



Technology Plan 2013-2017

**Carver Public Schools
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Benchmark 1 Commitment to a Clear Vision and Implementation Strategies			
A.			
The district's technology plan contains a clearly stated and reasonable set of goals and implementation strategies that align with the district-wide school improvement plan. The district is committed to achieving its vision by the end of the school year 2014-2015.	Meets Benchmark	The Carver Public Schools has self-assessed its technology status against the Massachusetts Local Technology Plan Guidelines and will use the results to develop related goals (see fourth column in this document) in areas where the benchmarks are not currently being met.	We will re-assess the district's technology status against the Massachusetts Local Technology Plan Guidelines on an annual basis and update this document as necessary.
B.			
The district has a technology team with representatives from a variety of stakeholder groups, including school committee members, administrators, and teachers. The technology team has the full support of the school superintendent to implement the plan.	Meets Benchmark	The Carver Public Schools Technology Committee is made up of students, teachers, administrators, parents, and community members which is aligned with the District Improvement Plan.	We will continue to maintain an active Technology Committee which meets regularly throughout the school year.
C.			
Needs Assessment			
1.			
The district assesses the technology products and services that will be needed to improve teaching and learning.	Meets Benchmark	The Carver Public Schools Technology Committee assesses the technology products and services that will be needed to improve teaching and learning.	The Technology Committee will continue to assess the technology products and services that will be needed to improve teaching and learning.
2.			
The technology plan includes an assessment of the services and products that are currently being used and that the district plans to acquire.	Meets Benchmark	The Carver Public Schools' technology plan includes an assessment of the services and products that are currently being used and that the district plans to acquire, and reports this information annually to the Department of Elementary and Secondary Education.	We will continue to collect and report this information annually to the Department of Elementary and Secondary Education.

D.			
Budget			
1.			
The district recognizes that technology plays a critical role in achieving its goals. The district has a budget that will ensure the implementation of its long-range technology plan.	Meets Benchmark	The Carver Public Schools operating budget includes technology.	We will continue to support technology as part of our operating budget, supported by federal, state, and local funds.
2.			
The budget includes staffing, infrastructure, hardware, software applications, professional development, support, and contracted services.	Meets Benchmark	The Carver Public Schools operating budget includes staffing, infrastructure, hardware, software, professional development, support, and contracted services (including telephone services).	We will continue to revisit the technology budget to ensure it includes appropriate staffing, infrastructure, hardware, software, professional development, support, and contracted services.
3.			
The district seeks funding for technology programs from federal, state, and private resources, as well as from academic departments that are supported by technology. The district explores ways that technology can reduce costs and create efficiencies in other areas of the district budget.	Meets Benchmark	The Carver Public Schools budget for technology is supported by the local operating budget, as well as Title II-A and Title II-D (professional development). We currently have the new Lunch system called "Nutri Kids" and new copy machines that are also teacher printers	We will continue to research additional funding opportunities (private and public grants) and submit applications for appropriate funding to enhance and bring in additional programs.
4.			
For districts that plan to apply for E-rate reimbursement, the technology plan specifies how the district will pay for the non-discounted portion of their costs for the services procured through E-rate.	Meets Benchmark	The Carver Public Schools plan to apply for E-rate reimbursement where appropriate. The non-discounted portion of the services procured through E-rate are paid from the operating budget.	We will investigate the partnership with an outside firm to assist us with maximizing our E-rate reimbursement.
E.			

Evaluation			
1.			
The district routinely consults with technology staff before purchasing technologies items, to ensure that the items are appropriate, cost-effective, and sustainable.	Does not Meet Benchmark	The Carver Public Schools Technology Committee evaluates the effectiveness of technology resources toward attainment of educational goals on a regular basis.	We will continue to evaluate the effectiveness of technology resources toward attainment of educational goals on a regular basis.
2.			
The district's technology plan includes an evaluation process that enables it to monitor its progress in achieving its goals and to make mid-course corrections in response to new developments and opportunities as they arise.	Does Not Meet Benchmark	The Carver Public Schools technology plan includes an evaluation process that enables it to monitor its progress in achieving its goals and to make mid-course corrections in response to new developments and opportunities as they arise.	We will continue to evaluate the technology plan against our goals and make corrections as needed.
Benchmark 2 Technology Integration and Literacy			
A.			
Technology Integration ²			
1.			
Outside Teaching Time - At least 90% of teachers use technology every day, including some of the following areas: research, lesson planning, organization, administrative tasks, communications, and collaboration. Teachers explore evolving technologies and share information about technology uses with their colleagues.	Does Not Meet Benchmark	100% of teachers in the Carver Public Schools use technology every day, including some of the following areas: lesson planning, administrative tasks, communications, and collaboration. Teachers share information about technology uses with their colleagues.	We will continue to support the infrastructure needed so that teachers can access technology on a daily basis, and provide opportunities for teachers to share information about technology with their colleagues.

