Chariho Regional School District
Technology Plan
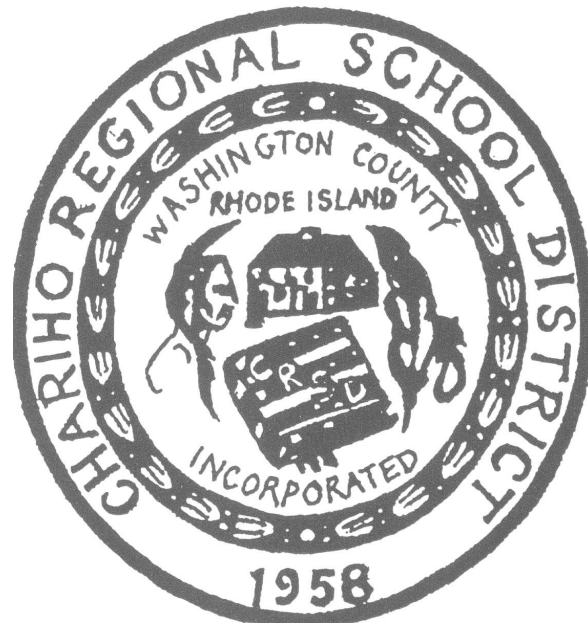## 2016-2019

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District Technology Plan Committee Members

Name	Position
George Abbott	School Committee Member
Stacey Boulmetis	Parent
Shawn Cole	Director of Educational Technology and Information Systems
Jane Daly	Assistant Superintendent
Jessica Geremia	Technology Fellow
Bryan Lucas	Teacher
Craig MacKenzie	Assistant Principal - Chariho High School
Sheri McCue	Teacher
Steven Morrone	Assistant Principal - Chariho Middle School
Rene´ Rosivach	Technology Fellow
Jeffrey Scanapieco	Principal - Ashaway Elementary

Decision-Making Process

The District Technology Plan Committee was formed in the Spring of 2015. The Committee members met at least monthly, sometimes in small groups and other times as a full committee. We initially researched a variety of other district technology plans, including model plans recommended by the RI Department of Education, and plans from notable districts in Connecticut and Massachusetts. The Committee also relied heavily on aligning the technology plan with Chariho's *Strategic Plan - Vision 2018* and the district's 1:1 initiative. In addition to the above Committee members, a group of students in February, 2016 were then provided the opportunity to review the draft of the technology plan and add additional input and comments. The District Technology Plan Committee will meet annually in June to update the status of each action item.

Mission

The Chariho Regional School District ensures that all students meet high academic standards and are prepared for lifelong learning and productive global citizenship.

Vision

With a commitment to continuous improvement, the District's highly-qualified staff engages with students in state-of-the-art facilities to master challenging content, to promote creativity, and to foster critical thinking. The District is recognized by the community as its greatest asset.

Beliefs

We believe that high academic standards and research-informed decision making are critical ...
- All professionals operate from a belief that all students can learn and meet or exceed demanding standards.
- All students at every level must be engaged in challenging academic experiences.
- Rigorous academic standards are the foundation of this school District.
- Instructional and program decisions must be data-informed and research-based.
- Learning is a continuous lifelong process.
- Schools must prepare students to be creative and critical thinkers, problem solvers, and effective communicators.
- The physical, social, and emotional wellness of every child is necessary for optimum learning.

We believe that the larger community must be fully engaged in the learning process...
- Education is a shared responsibility of students, parents, staff, and the community.
- Students thrive when supported, nurtured, and engaged by the community.
- In an environment that emphasizes school safety, everyone must be treated with kindness, dignity, and respect.
- Schools must prepare students to be team members and leaders, community contributors, and productive citizens in a global society.

District Profile

The Chariho Regional School District serves the communities of Charlestown, Hopkinton, and Richmond and includes four elementary schools, a middle school, a high school/career and technical center, and an alternative school. Approximately 3,300 prekindergarten through grade twelve students attend our schools. The District encompasses 127 square miles in southern Rhode Island that include oceanfront, rural, and suburban areas. The towns boast an abundance of golf courses, turf farms, and beaches. An ideal place to raise children, one only has to visit the tri-town area to develop a fondness for it. The three towns served by the District support high-quality public education.

SCHOOL NAME	October 1, 2015 Enrollment
Ashaway Elementary School	197
Charlestown Elementary School	280
Hope Valley Elementary School	200
Richmond Elementary School	420
Chariho Regional Middle School	945
Chariho Regional High School	1114
The R.Y.S.E. School	54

District Technology Initiatives

1) **Assessment:** Continuously improve the quality and accessibility of data available to teachers, enabling them to better consider both state and local formative and summative assessments to personalize instruction.

2) **Communication:** Expand communication and increase collaboration with families and the community using technology resources.

