

**PLYMOUTH PUBLIC SCHOOLS**  
**Plymouth, CT**



**EDUCATIONAL TECHNOLOGY PLAN**  
**January 11, 2017 – January 11, 2020**

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**Appendices**

Appendix A: Educational Tech Planning Resources

Educational Technology Planning



# About the District

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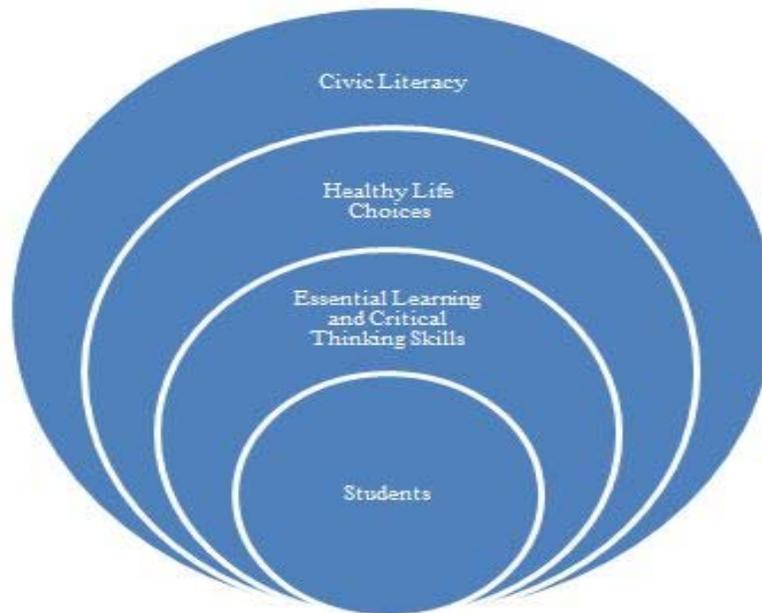
Plymouth, Connecticut, with a population of 12,243 residents, is part of Litchfield County, CT and is located 22 miles west of Hartford, CT.

The district serves approximately 1,520 students throughout its four schools:

- 1) Terryville High School
- 2) Eli Terry Jr. Middle School
- 3) Harry S. Fisher Jr. Elementary School
- 4) Plymouth Center School

## Our Mission

The Mission of Plymouth Public Schools is to challenge, inspire, and prepare all students for success in an ever-changing and complex world.



### DISTRICT STUDENT GOALS

- Students will demonstrate a mastery of core subject matter and apply their essential learning and critical thinking skills to achieve academic excellence.
- Students will demonstrate mastery of all essential skills, needed to participate successfully in the 21<sup>st</sup> century global economy.
- Students will exhibit healthy life choices (wellness).
- Students will use technology as a tool to research, organize, evaluate and communicate effectively, both orally and in writing, for a variety of purposes.
- Students will demonstrate social responsibility by providing for the needs of the greater community and by developing civic literacy.
- Students will be able to understand, negotiate and balance diverse views and beliefs in order to reach workable solutions.
- Students will demonstrate the ability to manage goals and time, work independently, and be self-directed learners.



# Technology Committee

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The Educational Technology Planning Committee should represent all stakeholders. Development of the educational technology plan and implementation of the plan should enable parents, educators, students and community members to benefit from the investment in technology and all should have representation on the committee.

<b>Member</b>	<b>Title</b>	<b>Constituency Represented</b>
Richard Trudeau	Director of Technology	Educator, District Administrator
Laura McBaine	Technology Specialist	Technology Support Staff
Rebecca Holleran	Math Coach	Plymouth Center School
Jason Barth	Technology Specialist	Technology Support Staff
Jodi Tenney	Director of Curriculum	District Administrator
Bonnie Scappaticci	Teacher	Plymouth Center School
Gregory Theborge	Technology Specialist	Technology Support Staff
Michael Hults	Principal	Building Administrators
Barbara Trinks	Director of Pupil Personnel & Special Education	District Administration, Students
Joy Kyle	Teacher	Educators, Students
Rachel Cote	Parent	Parents/Guardians, Students
Robert Nave	Teacher	Educators, Students
Jan Ouellette	Office Manager	Building Office Management

The Plymouth Schools Technology Committee maintains a collaborative sequence of technology plan review through both online Google Sites site membership and physical meetings based upon member availability. The committee is comprised of teachers, administrators, secretaries, support staff, parents, and students. Each member was invited to join based upon their interest in technology and their commitment to furthering the educational technology role within our schools. We continue to collect and analyze data to improve teaching and learning with technology. Our data collection process includes surveys, test scores, classroom observations, professional development feedback, asset inventory, and our technology budget (past, present, and future). Our committee members will continue to collaborate our efforts to help improve our educational technology foundation (hardware, software, training) so we can continue to improve on our integration of technology into our K-12 curricula.



