Amity Regional District #5
Bethany-Orange-Woodbridge

Educational Technology Plan

July 1, 2018 through June 30, 2021

VISION STATEMENT

The aim of 21st century education is learning – creative, powerful, personal, and open-ended in our lives. Technology should be ever-present yet almost invisible (seamless), empowering our staff and students to think, create, communicate, collaborate – locally and globally – and learn most effectively in a one-to-one environment.
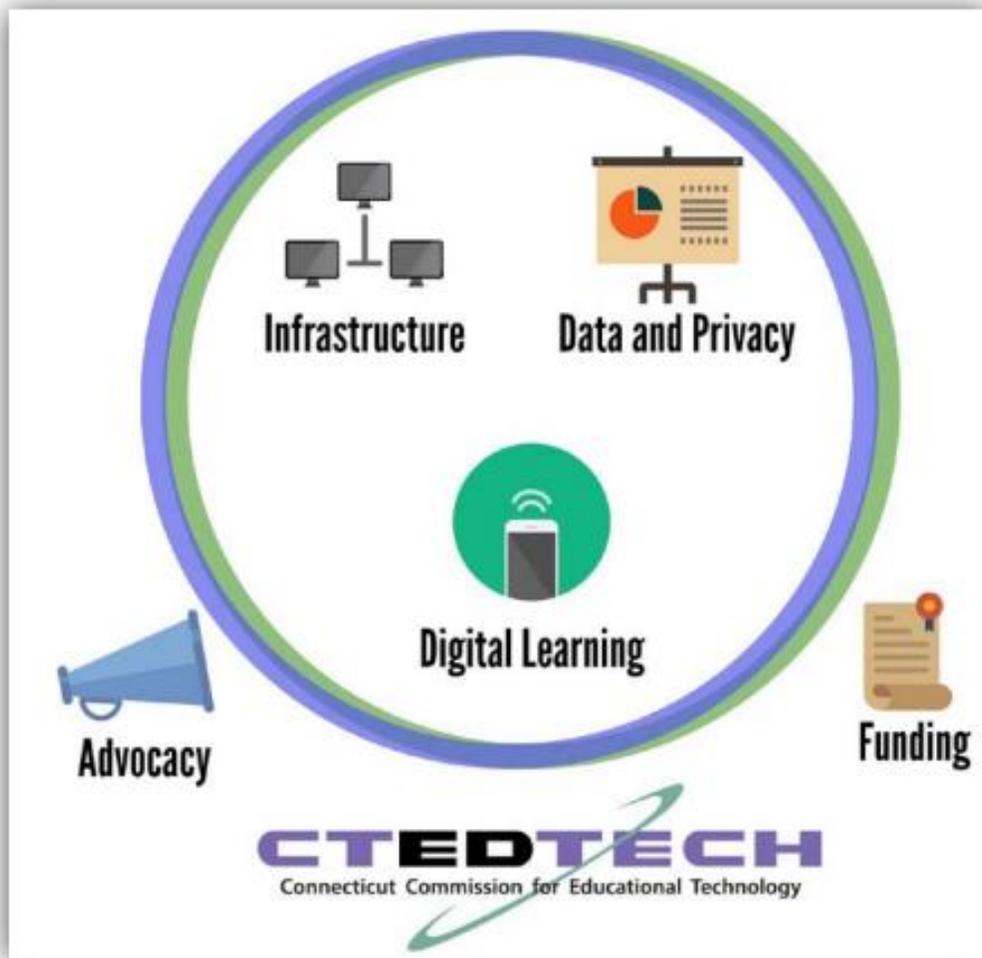
TECHNOLOGY PLANNING COMMITTEE

