old	Number of these connected to the LAN
Desktop Computers/Virtual Machines	576	576
Laptops	504	504
Chromebooks	170	170
Tablets 9" or greater without access to an external keyboard	101	101
Totals	1,351	1,351

In addition, the district allows students to Bring Your Own Device (BYOD). On an average school day, approximately 100 student devices access the district's network.

The district provides for the loan of instructional computer hardware to students legally attending nonpublic schools pursuant to Education Law, section 754.

Technology Peripheral Devices Inventory (2017)

Peripheral Device	Number in use
Document Cameras	20
Flat Panel Displays	10
Interactive Whiteboards	212
Multifunction Printers	38
Projectors	268
Scanners	49
Other Peripherals (Cameras, Camcorders, and Webcams)	35
Total	632

The district's Technology department tags all devices for inventory control.

Technology for Students with Disabilities

Approximately, 81% of students with disabilities in the school district have assistive technology documented on their Individual Education Plan (IEP). The district's ability to improve access to technologies for the students with disabilities has been enhanced with these additional resources:

- Google Read/Write – allow students more easy access to the information on the web and to edit their work.
- Chromebook access available within 3 years

Software and Instructional Technology Support

The operating systems in use in the district are:

- Mac OS 10 or later
- Windows 7.0
- Windows 8.0 or greater
- Apple iOS 7 or greater
- Chrome OS

The web browsers available and supported in the district are:

- Internet Explorer 9 or greater
- Mozilla Firefox
- Google Chrome
- Safari (Apple)

The district uses Schoology as its Learning Management System (LMS) for the administration, documentation, tracking, reporting, and delivery of online and blended learning courses.

The top commonly used software programs that are supported in classroom instruction in the district are:

1. Google Docs
2. Microsoft Word
3. Microsoft Excel
4. Smart Notebook
5. Microsoft Powerpoint

The most frequently used research databases supported by the district are:

1. ABC-CLIO Databases
2. Infobase Issues and Controversies
3. Cengage Opposing Viewpoints in Context
4. Cengage US History in Context
5. Infobase Issues and Controversies in American History

Technology Tools Used to Increase Parent Involvement

The district uses Parent Portals that provide the following to our parents:

- Attendance
- Homework
- Student Schedules
- Grade Reporting

- Family Demographics
- Immunizations
- Assessments

In addition to the Parent Portals, the district uses these technology based tools to increase involvement:

- Emergency Broadcast System
- Website
- Facebook
- Twitter

Technology Support Staff

- Director of Technology Operations (1)
- Computer Services Assistant (1)
- Senior Computer Services Assistant (2)
- Information Technology Network Analyst I (1)
- Information Technology Network Analyst II (2)

Total of 7 full time Technology Support Staff

Technology Instruction / Curriculum

The district has worked hard to use technology tools and resources to transform our teaching learning environments across the district. The district believes that technology included in this plan can be a powerful vehicle to actively engage all students in learning. Using technology tools and resources such as Chromebooks and iPads utilizing Google Apps and Schoology learning management system, teachers are able to personalize learning, differentiating both the content and the pedagogical approaches depending on the needs of student. Teachers can extend learning beyond the hours of the day and the confines of the classroom. They can also create authentic learning experiences and connect students to resources that will greatly enhance their learning. These resources can include content, study tools, tools for assessment, and also connections to experts in the field, as well as to teachers and other students. Technology can help transform learning largely from the inclusion of 21st century life and career skills including digital creation and innovation, group collaboration, effective navigation of information and media, and digital citizenship skills.

Technology for Students with Disabilities

Technology is a beneficial tool for Students with Disabilities and English as a New Language Students. Integration of technology allows them to participate, interact and work independently using a wide range of assistive tools and devices. The district's Special Education Department works directly with the District Technology Director to insure that assistive technologies are available for all students who require their use, and both departments collaborate to make sure that the technology requirements of each student's IEP are met.

The district will continue to use the professional services available from agencies, such as BOCES, to recommend solutions for students with technology needs. Chromebooks and iPads continue to be the most recommended devices as a result of these evaluations. Our Smart Schools Investment Plan includes purchasing a Chromebook or iPad for each student which will ensure the students with disabilities are receiving the same instruction on these devices as their peers. Classroom audio enhancement systems are included in the district's Smart Schools Investment Plan for each instruction classroom. This will allow every student including the students with hearing loss to hear in much greater detail the information presented in class.