# TECHNOLOGY COMMITTEE VISION

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Our mission for technology use is to improve teaching and learning by effectively integrating technology throughout the educational community so that students can achieve our seven district goals.

## **BELIEFS**

- Technology must be seamlessly embedded across the curriculum in all grade levels and content areas.
- All students need to learn how to use technology ethically and appropriately.
- Teachers, administrators, and educational staff need ongoing professional development to be best prepared to enhance student learning.
- Technology infrastructure and equipment must continually be updated to reflect the ever-changing world.
- Technology must be used as an effective tool to help gather and organize data for instructional decision-making.
- Board of Education policies must be updated regularly to reflect technology updates.
- Technology education must be a required, basic, 21st century course of study as compulsory and critical as reading, writing and mathematics.

## **Monitoring of Technology Plan Implementation**

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Educational Technology use must be reviewed on a regular, consistent basis to ensure that it is being utilized to its fullest potential in regards to its impact upon student learning.

The district will utilize multiple means of monitoring and reviewing the success of the Education Technology Plan. Examples would include staff, student and community surveys as well classroom visits and informal discussions. Other areas may include student created projects displays (static display, media or other means of sharing).



# Curriculum Integration

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## **Plymouth Schools - Now**

- Google Apps for Education - Fostering collaboration and communication
- 1:1 Chromebook deployment for grades 6-12
- Projectors in every classroom
- Interactive whiteboards in elementary and middle schools
- Educators incorporating technology within their classrooms
- Utilization of assessment data in improving student learning

## **Curriculum - Survey Responses:**

Students, staff and parents were surveyed on topics regarding technology integration within the district curriculum. Well over 90% of the respondents, across the three groups, indicated that they felt that technology should be embedded within the curriculum. Well over 95% also responded that technology can be an effective tool within the learning environment. When it came to student use of technology, virtually 100% of staff and parents responded that students should learn how to use technology appropriately.

## **Plymouth Schools - Future**

- Increase technology access and availability across district
- Continued Curriculum enhancement in areas of technology integration
- Further development of “Digital Citizenship” curriculum integration (Online behavior, safety and etiquette)
- Enhance use of assessment data to improve student learning
- Enhance technology integration to continue to support a foundation of collaboration, discovery and communication

# Professional Development

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## **Plymouth Schools - Now**

- Growing number of Google Apps for Education certified staff
- Current Google Apps for Education certified staff sharing Google Apps knowledge and practices
- Technology after-school training sessions
- Technology sessions during scheduled Professional Development
- Teacher initiated implementation of available features within Google Apps for Education such as “Google Classroom”
- Individualized/group scheduled Technology Training scheduled and provided by Technology Department

## **Professional Development - Survey Responses:**

Staff were surveyed on topics regarding Technology related Professional Development. 85% of the respondents felt that the current technology professional development opportunities were relevant. The surveys indicated that the district should continue to enhance its technology related professional development opportunities as well.



### **Plymouth Schools - Future**

- Encourage growth of Google Apps for Education certified staff
- Ongoing development of district wide technology professional development opportunities
- Investigate alternative means of delivering Professional Development sessions/resources
- Continue to encourage Google Apps for Education certified staff in the sharing of knowledge and practices in regards to Google Apps for Education use within the curriculum

## **Equitable Use of Educational Technology**

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### **Plymouth Schools - Now**

- 1:1 student Chromebook deployment for grades 6-12
- Dedicated Chromebook carts for elementary schools
- Google Apps for Education accounts for all students
- Interactive whiteboards for K-8 classrooms
- Projectors mounted in every classroom
- Access to real-time Google Apps for Education document and project collaboration for all students and staff
- High-speed WIFI availability in all buildings
- High speed internet connection through a fiber based network for entire district

### **Equitable Use of Educational Technology - Survey Responses:**

The majority of staff respondents (75%) indicated that their students, as well as themselves, have access to productivity software such as word processing and slide presentations. Additionally, 93% of staff respondents felt that the electronic systems for communicating within the school were adequate. Parent surveys indicated the acknowledgement of technology costs in terms of both obtaining and maintaining technology across the district.

