

*Genesee Valley  
Central School  
District  
Technology Plan  
2018-2021*

*Genesee Valley Central School  
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## **District Mission:**

Genesee Valley Central School shall champion education, a healthy lifestyle and community involvement by incorporating resources to inspire and empower all to be successful in life.

## **Technology Vision:**

We envision the creation of a technology enriched environment and technologically oriented culture at Genesee Valley Central School that supports and fosters continuous learning through individual growth; a learning culture that enables our learners to become lifelong productive and innovative members of our democratic society.

## **Technology Mission:**

Our mission is to effectively use technology to enable the Genesee Valley Central School District to attain and maintain the highest, broadest, and richest level of educational achievement possible. We strive to make our instructional technology plan indistinguishable from a best practices learning plan.

## **Primary Drivers and Objectives:**

- A. Facilitate, develop, implement, and monitor a dynamic and comprehensive technology plan that supports the GVCS mission.
- B. Use research based best practices and objective data to drive all decisions that involve all uses of technology.
- C. Make the use of technology an embedded part of the instructional and administrative process.
- D. Encourage and foster an environment of managed change and responsible risk-taking that promotes innovation in the use of technology.
- E. Provide and use appropriate technology that assists all students in achieving the learning standards set forth by GVCS and New York State,
- F. Provide and use appropriate technology to enhance and support curriculum and instruction.
- G. Implement a coordinated program to provide quality training opportunities for learning and teaching with technology.
- H. Employ technology to communicate and collaborate among staff, students, parents, and the community at large.
- I. Align the technology plan with other district plans, policies, and initiatives to leverage resources and synergize efforts.
- J. Implement a coordinated program for technology acquisition that is purposefully sustainable and future oriented.
- K. Allocate sufficient human and financial capital to ensure the full implementation of the technology plan.
- L. Use technology to assess, monitor, and evaluate both school management and instructional systems.
- M. Provide equitable technological opportunities for all members of the GVCS community.
- N. Communicate and practice the social, legal, and ethical use of technology.
- O. Promote and practice the secure and safe use of technology.
- P. Utilize all available funding streams in a comprehensive, effective, and coordinated manner to support the technology plan.
- Q. Align the technology plan to support and complement the district 5 year STEAM plan.
- R. Align the technology plan to support the district strategic plan that is currently under development.
- S. Provide a comprehensive, secure, and reliable technology infrastructure that can support the asynchronous and seamless delivery of learning resources to all learners in all learning environments.
- T. Provide for the creation of a "1:to digital" learning ecosystem that can provide the necessary digital learning resources to all learners in all learning environments.

## **2018-2021 Focus Goals:**

Goal 1 : Implement a coordinated program to provide quality training opportunities for learning and teaching with technology.

Goal 2: Provide a comprehensive, secure, and reliable technology infrastructure that can support the asynchronous and seamless delivery of learning resources to all learners in all learning environments.

Goal 3: Provide for the creation of a “1:to digital” learning ecosystem that can provide the necessary digital learning resources to all learners in all learning environments.

### Technology Plan Development:

Genesee Valley utilizes a multifaceted, comprehensive and distributed approach to technology planning. Student outcomes drive the process, so technology planning is embedded in the curriculum planning process via the district curriculum council. Staff development is essential, so tech planning is integrated with the professional development steering committee team. Student and teacher feedback is vital to the process, so these two groups are directly involved in planning. Due to the small population of the district stakeholder input can be obtained from samples that approach 100% of certain stakeholder groups. Plan input was obtained through multiple surveys, personal interviews, and meetings. Surveys were conducted for the following groups: faculty, staff, students, parents and community members. All faculty members were personally interviewed in regard to their technology current use and future needs. Technology planning was discussed at multiple faculty meetings, administrative team meetings, instructional cabinet meetings, grade level STEAM meetings, professional development team events, and curriculum council meetings. The district is currently reviewing its strategic plan. The technology director will meet with the administrative team and school board during the summer board retreat to get updated board input and make any plan adjustments that may be needed in light of strategic plan evolution.

