



**COLCHESTER PUBLIC SCHOOLS
DIGITAL CONVERSION PLAN 2018-2021**

**INNOVATION
NATION**

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OVERVIEW OF INNOVATION NATION & PERSONALIZED LEARNING

We are **Innovation Nation**. The mission of Colchester Public Schools is to engage each learner to prepare for the challenges of his or her tomorrow. We believe that when learning is personalized, students develop innovator dispositions that prepare them for a lifetime of learning.

Personalized learning is an approach to instruction whereby the teacher collaborates with the student to design a learning experience that is based upon individual student interests, goals, and levels of readiness. When learning is personalized:

Students...	Teachers...
Own their learning by designing a pathway that is based upon personal goals and relevant content that maximizes and extends their learning within and outside of the classroom.	Actively create and nurture a community of independent learners to expand the personal learning network of each student.
Reflect upon their progress, ask questions that drive new learning, and collaborate with others to deepen understanding and solve problems.	Use their knowledge of each student to support students set goals, track progress, take risks, process feedback, overcome barriers, and celebrate when goals are achieved.
Work with teachers to plan and showcase learning outcomes.	Provide the opportunity for students to engage in purposeful, relevant learning tasks, as well as with the resources that align with student interests.
Use technology to access content, collaborate, and create.	Use technology to engage students, access content, monitor progress, facilitate learning, and collaborate.
Have a voice in the selection of content, the way they express their understanding, and determining which audiences will provide the best feedback to extend their learning.	Work with students to plan and design a learning experience that flexibly supports each student, meets rigorous academic standards, and provides students with the opportunity to showcase innovative dispositions.
	Engage students in learning by using a variety of resources, strategies, and learning environments in order to inspire each student to become a lifelong learner.

DEFINITIONS

Technology refers to the hardware, software, digital content, and applications that enhance learning and the conditions for learning. The term, as used in this document, also includes the tools and infrastructure that support access to the Internet and the management of technological devices.

Hardware includes all of the physical resources that are used by students, parents, educators, and the community to enhance learning and the conditions for learning. For example, computers, wires, servers, switches, monitors, and wireless routers are all considered hardware.

Software is the collection of coded programs that are installed on hardware and used by users to carry-out the tasks associated with managing technology or enhancing learning. For example, Gmail, iOS, Powerschool, TabPro, and Achieve3000 are all considered software.

Open Educational Resources (OER) are digital content including articles, research, videos, podcasts, etc., that are provided free of charge to educators as resources to facilitate learning. OER can serve as both a supplement to or replacement of the textbook.

Learning Management System (LMS) is software that is used by educators to facilitate and manage learning, and by students to extend their learning. Educators use an LMS to upload content, manage course webpages, administer learning tasks or assignments, collect student work, and monitor student participation and academic growth. Students use an LMS to manage a portfolio of their work, collaborate with teachers/peers, monitor and manage course assignments and tasks, and access course content.

DIGITAL CONVERSION TEAM

Overview

The Digital Conversion Team (DCT) was formulated in January of 2016 with the mission of developing a technology plan for Colchester Public Schools. Students, educators, parents, and community members joined together to understand first the District shift to personalized learning under the District theme of Innovation Nation, and then plan for how technology would be used to support and enhance learning in our schools. The DCT researched the work of the Department of Education's Future Ready Schools initiative, the 2016 International Society for Technology in Education (ISTE) standards for students, as well as the work of other districts and their transition to a more personalized learning environment supported by technology. The product of this research resulted in a set of belief statements developed by the DCT for technology use (see Appendix A). The DCT then split into three groups focused on instructional technology, professional development, and resources. Each group collected data from observations, interviews, surveys, and inventories to assess the needs of the district (see Appendix B). Using the findings from the needs assessment, the DCT began the development of a set of goals that will drive District decision-making in regard to technology. A subset of DCT members then met to formulate, from the goals of each small group, a set of District goals for technology as outlined in this document.

Mission/Purpose

Upon acceptance of these goals, the DCT will assume an advisory role, tasked with the responsibility of monitoring, supporting, advocating for, and providing guidance around the achievement of the DCT goals. The DCT will meet a minimum of twice annually to work with school and district technology teams to see the DCT goals to fruition.

Team Members

The following individuals dedicated their time and expertise to the development of the DCT goals. The DCT met as a whole-group on 1.5.17, 1.25.17, 2.16.17, 3.15.17, 3.24.17, 3.29.17 and 10.3.17, and as small groups during the spring of 2017.

The Writing Committee met on 5.10.17 and 5.16.17 to develop the DCT goals.