### **Plymouth Schools - Future**

- Increased deployment of Chromebooks within elementary schools
- Chromebook replacement cycle in budget
- Director of Curriculum, Building Administrators, District Data Team and Tech Department to ensure timely delivery of support and professional development across the district
- Continue to ensure WIFI availability as required



# Infrastructure and Telecommunication

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## **Plymouth Schools - Now**

- High speed fiber connection between buildings
- High speed internet service through State of Connecticut
- Responsive WIFI availability
- Network maintenance and alert system
- District Technology Department support helpdesk availability and timely resolution response time
- Data backup and recovery system in place
- District-wide digital telephone system
- Plymouth16 Community Cable Channel

## **Plymouth Schools - Future**

- Maintain device replacement cycle (Chromebooks, servers, desktops, projectors, wireless equipment)
- Monitor current data and network equipment recovery procedures with a focus on minimizing downtime
- Monitor district-wide network health including WIFI coverage
- Monitor tech department helpdesk ticket response and ensure adequate staffing resources and deployment

# Administrative Needs

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## **Plymouth Schools - Now**

- Administrators use technology to communicate with staff, students and community
- Use of systems to access student learning performance, attendance, discipline and other information to help drive instruction
- Utilization of technology to plan staff professional development
- Use of technology in staff collaboration, evaluation and communication
- Use of technology in the development of school-wide scheduling

## **Plymouth Schools - Future**

- Continued administrative use of both existing and new available technologies for student, staff, parent and community communications
- Professional development in areas of data analysis through available technologies such as student learning data systems
- Collaborate in the planning of technology related professional development including topics and scheduling
- Encourage the development of “Digital Leaders” (Train-the-trainer) within buildings including the growth of Google Apps for Education certified staff



# Plan Implementation

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## Educational Technology Goals and Strategies

**Goal 1: Engaging and Empowering Learning Experiences**

**Goal 2: Assessment**

**Goal 3: Connected Teaching and Learning**

**Goal 4: Infrastructure for Teaching and Learning**

**Goal 5: Productivity and Efficiency**



# Goal 1: Engaging and Empowering Learning Experiences

*All learners will have engaging and empowering learning experiences both inside and outside of school that prepare them to be active, creative, knowledgeable and ethical participants in our globally networked society.*

*What will Plymouth Public Schools do over the life of this Educational Tech Plan to ensure that learning experiences are empowering, engaging and supported by digital tools?*

## Action Plan for Goal Area 1

What Steps Will You Take?	Who Will Be Responsible?	When?	How will you measure?
Maintain an equipment and infrastructure update cycle that provides for adequate hardware and software resources.	Technology Staff, Director of Technology	Ongoing – June 2017,18,19,20	Review of technology resources conducted by Technology Department Adequate funding included in the annual district budget.
Evaluate and collect exemplary models of innovative technology ideas/practice. Develop a website for a showcase of innovative ideas/practices in the district.	Teachers, Administrators, Students, Technology Staff, Director of Curriculum	Ongoing – Monthly 2017,18,19,20	Exemplary models of technology usage will be published on the Plymouth Board of Education webpage.
Technology tasks will be written into all curriculum areas as they are revised.	Teachers, Administrators, Technology Staff, Director of Curriculum	Ongoing – June 30/2017,18,19,20	BOE acceptance of updated curricula
Encourage Acceptance of technology into teaching strategies (Piloting of technology included)	Teachers, Administrators, Technology Staff, Director of Curriculum, Systems Specialist	Ongoing-Monthly 2017,18,19,20	Analysis of technology impacts upon learning as demonstrated through scores and teacher observation



## Goal 2: Assessment

*At all levels, our education system will leverage the power of technology to measure what matters and use assessment data for continuous improvement.*

*What will Plymouth Public Schools do over the life of this Educational Tech Plan to ensure that technology is used for assessment?*