2.			
For Teaching and Learning - At least 90% of teachers use technology appropriately with students every day to improve student learning of the curriculum. Activities include some of the following: research, multimedia, simulations, data analysis, communications, and collaboration. Teachers integrate evolving technologies that enhance student interest, inquiry, analysis, collaboration, and creativity.	Does Not Meet Benchmark	At least 85% of teachers use technology appropriately with students every day to improve student learning of the curriculum. Activities include some of the following: research, multimedia, simulations, data interpretation, communications, and collaboration.	We will continue to support the infrastructure needed for teacher/student technology use, as well as continue to build awareness of the Massachusetts Instructional Technology Standards.
B.			
Technology Literacy			
1.			
At least 90% of eighth grade students show proficiency in all the <i>Massachusetts Technology Literacy Standards and Expectations</i> for grade eight.	Does not Meet Benchmark	The Carver Public Schools' goal is for at least 85% of eighth grade students show proficiency in all the Massachusetts Recommended PreK-12 Instructional Technology Standards for grade 8.	We will administer an annual student technology skills assessment for Grade 8 students.
2.			
100% of teachers are working to meet the proficiency level in technology, and by the school year 2014-2015, 90% of teachers will have mastered 90% of the skills in the Massachusetts Technology Self-Assessment Tool (TSAT). ⁴	Does not Meets Benchmark	Observational evidence supports the statement that 100% of teachers are working to meet the proficiency level in technology with the goal of 60% of teachers reaching proficiency by 2010-2011.	We will administer a formal teacher technology assessment aligned with the TSAT in the school year 2010-2011.

C.			
Staffing			
1.			
The district has a district-level technology director/coordinator.	Meets Benchmark	Carver has a district-level Director of Curriculum, Instruction, and Technology (0.8 full-time equivalent) who oversees instructional technology initiatives. The Chief Operations and Financial Officer oversees technology support staff and purchasing.	The current budget will not support a full-time district-level technology director at this time.
2.			
The district provides one FTE instructional technology specialist per 60-120 instructional staff to coach and model.	Does not Meet Benchmark	Carver has one full-time instructional technology teacher at the elementary school and one at the middle high school.	We will continue to support technology instruction as allowed by the budget.
3.			
The district has staff specifically dedicated to data management and assessment.	Meets Benchmark	Carver has a full time Information Services Coordinator who handles district data management and reporting. Assessment data is handled by the Director of Curriculum, Instruction, and Technology, as well as building-based personnel.	The budget will continue to support the Information Services Coordinator to handle district data management and reporting. Assessment data will continue to be handled by the Director of Curriculum, Instruction, and Technology, as well as building-based personnel.

Benchmark 3 Technology Professional Development			
A			
At the end of five years, at least 90% of district staff will have participated in high-quality, ongoing professional development that includes emerging technology issues, technology skills, universal design, and research-based models of technology integration.	Does Not Meet Benchmark	The Carver Public Schools currently offers one full day of technology professional development for all staff. In addition, we have made online technology professional development resources available to all staff to meet individual needs. Budget and time constraints prevent us from meeting the recommended 45 hours of technology professional development for 85% of staff.	We will continue to investigate additional opportunities for technology professional development that are within our budget and time constraints.
B			
Technology professional development is sustained and ongoing and includes coaching, modeling best practices, district-based mentoring, study groups, and online professional development.	Does Not Meet Benchmark	The Carver Public Schools currently do not meet this benchmark due to budget, staff, and time constraints.	We will continue to investigate additional opportunities for technology professional development that are within our budget and time constraints.
C			
Professional development planning includes an assessment of district and teachers' needs. The assessment is based on the competencies listed in the Massachusetts Technology Self-Assessment Tool. ⁵	Does not Meet Benchmark	The Carver Public Schools has a Professional Development Committee. The district annually administers a teacher technology assessment and uses the results for technology professional development planning.	We will continue to assess staff technology needs in order to determine needs for technology support and professional development.