3) **Resources for Teaching and Learning:** Empower teachers and students with the tools and techniques needed to provide differentiated and individual learning experiences both in and out of school.

4) **Professional Development:** Provide professional development to all school community members, including parents/guardians, and educators with a focus on technology as a vehicle to improve teaching and learning.

Initiative 1

Assessment: Continuously improve the quality and accessibility of data available to teachers, enabling them to better consider both state and local formative and summative assessments to personalize instruction.

Action Steps	Person(s) Responsible	Results	Timeline	Status
What task will be done?	*Who will lead it?*	*What is the outcome of the task?*	*By when?*	*In Development, In Progress, Ongoing, or Completed*
Identify and implement technology platforms to develop multiple and varied formative and summative assessments, specifically to include tests aligned with ELA/Literacy and Math Common Core State Standards (CCSS), and Next Generation Science Standards (NGSS).	**CIPA/APP Committee** **Director of Educational Technology and Information Systems, Assistant Superintendent, Administrative Team**	● **Platforms for real-time data collection from CCSS and NGSS aligned formative and summative assessments have been identified.** ● **Teachers will revise/create assessments using identified platforms.** ● **Students will be assessed using these technology platforms.**	**Identify (Spring, 2016)** **Implement (2016-2017)**	In Progress
Identify and implement technology platforms to develop multiple and varied formative and summative assessments in additional content areas.	**CIPA/APP Committee** **Director of Educational Technology and Information Systems, Assistant Superintendent, Administrative Team**	● **Platforms for real-time data collection from formative and summative assessments.** ● **Teachers will revise/create assessments using identified platforms.** ● **Students will be assessed using these technology platforms.**	**Identify (2016-2017)** **Implement (2017-2018)**	In Progress
Develop an action plan to continuously improve the quality and accessibility of data available to all teachers, enabling them to better consider both state and local formative and summative assessments to personalize instruction.	**Director of Educational Technology and Information Systems, Assistant Superintendent, Administrative Team, Data Specialist**	● **Every two years, evaluate efforts to improve the quality and accessibility of data available to teachers.**	**Beginning June, 2017** **June, 2019**	In Development

Initiative 2

Communication: Expand communication and increase collaboration with families and the community using technology resources.

Action Steps	Person(s) Responsible	Results	Timeline	Status
What task will be done?	*Who will lead it?*	*What is the outcome of the task?*	*By when?*	*In Development, In Progress, Ongoing, or Completed*
Create a list of "district-approved" software/ resources/apps/hardware	**CIPA/APP Committee**	● **A Chariho Regional School District list of approved software/resources/ apps/hardware, published on the District website.**	**Initial List: April, 2016** **Updated twice per year in December and June**	**Completed** Ongoing
Identify and consolidate tools for effective communication within the school community and public. This includes structures for gathering ideas and effectively communicating with the public.	**Director of Educational Technology and Information Systems** **Administrative Team**	● **Agreed upon list and protocols identified for effective communication with all stakeholders.**	**June, 2017**	In Development
Research and identify a new district website platform and then redesign the district website to improve communication and centralize our web-presence.	**Director of Educational Technology and Information Systems**	● **A committee of key stakeholders identify an appropriate web-hosting platform.** ● **Purchase and design a new district website platform** ● **New website platform launches**	**June, 2017** **January, 2018 - July, 2018** **September, 2018**	In Development
Standardize the use of social-media and web presence as a tool for effective communication with the broader community, in alignment with the district's *Responsible Use of Technology* Policy.	**Superintendent, Principals**	● **Parents/guardians will have easy access to effective social media and web presence communication, which could be measured by an increase in the number of followers and web-site visitors.**	**June, 2018**	In Development

Initiative 3:

Resources for Teaching and Learning: Empower teachers and students with the tools and techniques needed to provide differentiated and individual learning experiences both in and out of school.

Action Steps	Person(s) Responsible	Results	Timeline	Status
What task will be done?	*Who will lead it?*	*What is the outcome of the task?*	*By when?*	*In Development, In Progress, Ongoing, or Completed*
Implement, monitor, and continuously evaluate the Chariho 1:1 initiative.	**Director of Educational Technology and Information Systems, Technology Fellows**	● **Annual collection and presentation of data related to pre-identified benchmarks.**	**September 2016, then annually**	Ongoing
Implement, monitor and continuously evaluate procedures that impact Chariho's personalized learning initiative.	**CIPA/App Committee, Assistant Superintendent**	● **Identify and then create procedures needed to protect student data and privacy.** ● **Evaluate instructional practices related to personalization of instruction.** ● **Provide professional development to grow the skills of faculty and staff so that personalization of instruction will be enhanced.**	**May 2016, then annually**	In Progress
Provide access to reliable devices for all students to participate in annual online state and local testing.	**Director of Educational Technology and Information Systems**	● **All students in Gr. K-12 have access to participate in annual online state and local testing.**	**April, 2017**	**Completed**
Provide the technological hardware that will significantly and positively impact Grades 5-8 personalized instruction.	**Middle School Device Selection Committee**	● **Recommendation(s) from Middle School Device Selection Committee for 1:1 devices.** ● **Implement 1:1 approved Middle School Device Recommendation.**	**March, 2016** **September, 2016**	**Completed** **Completed**
Provide the technical hardware that will significantly and positively impact Grades K-4 personalized instruction.	**Elementary School Device Selection Committee (to be established Spring, 2016).**	● **Formation of Elementary School Device Selection Committee** ● **Recommendation(s) from Elementary School Device Selection Committee.** ● **Implement appropriate ratio of devices which will allow elementary teachers to personalize instruction.**	**April, 2016** **October, 2016** **September, 2018**	**Completed** **Complete**d In Progress