### **Action Plan for Goal Area 2**

What Steps Will You Take?	Who Will Be Responsible?	When?	How will you measure?
Support data collection system to coordinate and analyze testing scores and track student information from year to year.	Technology Staff, Department of Curriculum, Teachers, Administrators	Ongoing-Monthly Data Review July/2017,18,19, 20	100% staff usage of tools such as Powerschool Analytics, Surveys
Appropriate personnel will be trained on the data entry and data analysis procedures and how to communicate findings to appropriate staff.	Technology Staff, Department of Curriculum	Ongoing – August 2017,18,19,20	100% staff participation for PD Offerings
Conduct an evaluation of the data warehouse content and analysis tools and their impact on student performance and/or instruction.	Technology Staff, Director of Curriculum, Teachers	Yearly- Data Review- July/2017,18,19, 20	Completed yearly evaluation of Powerschool Analytics-Renewal
Include technology professional development opportunities in the District Professional Development Plan that relate to data collection and analysis through the use of technology	Director of Curriculum, Director of Technology, Administrators, Systems Specialist	Yearly-Planning March/2017,18,19,20	Development of PD Calendar of upcoming school years
Assess current technology hardware and software in preparation for mandated online assessments	Director Curriculum, Technology Staff, Teachers, Administrators	Yearly-June/2017,18,19, 20	Completion of State Readiness Guidelines



### Goal 3: Connected Teaching and Learning

Professional educators will be supported individually, and in teams, by technology that connects them to data, content, resources, expertise and learning experiences that can empower and inspire them to provide more effective teaching for all learners.

What will Plymouth Public Schools do over this Educational Tech Plan to ensure that educators are prepared to teach 21st Century learners and are connected to technology resources that support teaching and learning?

#### Action Plan for Goal Area 3

What Steps Will You Take?	Who Will Be Responsible?	When?	How will you measure?
Assessment of Current Technologies and procurement of appropriate technology tools to meet requirement of enhanced teaching and learning	Teachers, Technology Staff, Director Curriculum, Business Manager, Administrators	Ongoing-Monthly 2017,18,19,20	Integration of selected technologies into curricula. Observation of successful use of technologies. Increase in scores.
As required - Increase network accessibility with additional wired and wireless connectivity and devices Increase network accessibility by adding VPN connectivity Research, evaluate, and implement lower-cost, mobile solutions to increase accessibility.	Technology Staff, Director of Technology, Teachers, Administrators	Ongoing-Wireless June/2017,18,19,20	Successful, consistent availability of technology resources (Infrastructure, hardware and software)
Include technology professional development opportunities in the <i>District Professional Development Plan</i> that relate to data collection and analysis through the use of technology	Director of Curriculum, Director of Technology, Systems Specialist, Administrators	Ongoing - March/2017,18,19,20	Development of PD Calendar of upcoming school years



## Goal 4: Infrastructure for Teaching and Learning

*All students and educators will have access to a comprehensive infrastructure for learning, when and where they need it.*

*What will Plymouth Public Schools do over the life of this Educational Tech Plan to ensure that all students and educators will have access to a comprehensive infrastructure for teaching and learning?*

### Action Plan for Goal Area 4

What Steps Will You Take?	Who Will Be Responsible?	When?	How will you measure?
Maintain 5 year replacement cycle for servers Maintain 5 year replacement cycle for routers, switches & WIFI hardware Implement 5 year replacement cycle for academic computers and laptops	Technology Staff, Director of Technology	Ongoing as required-July/ 2017,18,19,20	Hardware assessment and asset inventory indicating turnover
On an annual basis, present the evaluation of the technology staffing levels versus district needs to the Plymouth Board of Education.	Director of Technology	BOE Budget Presentation-March/ 2017,18,19,20	BOE Acceptance of staff budgeting
Maintain District Wireless Access	Technology Staff, Director of Technology, Vendors	June 30/2017,18,19,20	Maintain district wireless coverage as shown in Wireless GUI and staff/student device access



## Goal 5: Productivity and Efficiency

*At all levels, our education system will redesign processes and structures to take advantage of the power of technology to improve learning outcomes while making more efficient use of time, money and staff.*

*What will Plymouth Public Schools do over the life of this Educational Tech Plan to maintain or redesign processes and structures to take advantage of the power of technology to improve learning outcomes while maintaining efficiency?*