Member	Title/Constituent Group
Jess Artemchuk	Parent
Frank Barretta	Assistant Principal
Brenda Burt	Teacher and Building Technology Coordinator
Ken Clark	Teacher
Seth Davis	Teacher and Building Technology Coordinator
Richard Dellinger	Principal
Steven DeMaio	Board of Education Member
Shaun DeRosa	Director of Technology
Howard Ding	Student
Dr. Charles Dumais	Superintendent
Robert Fragione	Teacher and Building Technology Coordinator
Brian Goldstein	Teacher and Building Technology Coordinator
Neil Holt	Assistant Principal
Victoria Hulse	Library Media Specialist
Anastasia Kimball	Teacher and Building Technology Coordinator
John Laliberte	Teacher and Building Technology Coordinator
Lisa Lassen	Content Coach-Computer Education
Terry Lumas	Director of Finance
Kathryn McGonigal	Library Media Specialist
Dr. Marie McPadden	Director of Curriculum and Staff Development
Robert Musco	Library Media Specialist
Mary Raiola	Director of Pupil Services
Kristin Yeakel	Library Media Specialist
Penny Zamkov	Parent

Goal 1: Digital Learning

State Technology Plan
Goal: Statewide Digital Learning goals include the support of effective teaching and learning for students of all ages and abilities, across a range of effective environments and instructional frameworks (pedagogies). The work of the Commission and its network of partners will also support best practices in technology-enabled learning by defining and supporting the application of standards for students, teachers, and educational leaders. Translating standards and frameworks into applied practice in the area of digital and media literacy continues to be an ongoing objective. Equity of access remains a common goal across all Commission activities, whether in the form of making high-quality educational materials available to all teachers and students, supporting computer science education, or helping to ensure training for teachers to integrate technology effectively in support of engaging instruction. The Commission also strives to provide educational technology professionals with best practices in policy, governance, and operational efficiencies, with close alignment to national and international platforms such as the U.S. Department of Education's Future-Ready framework.

Future Ready Schools Framework
Curriculum, Instruction, And Assessment: In a Future Ready district, curriculum, instruction, and assessment are tightly aligned, redesigned to engage students in 21st Century, personalized, technology-enabled, deeper learning. Curricula and instruction are standards-aligned, research-based, and enriched through authentic, real-world problem solving. Students and teachers have robust and adaptive tools to customize the learning, teaching, and assessment, ensuring that it is student-centered and emphasizing deep understanding of complex issues. Assessments are shifting to be online, embedded, and performance-based. Data and associated analysis serve as building blocks for learning that is personalized, individualized, and differentiated to ensure all learners succeed. The elements that comprise this Gear are as follows: • 21st Century Skills/Deeper Learning • Personalized Learning • Collaborative, Relevant, and Applied Learning • Leveraging Technology • Assessment—Analytics Inform Instruction A foundation for each of these elements is the increased use of digital content, providing learners a range of high quality media, accessible 24 hours-a-day, 7-days-a-week. This provides all students many more opportunities to personalize learning, reflect on their own work, think critically, and engage frequently in deeper understanding of complex topics. This necessitates equitable access to devices and high-speed networks and broadband both at school and beyond, into the community and homes.

Action Plan for Goal Area 1

Action Steps	Responsible Parties	Timeframe	Evidence
Continue to use technology to increase student achievement, personalize learning, incorporate 21st Century Skills and the Future Ready Frameworks by using district supported digital tools and resources.	- Director of Curriculum and Staff Development - Principals - Computer Education Content Coach - Library Media Specialists - Teachers - Students	Ongoing Fall 2018 - Spring 2021	- Data report to Technology Committee- - Atlas Curriculum Maps - LMS - LMC Websites - Student work - Assignments
The Library Media Specialists at all three schools, the Building-Based Technology Coordinators at all three schools, and the Computer Education Content Coach will continue to work with teachers to develop lessons, projects, and assessments that are empowering, engaging and enhanced by district supported digital tools and resources.	- Director of Curriculum and Staff Development - Principals - Library Media Specialists - Building-Based Technology Coordinators - Computer Education Content Coach - Teachers	Ongoing Fall 2018 - Spring 2021	- Atlas Curriculum Maps - BBTC evidence - LMC Websites - Student work - PL activities - Assessments - Assignments