Action Steps	Person(s) Responsible	Results	Timeline	Status
What task will be done?	*Who will lead it?*	*What is the outcome of the task?*	*By when?*	*In Development, In Progress, Ongoing, or Completed*
Inventory and recommend hardware (other than student devices) which will support student's effectiveness in problem solving, critical thinking, and collaboration (21st century skills).	**Humanities and STEM Specialists and Library Media Specialists**	● **Maintain a list of existing hardware inventory which supports 21st century skills.** ● **The list will include recommendations for future purchases.**	**June, 2016, then annually updated** **November, 2016, then annually updated**	Ongoing
Provide sufficient technology staffing structure (ex. workload and device to technician ratios). See Appendix C:	**Director of Educational Technology and Information Systems**	● **Analyze technology staffing structure** ● **Determine a timeline to correlate staffing adjustments with increase of devices.**	**October, 2016**	Ongoing
Identify available technology to support safety and security, including accurate documentation of student, staff, and visitor attendance.	**Director of Educational Technology and Information Systems, Director of Buildings and Grounds, Principals**	● **Software is identified and purchased that will meet the security needs of the district.**	**November, 2016**	In Progress
Investigate the need for a student learning management system for students at the elementary level.	**CIPA App Committee**	● **CIPA App Committee discusses and approves pilot if there is a need.**	**June, 2016**	In Progress
Review and recommend policies, structures and software that support the improved implementation of virtual and blended learning experiences, including course delivery by Chariho educators.	**Technology Fellows**	● **Review policies in place to determine if adjustments need to be made in support of virtual/blended learning.** ● **Implement recommended structures and software for creating an improved virtual and blended learning experience.** ● **Provide training, as needed, to Chariho educators selected to deliver online courses.**	**June, 2017** **September, 2018**	In Progress
Investigate and identify Open Educational Resources (OER) such as Open Online Courses and public domain resources.	**Assistant Superintendent, HIgh School and Middle School Assistant Principals of Teaching and Learning, Department Heads and Content Leaders**	● **Include OER when following the *Selection Procedure for Grade Level Instructional Materials* or when selecting any new classroom instructional resource.** ● **High School and Middle School Assistant Principals of Teaching and Learning to lead department heads and content leaders in developing a process to identify, vet and make recommendations for use of Open Online Courses.**	**June, 2016** **June, 2017**	In Development

Initiative 4:

Professional Development: Provide professional development to all school community members, including parents, and educators, on technology as a vehicle to improve teaching and learning.

Action Steps	Person(s) Responsible	Results	Timeline	Status
What task will be done?	*Who will lead it?*	*What is the outcome of the task?*	*By when?*	*In Development, In Progress, Ongoing, or Complete*
Provide professional development designed to enhance educators skills to effectively analyze and use assessment data to improve personalized instruction to meet individual student needs, as well as for refining instructional programs.	**Assistant Superintendent** **Principals** **District Professional Development Committee** **Technology Fellows**	● **Teachers will participate in Blended Learning Coaching.** ● **All teachers will participate in trainings via School (Early Release Day) and District Professional Development Days** ● **Ongoing during Faculty Meetings, Department and Content Area Meetings, Common Planning Times, and District Elementary Grade Level and Subject Area Meetings as needed.**	**Ongoing**	Ongoing
Provide learning and development opportunities for parents and community members to become familiar with the use of technology in the Chariho Regional School District.	**Principals**	● **Create opportunities for parent and community engagement in the use of technology.**	**At least annually**	In Progress
Research and provide personalized and differentiated professional development for educators.	**Assistant Superintendent** **Principals** **District Professional Development Committee** **Technology Fellows**	● **Systems will be improved upon to provide personalized and differentiated professional development for the District Professional Development Days.** ● **Principals will begin to integrate systems to personalize and differentiate professional development for educators during Early Release Days.**	**Beginning with September, 2016, then ongoing**	In Progress
Teachers will take part in professional development on how to protect students' data and privacy.	**Human Resources Administrator,Technology Fellows**	● **Teachers will know how to protect students' data and privacy and will review related policy.**	**Beginning with September, 2016, then annually**	Ongoing