### Technology Plan Development Events:

Event	Discussion	Participants	Outcome,
PD Steering Committee 5.3.18	Determine staff development needs to support ITP, update district PD plan, training needs for LMS rollout , schedule CA BOCES integrator	Principals, Director of CSE& Curriculum, CIO/DDC, Steam director, teachers	Items to be finalized in next meeting on 5.22.18
Curriculum Council 5.2.18	Approve 3 focus goals of ITP	Principals, Director of CSE& Curriculum, CIO/DDC, Steam director, teachers Superintendent, tech director	Member support goals and approaches
Surveys – community, student, staff 4,18	Determine device type and access broadband access classroom presentation Software app needs training needs , district tech priorities from different perspectives	Parents, staff members, teachers, students , admins	Need for wireless network upgrade noted, more effective use of classroom tech needed , old device upgrades, lack of broadband at home highlighted

Budget meeting 5.8.18	Review ITP equipment expenditures and budget – superintendent, business manager, tech director, steam director	Superintendent tech director Steam director Business mgr.	Sustainable plan created for device replacement and peripherals updates. Building project tech items prioritized, erate items identified
Faculty Interviews 2.18 through 4.18	Ascertain instructional tech needs for future planning and both short term mid-term, and long range adjustments STEAM learning needs related to ITP , PD needs, reflection and evaluation over what is and what is not working.	Personal interviews with all teachers with tech director and steam director	Need for wireless network upgrade noted, iPad 2 replacements needed, device management , training for one note , misc app requests
Board retreat 7.18	Present BOE with proposed tech plan and gain input	BOE, superintendent, tech director, principals, business mgr.	TBD
PD Steering Committee 5.22.18	Follow-up on 5.3.18 meeting	Principals, Director of CSE& Curriculum, CIO/DDC, Steam director, teachers	TBD
Pk-6 Faculty meeting 3.18, 4.18	Coding , CS instruction plans, ITP update	Principal Director of CSE& Curriculum, CIO/DDC, Steam director, teachers	Proceed with adding CS to formal reporting system k-6,
7-12 Faculty meeting 3.18, 4.18	ITP update, plans for new mandatory multi disciplinary computer course in high school, PBL block for grade 8 with tech integration	Principal Director of CSE& Curriculum, CIO/DDC, Steam director, teachers	Guidance to schedule new computer course and 8 <sup>th</sup> grade block with ELA,Tech, & SS.

## Instructional Technology – Professional Learning (PL)

GVCS adheres to the 2017 ISTE standards for teachers and administrators - see <https://www.iste.org/standards>. Both TIM and SAMR are used as a contextual framework- see <http://www.schrockguide.net/samr.html> and <https://fcit.usf.edu/matrix/> . Job embedded professional learning development is the preferred model. Turnkey staff members are the primary implementors who model best practices and pass along their expertise to fellow professional learners. CA BOCES tech integrators make planned visits to the school to work directly with teachers in the classrooms. The district STEAM coach also provides PL and tech

integration support. Classroom pilots are encouraged, as is attendance at state and national conferences. The district vigorously pursues grants and ensures that all grant applications have a strong PD component. GV participates in both the E1B BOCES CSLO and CA BOCES ISS professional learning communities and offerings. The district regularly visits other schools to observe best tech and STEAM learning practices and also hosts visiting schools who come to observe GV and provide idea exchanges. The district has a 5 year STEAM plan with instructional technology professional development components. District technology personnel actively participate in the NYSCATE and ISTE organizations. See the Professional Learning P action plan matrix below for details.

**Professional Learning resources and events scheduled, planned, and proposed table/matrix**

Resource	Audience	Tim elin e	Objective
Collaborative Educator Summit	Administrators, teachers, media specialists , instructional coaches	8/2018	Team training in STEAM advancement
i-Ready North East Conference	Administrators, teachers, CIO, special education and literacy teachers	5/2018, 5/2020, 5/2021	Workshops on best practice, pedagogy, support, and product updates
Annual NYSCATE Conference	Tech director, STEAM director	2018 - 2021 annual state conference	Engage with other professionals, attend workshops, best practices demos, interact with vendors and other service providers.
EDWeb.net	teachers, tech director, media specialist, administrators	2018 - 2021 ongoing weekly webinars , PLC opportunities, on line discussions, PD certified available	topics and lessons for a wide variety of technology applications as well as technology infused curriculum development and teaching strategies