Provide facilitated time for teachers to work on learning activities/lessons to use in their classes, which incorporate technologies in which they have been trained.	• Building-Based Technology Coordinators • Director of Curriculum and Staff Development • Computer Education Content Coach	Ongoing Fall 2018 - Spring 2021	• Course catalogs from staff development days and ongoing training offered throughout the year via PLC presentations, faculty meetings or after school workshops, feedback surveys. • PL Activities • Needs assessment
Embed digital citizenship into current lessons in order to help students think critically, behave safely, and participate responsibly in a digital world through communication, collaboration, creativity, and critical thinking skills.	• Director of Curriculum and Staff Development • Principals • Library Media Specialists • Building-Based Technology Coordinators • Computer Education Content Coach • Teachers	Ongoing Fall 2018 - Spring 2021	• Atlas Curriculum Maps • BBTC evidence • Common Sense Media Lessons • Student work • PL activities • Assessments • Assignments

Goal 2: Infrastructure for Teaching and Learning

State Tech Plan
Goal: As defined in its governing Statute (Sec. 4d-80), the Commission's ongoing work and long-term goals address connectivity to and within schools. Through its oversight of the Connecticut Education Network (CEN), the Commission will expand upon this work, with efforts underway to connect libraries, universities, municipalities, and other community anchor institutions. Based on CEN member needs assessments, the Commission will work closely with CEN leadership to explore the provision of new services that support educational networking demands statewide.   Efforts will continue to eliminate inequalities of access to technology by supporting the provision of broadband outside of school and equipping students with affordable, high-quality devices. This work will come in the form of sharing connectivity and infrastructure best practices with educational technology leaders and practitioners.
Future Ready Schools Framework
Robust Infrastructure: When employed as part of a comprehensive educational strategy, the effective use of technology provides tools, resources, data, and supportive systems that increase teaching opportunities and promote efficiency.   The elements that comprise this Gear are as follows: Adequacy of Devices; Quality and Availability   Robust Network Infrastructure   Adequate and Responsive Support   Formal Cycle for Review and Replacement   Such robust environments enable anytime, anywhere learning based on competency and mastery with empowered, caring adults who are guiding the way for each student to succeed. High quality, high speed technology and infrastructure systems within a school district are essential to the advancing of digital learning. In these environments, the use of technology is seamless, and students have ubiquitous access to broadband on high quality devices both at school and while at home.

Action Plan for Goal Area 2

Action Steps	Responsible Parties	Timeframe	Evidence
Continually review infrastructure and replace when needed.	• Director of Technology • Director of Finance	Ongoing Fall 2018 - Spring 2021	• Budget lines • Fixed Asset Management Software

Allocate resources to support keeping the technology staff current with the latest skills through training sessions.	• Director of Technology • Director of Finance	Ongoing Fall 2018 - Spring 2021	• Budget lines • Records from workshops
Work with the District Technology Committee to plan and implement a 1:1 computing environment, including addressing equity issues.	• Director of Technology • Director of Finance • Principals • Technology Committee • Parents • Students	Ongoing Fall 2018 - Spring 2021	• Budget lines • 1:1 Plan • Meeting minutes
Continue to use a ticket module to receive, respond, track and address technology trouble tickets. Using this information, we can make projections regarding where possible issues may arise in the future and then prepare and/or budget for repairs or replacements.	• Director of Technology • Principals • Teachers	Ongoing Fall 2018 - Spring 2021	• ITDirect reports • Teacher feedback

Goal 3: Student Data and Privacy

State Tech Plan
Goal: The availability of digital tools, devices, and access has expanded the ability of educators — and students themselves — to capture, assess, and act upon educational data. The Commission will continue to champion the effective use of instructional and operational data to further learning while helping to ensure the security and privacy of student and educator information and content. This work will include initiatives that support the effective and responsible use of educational data across a number of initiatives. Privacy Compliance Privacy Best Practices Framework Advocacy Funding

Future Ready Schools Framework
Data and Privacy: Data privacy and security are foundational elements of digital learning. The district ensures that sound data governance policies are enacted and enforced to ensure the privacy, safety, and security of confidential data sets. Such policies and procedures ensure that access to authorized persons is secure. Education professionals have a range of resources, trainings, and services available to build their awareness and capacity to implement such policies and procedures with precision. The elements that comprise this Gear are as follows: Data and Data Systems Data Policies, Procedures, and Practices Data-Informed Decision Making Data Literate Education Professionals A personalized, learner-centered environment uses technology to collect, analyze, and organize data to provide continuous cycles of feedback to students, teachers and other education professionals, with the intent of increasing the depth, breadth, complexity, and efficiency of learning. All policies and practices ensure student data privacy.