Maile Blumberger (student)

Harrison Burr (student)

Luke Hajdasz (student)

Chris Maffuid (student)

Alexander Manelov (student)

Tamara Dimitri (parent)

Jim Falcon (parent)

Jeff Francoeur (parent)

Melissa Gerkey (parent)

Matthew Grimm (parent)

Ronnie Mertz (parent)

Matt Parsons (parent)

Danielle Pensa (parent)

Matthew Sweeney (parent)

Pamela Cannata (teacher)

Kelli Cauffman (teacher)

Karen Groves (teacher)
Amy Piacenza (teacher)
Matthew Pulick (teacher)
Barbara Johnson (Library Media Specialist)
Maureen Vint (Library Media Specialist)
Roger Jesse (IT Staff)
Randy Sperry (IT Staff)

Jill Levasseur (teacher)
Charles Hewes (administrator)
Judy O'Meara (administrator)
Matthew Peel (administrator)
Jennifer Reynolds (administrator)
Jeffry P. Mathieu (superintendent)
Jeremiah Frink (Dell Consultant)

NOTE: *Individuals listed in italics served as members of the Writing Committee.*

DIGITAL CONVERSION TEAM GOALS

1. Instructional Technology
 - a. Prepare students with the knowledge, ethics, critical thinking, and technological skills necessary for a rapidly changing, global community.
 - b. Technology will be used to support and enhance the development of students' academic, technical, social, and creative skills to innovate and solve personally meaningful real-world problems in a global context (Strategic Plan Goal #2).
 - c. Technology will be used by teachers to engage students, access content, monitor progress, facilitate learning, and collaborate.
 - d. Technology will be used by students to share work, access content, collaborate, create, and build knowledge.
 - e. Curriculum and instruction will drive the appropriate (age, level, etc.) selection of and access to technology used in the classroom.
 - f. Technology will be used ethically and responsibly by the entire school community.
2. Professional Development
 - a. Establish minimum expectations for student and staff competencies for the use of technology and a method for tracking progress.
 - b. Dedicate time for ongoing and embedded training and support for administration, teachers and classroom support staff in the use of technology (instructional technology, data management, communications, etc.).
 - c. Design and provide access to a variety of professional development for staff based upon their competency and individual and/or curricular needs.
 - d. New learning around technology will be real-time, collaborative, and is facilitated by and occurs between:
 - i. Teacher-to-teacher
 - ii. Teacher-to-student
 - iii. Student-to-teacher
 - iv. Student-to-student
 - e. Develop a network of support for student and teacher use of technology within each school.
3. Family and Community
 - a. Colchester will be made aware of how technology supports Innovation Nation and personalized learning.
 - b. Technology will be used to engage families and the community in the process of learning and showcasing of student work.
 - c. Foster interactive communications between students and their families, teachers, and administrators that monitor student progress towards their academic goals.
 - d. Technology will be used to create community relationships.
4. Resources
 - a. Provide year-round, equitable access to technology for student learning.

- i. Student, staff, and family access to appropriate technology to support the curriculum, academic standards, and personalized learning tasks.
 - ii. Uninterrupted, reliable internet access in all schools.
 - b. Evaluate school, family, and community resources to inform educational and technological decision-making in relation to curriculum and academic needs.
 - i. Annually perform needs assessment/evaluation of technology resources (current).
 - ii. Research and evaluate the new educational technology based upon need (future).
 - iii. Report findings to the DCT and Board of Education.
 - c. Develop and maintain a fiscally responsible budget that supports technology within personalized learning and Innovation Nation.
 - d. Establish a plan for purchasing, maintenance, and replacement of technology and technological infrastructure.
 - e. Establish and maintain a team that supports technology and technological infrastructure.
- 5. Policy
 - a. DCT will review and recommend policy and regulation that support DCT goals.

APPENDIX A

WE BELIEVE STATEMENTS

We believe that technology supports Innovation Nation and personalized learning by:

From the Students...

- Providing a platform for student inquiry/creation
- Displaying student work/product beyond the classroom
- Building networks/connections
- Spurring students' drive to attack problems and solve them through a variety of methods
- Allowing direct access to primary sources and people/experts
- Connecting courses and material to worldwide possibilities
- Furthering personal skills and abilities

From Parents and the Community...

- Supporting individualized learning
- Learning Styles
- Pace of Learning
- Varying Interests (Accommodating)
- Monitoring Goals
- Collaboration (Internal & External)
- Access to experts
- Broadening access to knowledge
- Enhancing hands-on experiences
- Providing recognition (Achievements)
- Badges
- Showcasing
- Accessing multiple sources
- Self-assessment
- Assessing student progress

From Faculty & Staff...