D			
Administrators and teachers consider their own needs for technology professional development. ⁶	Does not Meet Benchmark	The Carver Public Schools annually administers a teacher technology assessment and staff may use the results to consider their own needs for technology professional development.	We will continue to assess staff technology needs in order to determine needs for technology support and professional development.
Benchmark 4 Accessibility of Technology			
A.			
Hardware Access			
1.			
By 2014-2015, the district has an average ratio of one high-capacity, Internet-connected computer for each student. (The Department will work with stakeholders on a regular basis to review and define high-capacity computers.)	Does not meet Benchmark	Carver Public Schools makes an effort to obtain a ratio of one student per computer. However, with budget constraints this is not feasible.	We will continue to apply for grants to assist with this ratio and reduce the ratio. However, unless more funding is provided by the state, then it will not be feasible.
2.			
The district provides students with emerging technologies appropriate to their grade level.	Does not meet Benchmark	The Carver Public Schools provides students with access to portable and/or handheld electronic devices appropriate to their grade level, including Alphasmarts, Danas, Neos, PDAs, and digital media devices.	We will continue to investigate the use of portable and/or handheld electronic devices to support instructional goals.
3.			
The district maximizes access to the general education curriculum for all students, including students with disabilities, using universal design principles and assistive technology devices.	Does not meet Benchmark	The Carver Public Schools maximizes access to the general education curriculum for all students, including students with disabilities, using technology in classrooms with universal design principles and assistive technology devices.	We will continue to investigate and invest in assistive technology options in order maximize access to the general education curriculum for all students.

4.			
The district has procurement policies for information and instructional technologies that ensure usability, equivalent access, interoperability and SIF compliance ⁷ .	Does not meet Benchmark	The Carver Public Schools has procurement policies to ensure that new technologies are usable, accessible, and operable within the current technology setting.	We will continue to require that purchase orders including technology items be signed off on by appropriate technology staff.
5.			
The district provides technology-rich classrooms, with access to devices such as digital projectors, electronic whiteboards, and student response systems.	Meets Benchmark		We will continue to procure additional digital projectors and electronic whiteboards for classroom use.
6.			
The district has established a computer replacement cycle of five years or less.	Does not meet Benchmark.	Budget constraints prevent us from guaranteeing that this benchmark will be met. However, we strive to meet the goal of 90% of all computers meeting the state recommendation of type A (high-end) or type B (average) designation.	We will replace old and outdated computers as budget allows, on a department, grade-level, or group basis, to maximize equity.
B. Internet Access			
1.			
The district provides connectivity to the Internet for all computers in all classrooms in all schools, including wireless connectivity.	Does not meet Benchmark	The Carver Public Schools provides connectivity to the Internet in all classrooms in all schools including wireless connectivity, although there are some areas where wireless connectivity is not currently possible.	We will conduct a wireless audit order to work toward to enabling wireless accessibility throughout the entire district.

2.			
The district provides an external Internet connection to the Internet Service Provider (ISP) of 100 Mbps per 1,000 students/staff.	Does not meet Benchmark		
3.			
The district provides bandwidth of at least 10/100/1 Gb to each classroom. At peak, the bandwidth at each computer is at least 100 kbps. The network card for each computer is at least 10/100/1 Gb.	Exceeds Benchmark	The Carver Public Schools provides bandwidth of at least 100/1 Gb to each classroom. At peak, the bandwidth at each computer is exceeds 100 Mps. The network card for each computer is at least 100/1 Gb.	We will continue to provide the resources necessary in order to support bandwidth-intensive activities such as streaming video and audio.
C. Networking (LAN/WAN)			
1.			
The district provides internal wide area network (WAN) connections from the district to each school between schools of at least 1 Gbps per 1,000 students/staff.	Does not meet Benchmark	The Carver Public Schools provides a 1 Gb switched network throughout the district and/or 802.11g/n wireless network.	We plan to upgrade the switches between district buildings in order to provide the same level of quality service.
2.			
The district provides access to servers for secure file sharing, backups, scheduling, email, and web publishing, either internally or through contracted services.	Meets Benchmark	The Carver Public Schools provides access to internal servers for secure file sharing, backups, scheduling, and email after a complete reconfiguration of the network/servers in 2007. Our web publishing services are provided through an outside agency via a shared content management system.	We will continue to provide the resources necessary for secure file sharing, backups, scheduling, email, and web publishing.