Action Plan for Goal Area 3

Action Steps	Responsible Parties	Timeframe	Evidence
Utilize a SIS, LMS, and data warehouse for storing and accessing data.	• Director of Curriculum and Staff Development • Director of Technology • Principals • Computer Education Content Coach • Teachers • Students	Ongoing Fall 2018 - Spring 2021	• PowerSchool SIS, Insights, and Learning • PL activities

Use CT laws on student data and privacy to create policies and procedures for the district.	• Superintendent • Director of Finance • Director of Curriculum and Staff Development • Director of Technology	Ongoing Fall 2018 - Spring 2021	• Policy • Contracts • Notifications • Website
Continue to investigate evidence-based reasoning and data-driven decision-making, including training on using the data warehouse, Universal Assessment data, and SIS.	• Director of Curriculum and Staff Development • Principals • Computer Education Content Coach • Teachers	Ongoing Fall 2018 - Spring 2021	• PowerSchool SIS, Insights, and Learning • PL activities • Atlas Curriculum Maps • STAR Data Coach

Appendix A: Technology Planning Resources

Technology Planning Resources

Technology Planning Resources	Site
CSDE Educational Technology Plan	http://www.ct.gov/ctedtech/lib/ctedtech/2017-18_Strategic_Plan_1-0.pdf
Future Ready Frameworks	https://futureready.org/
International Society for Technology Education	https://www.iste.org/
National Educational Technology Plan	https://tech.ed.gov/netp/

Appendix B: Available Technology

Available Technology

Location	Technology
District Office	17 PCs equipped with Microsoft Office and internet access. 3 Laptops equipped with Microsoft Office and internet access. 2 Chromebooks 2 Digital Lightboard
Amity Regional High School	510 PCs (teacher and student) equipped with Microsoft Office and internet access; at least one PC in each classroom; four open labs, two Business labs (Quickbooks), one CAD Lab (Autodesk Suite), one Science Lab, one Graphics lab (Adobe CS6), one Drafting/Engineering Lab (MasterCam, EnRoute), Music Lab (Finale). 50 Macs for Fine Arts: Video Lab, Photography Lab both equipped with Adobe CS6 6 Chromebook Carts with 29 devices/cart 76 SmartBoards 4 BrightLinks 5 3D Printers
Amity Middle School-Bethany	225 PC Labs equipped with Microsoft Office and internet access; at least one PC in each classroom; three open labs, one Music lab (Finale), one Science Lab, one Technology lab (Google Sketchup, VexOS, MakerBot), one Reading/Chinese Lab. 3 Chromebook Carts with 29 devices/cart 30 SmartBoards 6 BrightLinks 2 3D Printers
Amity Middle School-Orange	150 PCs equipped with Microsoft Office and internet access; at least one PC in each classroom; three open labs, one Music lab (Finale), one Technology lab (Google Sketchup), library media center with 28 PCs. 3 Chromebook Carts with 29 devices/cart 30 SmartBoards 6 BrightLinks 2 3D Printers