CSLO Consortium Professional Development	Teachers, administrators, tech director	2018 - 2021 wide variety of workshops, focus on One Note . Summer Tech Conference	Topics and lessons for a wide variety of tech applications and curriculum development, focus on Office 365 offerings.
WNY STEM	Teachers, administrators, STEAM Director	2018 - 2021	Regional events STEM/STEAM learning opportunities
ISTE Annual Conference	Tech Director, STEAM Director	2018 - 2021 annual national conference	Engage with other professionals, attend workshops, best practices demos, interact with vendors and other service providers.
Discovery Education Pilot	Teachers, administrators	2018 - 2019	Work with vendor to implement STEM Learning Connect
Jason Project Pilot	Teachers, administrators	2018 - 2019	Work with vendor to implement JASON learning project
CA BOCES Tech Integration Forum/ Tech Sol Forum	Tech director, director of STEAM Learning, administrators	2018 - 2021	Tri-annual discussions on technology and learning best practices
CA BOCES on-site tech integrator	Teachers	Monthly, 2018 - 2021	Integrator works with teachers embedded in day to day classroom activities
AIMS WEB	Administrators, RTI teachers, SPED teachers, K-3 Faculty	8/2018	Training to launch AIMSWeb Plus progress monitoring
Fast Forward pilot	Administrators, RTI teachers, SPED teachers, K-5 Faculty	TBD	Trial period to test resource before full deployment
Captivevoice pilot	Administrators, RTI teachers, SPED teachers,	TBD	Trial period to test resource before full deployment
LMS	k-12 teachers, principals, guidance staff, parents	2018 /19 and	Train staff in effective LMS utilization. Parent outreach

		ongoing	
Adobe Illustrator, vinyl cutter	Art teachers, tech teacher, steam director, tech director, business teacher	8/18	training on equipment and software also curriculum development for new entrepreneurship course
STEAM /Tech Integration Coaches – part time elementary and full time district wide	Pk-12 faculty	9/18 and ongoing	Provide embedded assistance to integrate STEAM learning and tech integration in pk-12 learning experiences

**Teaching and Learning with Technology at GVCS – building a sustainable pathway to academic rigor and high performance.**

Meaningful and appropriate technology use starts at the early childhood (ages 3-6) level at GV and continues until the learner graduates. The approach at each level is guided by research and proven best practices. At each grade level learners are viewed as unique individuals with their own best path to achievement and success. With only 25 to 60 students in each cohort, the process of forming relationships with learners, performing regular data based academic skills diagnostics, and identifying individual learner needs and ways to meet those needs is very doable. Technology resources are only implemented if they are supported by quality research or directly support practices that are backed by proven research methods. A Learning Management System is being implemented to store, coordinate, distribute, and share academic resources and communicate academic progress to learners, parents, and the community at large. The LMS will also serve as PLC and curriculum map storage area. The district has grade level data teams that analyze performance trends based on state, diagnostic, and classroom performance assessment data. Weak areas are identified and prioritized. Instructional technology platforms are then implemented based on their research proven capacity to build learner strength in areas demonstrating subpar performance. The application of TIMS (or SAMR) coupled with the ISTE standards provides a systemic framework on which to create strategies for effective technology use by teachers and students to improve student engagement and learning. As Next Gen standards are implemented, complimentary technology will be introduced to allow learners to perform advanced experiments, build models, conduct simulations, and create useful artifacts. Computer Science is being taught K-12 in the district through the use of programmable robots, drones, and electronic kits. Advanced coursework is offered through virtual and blended learning opportunities as are courses that the district does not have the resources for to provide for independently. The effective use of technology is observed in professional evaluations and teachers are coached when lessons fall short. Effective home/school communication is a vital part of the academic success equation; multiple technology based avenues are used for collaborative communication and information delivery at GV.

**Technology, Learning, and Achievement Action Matrix**

Resource/Initiative	Target Audience	Time Line	Objective
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K-6 Literacy Curriculum Map/Skill Development with STEAM/Tech Integration			
grade level data teams			Identify areas of academic weakness
i-Ready Diagnostic, Instruction, and Teacher Toolbox			
AimsWeb			
Digital Literacy and Citizenship embedded in coursework and district PBIS.			
ST-Math			
SuperKids Reading			
Reading Eggs			
Castle Learning			
PowerSchool Unified Classroom (LMS)			
Frontline Education (MLP/OASYS)			
ACE (Special Education)			
Office 365			
GSuite			
STEAM initiative			
DL/blended course offerings ZOOM			
Thinglink, VR, Expeditions			
ExploreLearning Gizmos, ck-12			
Robotics FIRST, VEX Lego			
Jason Project (Pilot)			
Discovery Education (pilot)			
ClearTrack			
Zearn			
Adobe suite, Autodesk, Tinkercad, design software			
Code.org, Kodable, Cospaces.			
Learning A-Z			
Grade 8 block/coteach pilot			