D.			
Access to the Internet Outside the School Day			
1.			
The district provides access to its computer labs before and after school to ensure that students and staff have adequate access to the Internet outside of the school day.	Does not meet Benchmark		
2.			
The district disseminates a list of up-to-date list of places where students and staff can access the Internet after school hours.	Meets Benchmark	The Carver Public Library provides Internet access outside of the school day.	We will work with any additional community groups that provide Internet access outside of the school day.
Staffing			
1.			
The district provides staff or contracted services to ensure that its network is functioning at all times.	Meets Benchmark		
2.			
The district provides resolves technical problems within 24 hours, so that they do not cause major disruptions to curriculum delivery. The district provides clear information about how to access technical support, which can be provided in person or remotely.	Meets Benchmark	Technology person works overtime. We only meet these expectations because these people work overtime. These hours are outside of Comcast hours.	

3.			
The district provides at least one FTE person to support 400 computers. Technical support can be provided by dedicated staff or contracted services.	Does Not Meet Benchmark	The Carver Public Schools employs 1.5 FTE dedicated technical support personnel for ~600 computers.	Due to budgetary constraints, adding technical support personnel is not currently possible. We will continue to investigate additional opportunities for technical support services.
Benchmark 5 Virtual Learning and Communications			
A			
The district encourages the development and use of innovative strategies for delivering high-quality courses through the use of technology.	Meet Benchmark	The district does not have the resources to deliver specialized courses through the use of technology.	We will continue to investigate shared opportunities for specialized courses through the use of technology.
B			
The district deploys IP-based connections for access to web-based and/or interactive video learning on the local, state, regional, national, and international level.	Meets Benchmark	The district provides access to web-based learning systems, including United Streaming, Atomic Learning, Study Island,	We will continue to provide access to web-based learning systems, and will continue to investigate additional systems as appropriate/feasible.
C			
Classroom applications of virtual learning include courses, collaborative projects, field trips, and discussions.	Meets Benchmark	Teachers throughout the district utilize online resources (United Streaming, Google LitTrips) to provide e-learning experiences for students.	We will continue to investigate and share online resources, particularly those that are free.

D			
The district maintains an up-to-date website that includes information for parents and community members.	Exceeds Benchmark	The district maintains an up-to-date and accurate web site using a shared content management system. Information for parents and community is constantly updated by a network of administrators, office staff, and teachers.	We will continue to support a shared content management system and provide training to those who need to have access to the tools to update the site.
Benchmark 6 Safety, Security, and Data Retention			
A			
The district has a CIPA-compliant Acceptable Use Policy (AUP) regarding Internet and network use. The policy is updated as needed to help ensure safe and ethical use of resources by teachers and students.	Meets Benchmark	The current Carver AUP can be found at www.carver.org > Administration > Technology	We will review the AUP annually and update as necessary.
B			
The district educates teachers and students about appropriate online behavior. Topics include cyber-bullying, potential risks related to social networking sites and chat rooms, and strategies for dealing with these issues.	Meets Benchmark		
C			
The district has a plan to protect the security and confidentiality of personal information of its students and staff. ¹⁰	Meets Benchmark		

D			
<p>The district complies with federal and state law¹¹, and local policies for archiving electronic communications produced by its staff and students. The district informs staff and students that any information distributed over the district or school network may be a public record.</p>	<p>Meets Benchmark</p>	<p>The Carver Public Schools complies with federal and state law, and local policies and uses an e-mail archiving system produced by its staff. The district informs staff and students via the AUP that any information distributed over the district or school network may be a public record.</p>	<p>We will continue to comply with federal, state, and local policies around electronic communication and network access.</p>