Once a recommendation is made and approved, the district will support the solution in the following ways:

- Within its financial resources, provide the recommended hardware, software, and peripherals.

- The Computer Services department will work closely with the Office of Special Programs and school building in implementing and supporting the assistive technology called for in a student's Individual Education Plan (IEP) or 504 plan.
- The district will provide awareness and training for readers and involved staff whose students are utilizing assistive technologies.
- The Computer Services department will inventory and track all hardware and software related to assistive technologies.
- The Director of Special Programs and Director of Technology will investigate the most cost effective deployment of recommended hardware and software for classified students.

Technology for English Language Learners

Our Smart Schools Investment Plan includes purchasing a Chromebook or iPad for each student which will ensure the students that are English Language Learners are receiving the same instruction on these devices as their peers. Classroom audio enhancement systems are included in the district's Smart Schools Investment Plan for each instructional classroom. This will allow every student including students that are English Language Learners to hear in much greater detail the information presented in class which allows for more comprehension.

Professional Development in Technology

The technology skill set needed by the teachers is identified and presented as expected proficiencies. Staff is encouraged to develop their technology skills in any of the following formats:

- Superintendent's Day and other In-Service Days – Classes in technology subjects determined by evaluation of the skills needed. These are instructed by tech integration specialists.
- After-hour Technical Sessions (Tech Time) – 30 minutes classes at each school twice a month. The classes vary on technical subjects, for example, Technology Equipment Available, SMART Board Notebook, and GAFE. They are taught by technology integration specialists, technology teaching assistants, internal teacher experts, BOCES technology specialists and other available experts in the field.
- Peer Observation – Teachers are encouraged to offer their technical skills and classroom implementations for viewing by other teachers.
- Course Work – Enrollment and completion of a district approved technology instruction learning experience. Including by not limited to on-lint, traditional or hybrid models.
- Technology Assistant – Each school has a Technology Teaching Assistant who is available for technology help and instruction assistance.

In addition to the learning of technical skills, the teachers are also instructed in various ways of implementing these skills within their daily classroom routines.

Technology hardware, software and trends are constantly being tracked for needed updates in skills. This data is evaluated by the Director of Information Technology and Director of Professional and their respective committees for possible changes or additions to the current offerings.

Technology Integration Support Staff

- Director of Staff Development (1)
- Teacher's Assistant (3)

Total of 4 full time Technology Integration Support Staff.

Technology Investment Plan

	Anticipated Item or Service	Estimated Cost	Is Cost One-time, Annual or Both	Funding Sources
1	Chromebooks	\$ 996,000	One-time	Smart Schools Bond Act
2	Tablets	\$ 445,000	One-time	Smart Schools Bond Act
3	Audio Enhancement	\$ 432,000	One-time	Smart Schools Bond Act
4	Instructional Software	\$ 180,000	Annual	District Operating Budget
5	Interactive Displays	\$ 40,000	Annual	District Operating Budget
	Total	\$2,095,000		

Community Connectivity in Technology

The district plans to increase student and teacher access to technology at home and in the community with these:

- The districts Smart Schools Investment Plan includes student and teacher assigned Chromebooks for grades 3 – 12. These devices will be allowed to be brought home for educational purposes.
- The district working with community organizations to encourage open WIFI access and will be distribution a list of currently available locations for free Internet access in the community at the beginning of the school year to staff, parents, and students.
- The district is currently investigating possible solutions to solve the problem of some students not having Internet access at home.

The current available Internet locations within the community:

- Public Library (1)
- Local Businesses (8)
- Community Broadband Downtown Streets
- Civic Center (1)

CCSD Technology Integration Action Plan

Goal 1: Increase hardware and software availability to staff and students to meet educational needs.