### **Action Plan for Goal Area 5**

What Steps Will You Take?	Who Will Be Responsible?	When?	How will you measure?
Evaluate effectiveness of Plymouth's student management software systems.	Director of Curriculum, Director of Technology, Administrators	Yearly-June/2017,18,19, 20	Assessment reveals accessibility to all required student data reports requirements.
Plymouth staff will be trained to use student management systems and other classroom technologies.	Director of Curriculum, Director of Technology, Administrators, Systems Specialist	Ongoing-Monthly/Yearly 2017,18,19,20	Development of PD Calendar for upcoming school years
Evaluate the effectiveness of technology practices used in embedded tasks in each curriculum area.	Curriculum Committee, Director of Curriculum, Administrators	July, August/2017,18,19,20	Student work from embedded tasks will be assessed for proper technological integration.
Conduct an evaluation of the data warehouse content and analysis tools and their impact on student performance and/or instruction.	Director of Curriculum, Administrators	Ongoing- July/2017,18,19,20	The Director of Curriculum & Instruction will report on the effectiveness of the data warehouse and recommend modifications as necessary.
Evaluate district wide software system to coordinate budget planning process as well as purchase orders.	Business Director, Administrators	Yearly- July/2017,18,19,20	The Plymouth Board of Education Business Manager will evaluate the effectiveness of the system and recommend modifications as necessary



# Appendices



## Appendix A: Educational Tech Planning Resources

### Educational Technology Planning

- National Educational Tech Plan:

<http://www.ed.gov/sites/default/files/netp2010.pdf>

- State of Connecticut Educational Tech Plan:  
[http://www.sde.ct.gov/sde/lib/sde/pdf/dtl/technology/csde\\_2011\\_educational\\_technology\\_plan.pdf](http://www.sde.ct.gov/sde/lib/sde/pdf/dtl/technology/csde_2011_educational_technology_plan.pdf)

### Educational Technology Planning

#### Site

CSDE Position Statement on Educational Technology	<a href="http://www.sde.ct.gov/sde/cwp/view.asp?a=2678&amp;q=320314">http://www.sde.ct.gov/sde/cwp/view.asp?a=2678&amp;q=320314</a>
National Educational Technology Plan	<a href="http://www.ed.gov/technology/netp-2010">http://www.ed.gov/technology/netp-2010</a>
CT Teacher Technology Competencies	<a href="http://www.sde.ct.gov/sde/lib/sde/pdf/dtl/technology/perfindi_v2.pdf">http://www.sde.ct.gov/sde/lib/sde/pdf/dtl/technology/perfindi_v2.pdf</a>
International Society for Technology in Education Essential Conditions	<a href="http://www.iste.org/Libraries/PDFs/Essential_Conditions_2007_EN.sflb.ashx">http://www.iste.org/Libraries/PDFs/Essential_Conditions_2007_EN.sflb.ashx</a>
National Educational Technology Standards for Administrators	<a href="http://www.iste.org/standards/nets-for-administrators.aspx">http://www.iste.org/standards/nets-for-administrators.aspx</a>
National Educational Technology Standards for Teachers	<a href="http://www.iste.org/standards/nets-for-teachers/nets-for-teachers-2008.aspx">http://www.iste.org/standards/nets-for-teachers/nets-for-teachers-2008.aspx</a>
National Educational Technology Standards for Students	<a href="http://www.iste.org/standards/nets-for-students/nets-student-standards-2007.aspx">http://www.iste.org/standards/nets-for-students/nets-student-standards-2007.aspx</a>
CT Education Network (CEN)	<a href="http://www.ct.gov/cen/site/default.asp">http://www.ct.gov/cen/site/default.asp</a>
CT Commission for Educational Technology (CET)	<a href="http://www.ct.gov/ctedtech/site/default.asp?cenPNavCtr= #30930">http://www.ct.gov/ctedtech/site/default.asp?cenPNavCtr= #30930</a>
SETDA Toolkits	<a href="http://www.setda.org/web/guest/toolkits">http://www.setda.org/web/guest/toolkits</a>
Partnership for 21st. Century Skills	<a href="http://www.21stcenturyskills.org/">http://www.21stcenturyskills.org/</a>
Documentation from 21st Century Learning Environments grantees	<a href="https://sites.google.com/site/cteett/home/21st-century-learning-environment/project-work/progress-report-i">https://sites.google.com/site/cteett/home/21st-century-learning-environment/project-work/progress-report-i</a>