Technology Five-Year Capital Improvement Plan

Line Item	Description	Qty	2017-2018 Budget	Qty	2018-2019 Forecast	Qty	2019-2020 Forecast	Qty	2020-2021 Forecast	Qty	2021-2022 Forecast	Qty	2022-2023 Forecast
	Day to day expense												
1	Ink and Toner		$50,514		$11,514		$12,000		$12,000		$12,100		$12,100
2	Consultation fees and services		$3,000		$15,000		$3,000		$3,000		$3,000		$3,000
2	Training		$7,275		$7,275		$7,000		$7,000		$7,000		$7,275
3	Repairs and Maintainence		$7,600		$7,500		$7,000		$7,000		$7,000		$7,600
4	Travel	6	$1,200	6	$1,200	6	$1,200	6	$1,200	6	$1,200	6	$1,200
5	Misc. supplies		$23,881		$21,652		$25,000		$27,000		$27,000		$23,881
	Totals		**$93,470**		**$64,141**		**$55,200**		**$57,200**		**$57,300**		**$55,056**
	Infrastructure												
6	Servers		$30,028		$22,381		$0		$0		$0		$30,028
7	Switches		$0		$0		$0	5	$15,000	5	$15,000		$0
8	filter appliance		$0		$0	1	$10,000		$0		$0		$0
9	Wiring		$0		$0		$500		$0		$0		$0
10	Server / Storage Maint.		$42,175		$0		$5,000		$0		$0		$5,000
11	1:1 initiative wireless upgrades		$0		$16,700		$10,000		$10,000		$10,000		$0
	Totals		**$72,203**		**$39,081**		**$25,500**		**$25,000**		**$25,000**		**$35,028**
	New Programs												
12	Handibot CNC machines for MSs			2	$6,390		$0		$0		$0		$0
13	computer and brightlink for DC office AHS												
14	Digital Whiteboard Main Office conf rm AMSO			1	$3,000								
15	Digital Whiteboard LMC AMSO			1	$3,000								
16	AMSO video monitor for main office				$300								
17	Transition program off-site computers			4	$4,400								
18	Reading Lab High School	25	$25,000		$0		$32,000		$0		$0		$0
19	Transition program off-site digital whiteboard			1	$3,000		$0		$0		$0		$0
20	1:1 initiative hardware				$150,000		$150,000		$150,000				
	Totals		**$25,000**		**$170,090**		**$182,000**		**$150,000**		**$0**		**$0**
	New Hardware Existing Programs												
21	SmartBoards/BrightLinks/InFocus High School	5	$10,000		$0		$0		$12,000		$12,000	5	$10,000
22	Epson BrightLinks Orange / Bethany	1	$2,000		$0	5	$9,000	7	$12,600	7	$12,600	1	$2,000
23	MS Surface 3s for AMSO & AMSB	4	$2,600	1	$800		$0		$0		$0		$0
24	Winbooks for AP CSP		$0	10	$5,000		$0		$0		$0		$0
25	Misc. (cameras for LMC, amso, amsb)	0	$0		$800		$0		$0		$0	0	$0
26	AHS Cad lab HP Z240		$0	4	$6,000		$0		$0		$0		$0
27	MacBook Pro for Media Ctr Orange	1	$1,000		$0		$0		$0		$0	1	$1,000
28	Printers Orange	1	$500		$0		$0		$0		$0		$0
29	Printers Bethany		$0		$0		$0		$0		$0		$0
30	MS Surface Pro 4 Athletics and AMSO LMC	2	$2,200		$0		$0		$0		$0	2	$2,200
31	PC for AHS rm 373		$0		$1,100		$0		$0		$0		$0
32	Chromebooks AMSB	88	$26,400		$0		$0		$0		$0		$0
33	Chromebooks AMSO	30	$9,000		$0		$0		$0		$0		$0
34	Chromebook carts	4	$4,000		$0	2	$2,000	2	$2,000	2	$2,000		$4,000
35	AHS Projectors for DC meeting rooms	2	$1,000		$3,100		$0		$0		$0		$0
36	Desktop for DC meeting rooms AHS	1	$800		$0		$0		$0		$0		$0
37	AMSO iPads for student use		$0		$0		$0		$0		$0		$0
38	AMSO computers for Tech ED		$0		$0		$0		$0		$0		$0
39	AMSB Music iPad Air 2	1	$400	1	$400		$0		$0		$0	1	$400
	Totals		**$59,900**		**$17,200**		**$11,000**		**$26,600**		**$26,600**		**$19,600**