Actions Needed to Achieve Goal	Staff Development	Person(s) Responsible	Date Each Action Completed	Indication of Success
Active Technology Committee as oversight to implementation of the technology plan	n/a	Technology Committee Chairs	Meets 1 st Thursday of each month	Meeting deadlines of plan and adopting changes to the plan as needed
Implementation of Schoology LMS for the Middle and High school students	Training provided to MS and HS staff on Schoology	Director of Technology	Fall 2016	Staff understanding of important parts of Schoology
Implementation of 1:1 Chromebooks for MS, HS, and CACC staff; MS and CACC students	Training on Google Apps, Schoology, Assessment tools and strategies, digital citizenship and others.	IT Department	Fall 2016	Devices deployed
Implementation of classroom audio systems district wide	Training provided to all staff on the need and use of utilizing the systems daily.	Director of Technology	Fall 2016	Systems installed a teachers are using them on a daily basis (Survey required)
Implementation of 1:1 Chromebooks for PES staff and HS students	Training on Google Apps, Schoology, Assessment tools and strategies, digital citizenship and others.	IT Department	Fall 2017	Devices deployed

Actions Needed to Achieve Goal	Staff Development	Person(s) Responsible	Date Each Action Completed	Indication of Success
Implementation of Schoology LMS for the Primary Elementary students	Training provided to PES staff on Schoology	Director of Technology	Fall 2017	Staff understanding of important parts of Schoology
Implementation of 1:1 Chromebooks and iPads for PES students	Training on Google Apps, Schoology, Assessment tools and strategies, digital citizenship and others.	IT Department	Fall 2018	Devices deployed

Goal 2: Increase technology integration into classroom instruction

Actions Needed to Achieve Goal	Staff Development	Person(s) Responsible	Date Each Action Completed	Indication of Success
Identify staff within the district that have advanced skills in technology integration	n/a	Director of Professional Development	Winter 2016	List created of internal staff willing to assist in future PD opportunities
Develop ways to showcase successful technology integration within the district	n/a	Director of Professional Development	Spring 2017	Staff have opportunities to see success full classrooms and begin to do similar activities in their classes

Actions Needed to Achieve Goal	Staff Development	Person(s) Responsible	Date Each Action Completed	Indication of Success
Identify and collaborate with regional districts with a high level of existing technology integration	n/a	Director of Professional Development and Director of Technology	Winter 2016	Produce a list of districts willing to collaborate on technology initiatives
Create collaboration events with districts identified for technology collaboration	n/a	Director of Professional Development	Spring 2017	Successful completion of Regional Technology PD day scheduled for March 2017
Further develop a long term professional development plan that helps staff integrate technology into instruction	n/a	Director of Professional Development	Spring 2017	Schedule of leveled PD offering on implementation strategies
Redefine classroom instruction methods with the use of Schoology	Many PD opportunities to leverage collaboration tools in Schoology to enhance instruction		Spring 2018	Schoology becomes the hub of all classroom, building and district activities and communications

Goal 3: Enhance communication with Staff, Students, Parents and Community

Actions Needed to Achieve Goal	Staff Development	Person(s) Responsible	Date Each Action Completed	Indication of Success
Reevaluate our current website and make changes to modernize and make more efficient	Train staff on the use of new website tools	Director of Technology	Winter 2016	Staff proficient in use of updated web site
Further the use of Social Media too for more active communication with stakeholders on district goals and successes	Staff and Admin training on professional uses of Twitter, Facebook and Instagram	Public Relations Director	Spring 2018	All major district communications flow through our Social Media sites

Monitoring and Evaluation

The proposed strategies that the district will use to evaluate whether the district’s instruction technology plan is

- Meeting the vision and goals as outlined in the plan, and
- Making a positive impact on teaching and learning in the district.

Date	Purpose	Participants	Outcome
Annually on the 1 st Thursday in November	Technology Survey	District personnel	Provide district leadership with clear picture of staff perception of district technology use and needs.
Annually on the 1 st Thursday in December	Meeting to discuss how the survey results reflect the districts vision and goals as outlined in the technology plan and how much progress we are making on having a positive impact on teaching and learning in the district.	District Technology Committee	Evaluation of current state as it relates to the Technology Plan and the development of meeting topics and work to be done by the committee for the rest of the school year
Annually on the 1 st Thursday in June and July	Discuss changes in the Technology plan for the following year to best meet the vision and goals as outlined in the previous year’s plan and develop action steps for making a positive impact on teaching and learning in the district	District Technology Committee	Updated District Technology Plan to be used for the following year

Policies

- Acceptable Use Policy(AUP) – Adopted 1998 - <https://www.canandaiguaschools.org/district/district-policies>
- Internet Safety / Cyberbullying – Adopted 2001 - <https://www.canandaiguaschools.org/district/dasa>
- Parents’ Bill of Rights for Data Privacy & Security – Adopted 2003 - <https://www.canandaiguaschools.org/parents>