Appendix A: Student Device Recommendations

Devices

The Chariho Regional School District understands that the availability of reliable technology is of vital importance to the success of both our staff and students. By the 2015-2016 school year, all certified staff were provided with a 13" MacBook Pro. The device provided to the staff will be replaced with a new reliable device on a regular schedule coinciding with the end of the finance agreement on the device. A similar plan is currently in place for students in grades 7 through 12. As of the 2015-2016 school year, all students in grades 8 through 12 will have their own device to use at both school and at home. By the 2016-2017 school year, this plan that has already been set into motion will be extended through grade 7. The existing plan has the district providing a new device for all incoming grade 9 students, this device will remain with them for the duration of their time enrolled in the Chariho Regional School District.

Moving forward, to continue providing the best education to our students, the district recommends that the 1:1 program be continued for grades 5 and 6 students. Grades 5 and 6 students will be provided with the same device given to grade 7 and 8 students. In March 2016, the Middle School Device Selection committee recommended the Dell Chromebook 11 Touch as the device to use for grades 5 through 8.

For grades K through 4, the need to go 1:1 with devices has not been deemed necessary, but the need to increase the availability of devices is critical. In order to effectively move forward with blended and personalized learning in the elementary classrooms, it is recommended that there be one device for every two students in each classroom. For grades K and 1, since the use of a keyboard is not essential, and as these classes are already effectively using iPads in small groups, the recommendation will be to have enough iPads in every K-1 classroom so up to one half of the students may be using a device at a given time. For grades 2 through 4, a device with a keyboard is recommended at the same ratio of one device for every two students in the classroom. In the event that an entire class needs a device, the devices for two classes may be combined to outfit an entire class. A committee will be formed to determine the appropriate device for students in grades 2 through 4.

Current 1:1 Devices In Use:

Faculty and Staff
- Certified Staff - 13" MacBook Pro
- School Administrators - 13" MacBook Pro
- Clerical Staff - Windows Desktop

Students
- Grades 8-12 - 1:1 devices - 11" MacBook Air

Total Counts of 1:1 Devices (2015-2016 School Year):

13" MacBook Pro - 379

11" MacBook Air - 1538

Appendix B: Network Infrastructure

The Chariho School District's network consists of a main campus (6 buildings) and four remote elementary schools. All buildings on the main campus are fiber connected (1 Gbps) back to the data center located in the Maintenance and Technology Building, which is the hub for the district. Each elementary school is connected back to the Maintenance and Technology Building through a 100 Mbps wide area network (WAN). Each building is designed with a main distribution frame (MDF) and intermediate distribution frames (IDF) where needed. Every IDF is connected to the MDF with fiber (10 Gbps). Additionally, all classrooms and most other rooms are equipped with a wireless access point (WAP), providing wireless access in every building across the district. All buildings access the Internet through a 500 Mbps connection provided by OSHEAN.

As the hub of the district, the main data center located in the Maintenance and Technology Building houses the bulk of the server infrastructure. To reduce the number of physical servers needed, the district uses a virtualized server environment. A battery backup unit and generator keep the servers running at all times. Additional servers are located in the high school, to be primarily used for backup and security. Each elementary school has one physical server as well as a phone gateway.

BUILDING	MDF/IDF	WAP
Maintenance and Technology Building	1	2
Administration Building	1	6
Chariho Regional High School	6	84
Chariho Regional Middle School	4	79
Chariho Area Career and Technical Center	1	20
The R.Y.S.E School	1	23
Ashaway Elementary School	1	22
Charlestown Elementary School	3	27
Hope Valley Elementary School	1	23
Richmond Elementary School	2	36

Appendix C: Technology Personnel

With a heavy investment in the technology, the district will need to ensure proper staffing to support this technology. The district Technology Department and the district Technology Fellows provide most of the technological support. The number of devices across the district is growing at a rapid pace and additional systems are added on a regular basis. To properly support and train staff, the district needs to be willing to invest in the personnel necessary to successfully complete this task. The district's willingness to invest in staff to support this initiative has been displayed over the past couple years, as a Computer Technician position was added in 2013, two part-time temporary Computer Technician positions were hired for the Summer of 2015, and the Data Specialist position was increased to full time in 2015. Additionally, a second Technology Fellow was added to the staff for the 2015-2016 school year. As the Middle School moves towards a 1:1 student device model for all grades and the device count is increased at the elementary level, additional support staff will likely be needed.

Current Staffing
Technology Department:
- Director of Educational Technology and Information Systems
- Systems Administrator
- Data Specialist
- Technology Clerk
- Computer Technicians (3)

Technology Fellows
- Technology Fellows (2)