#	Item	Qty	2017-2018	Qty	2018-2019	Qty	2019-2020	Qty	2020-2021	Qty	2020-2021	Qty	2022-2023
	Replacement Equipment												
40	Computers HS	40	$32,000	40	$32,000	50	$40,000	50	$40,000	50	$40,000	40	$32,000
41	Computers Bethany	25	$20,000	25	$20,000	30	$24,000	20	$16,000	20	$16,000	20	$16,000
42	Computers Orange	25	$20,000	25	$20,000	20	$16,000	30	$24,000	30	$24,000	20	$16,000
43	AHS CAD lab computer upgrades		$0		$5,000		$0		$0		$0		$0
44	AHS data logic scanner		$0		$500		$0		$0		$0		$0
45	HS Tech Ed Graphics Lab	17	$18,700		$0		$0		$0		$0		$0
46	Computers for Bethany Tech Ed	17	$13,600		$0		$0		$0		$0		$0
47	Chromebook cart replacment for COW 6	1	$1,000		$0	1	$1,000		$0	1	$1,000	1	$1,000
48	Dolphin LMC inventory scanner	1	$1,200		$0		$0		$0		$0	1	$1,200
49	Monitors	20	$3,000	20	$3,000	15	$3,000	20	$4,500	20	$4,500	20	$3,000
50	Replacement Wireless "n" Access Points	5	$3,000		$0	5	$3,000	5	$3,000	5	$3,000	5	$3,000
51	SmartBoards / BrightLinks	6	$12,300	5	$10,000	7	$14,000	7	$14,000	7	$14,000	6	$12,300
52	Printers	4	$2,000		$0		$0	5	$1,500	5	$1,500	4	$2,000
53	iPads for replacment		$0		$0		$0		$0		$0		$0
54	AHS Admin laptops		$0	4	$4,000		$0		$0		$0		$0
55	AMSO LMC computers	15	$12,000		$0		$0		$0		$0	15	$12,000
56	LCD Data Projectors	20	$10,000	20	$10,000	5	$2,500	5	$2,500	5	$2,500	20	$10,000
	Totals		**$148,800**		**$104,500**		**$103,500**		**$105,500**		**$106,500**		**$108,500**
	Software Licenses												
57	CEN Fiber Service		$68,400		$45,600		$45,600		$45,600		$45,600		$45,600
58	District Systems		$200,219		$180,036		$182,000		$184,000		$200,000		$205,000
59	HS Reading		$1,800		$1,800		$1,800		$1,800		$1,800		$1,800
60	Curriculum and Staff Development		$16,900		$17,050		$20,000		$20,000		$20,000		$16,900
61	AHS English		$12,000		$4,000		$5,000		$5,000		$5,000		$5,000
62	AMSO Music		$500		$500		$1,000		$1,000		$1,000		$1,000
63	AMSO & AMSB Tech Ed		$0		$0		$500		$500		$500		$0
64	AMSB Music		$1,090		$1,090		$1,000		$1,000		$1,000		$1,090
65	AHS Applied Education		$6,685		$7,100		$7,300		$7,500		$7,500		$7,800
66	AHS Math		$900		$900		$1,000		$1,000		$1,000		$1,000
67	AHS World Language		$997		$797		$1,000		$1,000		$1,000		$1,000
68	AMSO Media Center		$4,175		$4,375		$4,500		$5,000		$5,000		$5,000
69	AMSB Media Center		$4,325		$4,410		$4,500		$5,000		$5,000		$5,000
70	AHS Fine Arts		$2,500		$3,000		$2,500		$2,500		$2,500		$2,500
71	Pupil Services		$1,875		$1,875		$2,000		$2,000		$2,000		$2,100
72	Server backup service		$7,788		$7,788		$7,788		$7,788		$7,788		$7,788
	Totals		**$330,154**		**$280,321**		**$287,488**		**$290,688**		**$306,688**		**$308,578**
			2017-2018		2018-2019		2019-2020		2020-2021		2020-2021		2022-2023
	Totals		**$729,527**		**$675,333**		**$664,688**		**$654,988**		**$522,088**		**$526,762**