- 24/7 access for students, staff
- Providing multiple platforms, tools for all
- Allowing for multiple personalized experiences within a learning space
- The opportunity for students to set and pursue personal goals
- Instantly expanding the knowledge-base of educators and learners
- Connecting the world with the classroom
- Expanding the opportunities for real-world applications
- Empowering students to be creators, not just consumers
- Allowing for collaboration with family members
- Enabling students to do inquiry, independent projects, and solve problems
- Targeting different learning styles, such as multimodal texts
- Sharing student learning to involve community and parents

APPENDIX B

Instructional Technology (see slideshow)

Professional Development

Data Collection:

1. What data did you gather? Why?
 - Surveys:
 - PD needs and experiences related to digital learning: To gather information about existing staff knowledge and what they want to learn to do in terms of digital learning
 - Needs assessment and use of education technology: To build a model of professional development
 - Articles: What is currently being done for PD
 - Groundbreaker interviews: Gather information about the new instructional practices that we will implement next year
2. What tools did you use to gather data? (ex: survey, interviews, walk-through, etc.)
2 surveys in Google Forms, interviews, articles
3. Where/from whom did you gather the data? (ex: students, teachers, documents, etc.)
Surveys: staff
Interviews: Groundbreakers
4. What barriers existed to the process of data collection (ex: small sample size, there was no documentation available, etc.)
 - Survey 1: PD needs and experiences related to digital learning: Relatively small sample size: 59 responders: Many of the people who had tech experience were the responders
 - Survey 2: Needs assessment and use of education technology: Relatively small sample size: 80 responders:
5. Is there additional data your team recommends we collect? Why?
 - An exit survey at the end of the year guaranteeing the summer off can be administered

Results:

6. What does the data say? (Ex: 25% of respondents agreed that....)
Survey 1: PD needs and experiences related to digital learning:
 - Majority (72%) of respondents felt supported by district to seek out PD
 - 73% said district supports teachers in self-directed use of technology that enhances professional growth
 - What kind of PD taken part in:
 - What school offers
 - Webinars
 - Online courses
 - PD in and out of district
 - Conferences
 - What could be done to improve personalized learning: (Wide range of needs)
 - Time
 - Google Doc, Excel, or Naviance help

- Etc.

Survey 2: Needs assessment and use of education technology:

- 80% of those surveyed prefer small group PD
- 45% felt they had basic tech skills
- 44% feel they are proficient
- 7% feel they are advanced
- 50% use applications once a month or less
- 40% feel they can set digital learning goals for themselves and for students
- What have you found to be the greatest advantage of using tech in the classroom?
 - Student engagement

Findings

1. How should the data be interpreted? (Ex: There too few devices to allow for universal access to digital content)
 - Too few devices
 - Fearful that tech won't work
 - Huge range of abilities and comfort levels within staff in regards to use of digital technology
 - Smaller groups would be more desired
 - Take into account the variety of different learning styles and PD formats available

Resources

Data Collection:

1. What data did you gather? Why?
 - Anecdotal data throughout walk-through (strengths and negatives of the current technology building)
 - Interviews of IT using the sub-audit
 - Skype interview with industry expert
 - Superintendent knowledge of the buildings within the district and the budget
 - Budget & line items
2. What tools did you use to gather data? (ex: survey, interviews, walk-through, etc.)
 - Walk-through of Bacon Academy with parents, admin, teacher, student
 - Jeff Mathieu interviews
 - BOE budget documentation
3. Where/from whom did you gather the data? (ex: students, teachers, documents, etc.)
 - Administration
 - Teacher
 - Student
 - Existing technology within Bacon
 - District IT staff
4. What barriers existed to the process of data collection (ex: small sample size, there was no documentation available, etc.)
 - No knowledge of schools other than Bacon and CES
 - Lack of group's understanding of curriculum and instruction district-wide
 - Confusion regarding document questions in sub-audit.
 - Questions can be answered in different ways for each building within district
5. Is there additional data your team recommends we collect? Why?
 - Quantitative data from teachers and those affected daily by the current status of technology within the district

Findings:

1. How should the data be interpreted? (Ex: There too few devices to allow for universal access to digital content)
 - Adequate funding for the purchase of, the replacement of, and the maintenance of technological devices across the district is needed on a sustainable basis
 - Adequate funding for the purchase of, the replacement of, and the maintenance of technological devices across the district is needed on a sustainable basis
 - A recurring plan is needed to sustain new technology district-wide
 - More IT support is needed
 - CPS is limited in fidelity of using various data found to make decisions in regards to purchasing and upkeep of technology
 - Staff utilize data to inform instructional and curricular decisions in an inconsistent manner across the district