## Special Provisions for Special Needs Learners

At GV learners are viewed as unique individuals with their own best path to achievement and success; in that regard the district views all of its learners as “special”. In the case of those learners who have IEP’s or specific learning disabilities the district provides technology unique to each learner’s situation. Based on expert analysis, personal learning devices with the appropriate applications are issued to all students with IEP plans that call for assistive technology to meet their specific learning needs. Where applicable, special education teachers and specialists such as speech therapists are provided with technology to the needs of disabled populations. Professional learning is provided to teachers, aides, and specialists so that they can utilize the assistive technology effectively and train the target learner populations accordingly. The district follows a policy of maximum inclusion and least restriction in regards to its disabled student populations, and where technology supports this policy, it is obtained and implemented.

## Technology Plan – Progress Monitoring and Evaluation

The effective deployment and use of technology is evaluated and monitored in a variety of ways at GVCS. It is considered the responsibility of all stakeholders, at some level, to evaluate and monitor the evolution and use of technology within the District. All parties who provided input to the plan are accountable for their own part in making the plan happen.

The overall responsibility for evaluating the technology plan and monitoring its implementation rests with the district technology director. The district, whenever possible, uses objective, quantifiable benchmarks for monitoring, These benchmarks are supplemented by expert opinion and group analysis as needed.

## Technology Plan – Progress Monitoring and Evaluation Matrix

Entity/Responsible Party	Time	Action
Wireless network statistics – tech director	Monthly ongoing	Wireless network statistics- outages, bandwidth usage, load, number of devices, traffic type, bus wifi usage
Solar Winds monitoring – tech director	Monthly ongoing	Solar Winds monitoring – type of web traffic, network outages, educational vs. other traffic, video usage
Tech director	Monthly ongoing	Content Filter reports – monitor for inappropriate and frivolous use. Educational website usage AUP compliance, student data and security compliance
Tech director	Weekly ongoing	Security compliance auditing, network security reports reviewed, best practices enforcement.
Grade level teams, Curriculum director, CIO/DDC, tech director, principals	8/18, 1/19, ongoing bi-annually	i-Ready -review data and lessons usage, correlate with classroom standards progress and state test results.
Curriculum director, CIO/DDC, teachers	9/18, 6/19 ongoing semi annually	St Math – review student and class progress charts, correlate with classroom standards progress and state test results.

Tech director	monthly	Website usage, public portal usage, tech inventory
Curriculum director, CIO/DDC, RTI teachers	monthly	AIMSWEB – review student and class progress, correlate with student skills and standards progress.
Instructional Cabinet	Semi annually	LMS usage , implementation progress.
Admin Team	Semi annually	Start and review tech budget process and current spending; building project progress re technology items
2-4 STEAM Team Early Childhood STEAM team	Semi annually	Review progress toward STEAM plan – coding elements and ISTE student standards , review equipment ( STEAM/STEM kits ) usage
Tech director, curriculum council	Annual	Surveys – summarize staff and student annual surveys – identify areas where ITP goals are falling short. Update timelines.
PD Steering Committee	Tri-annually	Review surveys and anecdotal feedback on tech staff development, review district PD goals as they relate to ITP.
Departmental Data teams	Tri -annually	Evaluate areas of academic weakness that have been targeted with a technology solution (ST Math, Superkids) – measure results against application ; App usage survey – identify gaps between app usage and curriculum maps, identify areas where app usage / app functionality is inadequate to meet learner needs
Tech director, curriculum director Curriculum council	Annually	App usage survey – identify gaps between app usage and curriculum maps, identify areas where app usage / app functionality is inadequate to meet learner needs.
Curriculum council	Semi annually	Review STEAM plan progress, review district data and results, review updated board goals and effect on ITP initiatives, review usage of tech tools not officially supported by district
PK-6 & 7-12 faculty meetings	Monthly	STEAM/PBL progress, blended learning progress, classroom best practices reviewed, ITP goals reviewed in reference to classroom activities
Board of Education	Annually	Review board goals in relation to ITP plan goals , review administrative reports on ITP progress and changes.