

2015–2019

# Reimagining Learning in a Connected Age

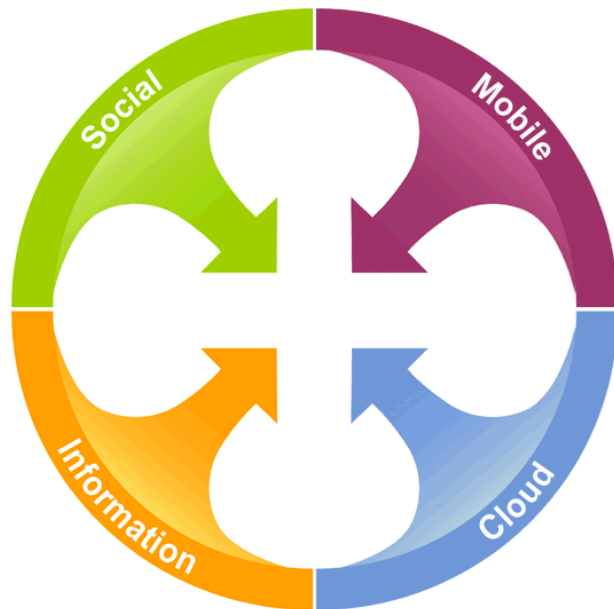
Victor Central Schools  
Strategic Technology Plan

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# The Drivers

The interactive and mobile technologies with which our students are immersed present tremendous opportunities for supporting our design of more authentic learning environments. At the same time, emerging research on how the brain functions and on how people learn is supporting the value of creative, social, and real-life integration of these interactive, mobile technologies in promoting deeper learning for students.



The Nexus of Forces – Gartner 2012

Advances in mobile, social, information, and cloud technologies are reshaping society and creating new opportunities for how we teach and learn. The convergence of these four forces is enabling access to more powerful personal mobile technologies to learn and work. The pace of this change lends a sense of urgency in creating transformative learning experiences for teachers and students.

These ubiquitous technologies have the potential to enable a powerful and dynamic human learning network more easily than previously possible. However, if the potential benefits of integrating technology into our instructional and workplace practices are to be realized, then these emerging technologies must be used to facilitate how we transform teachers and learner's interaction and engagement with the content and other learners. In this way, we have an opportunity to reshape current conceptions of teaching and learning to address the learning needs of all students more effectively.

Digital technologies are upending existing conventions for how, what, and when we learn and work. Thus, there is an urgent need to re-imagine learning and the business of learning in the digital age.

# Executive Summary

The innovative use of technology remains a significant strategy in our ongoing improvement initiatives. A growing repository of digital resources and a dynamic computing infrastructure is enabling timely access to instructional resources through a variety of interactive and mobile technologies. As a result, Victor Central Schools (VCS) is changing learning environments through the innovative integration of technology across all aspects of the school system. These changes also are facilitating increased effectiveness of our business services and creating new professional learning opportunities.

The VCS 2015–2019 Strategic Technology Plan outlines the multiyear goals, strategies, and actions required to achieve the plan's single focus of inspiring and reimagining teaching and learning in a digital age. This technology plan aligns with and supports the superintendent's and Board of Education's mission, vision, core values, and commitment to ensuring that all students achieve at the highest levels.

A diverse coalition of stakeholders participated in the discussion, description, and elaboration of the themes that informed the plan's goal, strategies, and actions. The underlying assumptions of this plan include the following insights:

- Digital technologies, specifically in the mobile realm, are changing how we live, work, teach and learn. As a result, we must adapt and integrate these technologies to create inspiring and motivating teaching and learning experiences.
- Technology-enhanced assessments must provide

timely feedback for students so that teachers can provide students with differentiated learning experiences and dynamic progress monitoring towards learning goals.

- Providing ongoing, high-quality professional development for teachers that models best practices for leveraging digital technologies is critical in shaping the types of instructional practices we want in our classrooms.
- A robust and resilient infrastructure that ensures anytime, anywhere access to learning resources and the virtual community is a fundamental requirement for effective digital teaching and learning.

As a result, this plan identifies a single goal that provides an overarching, laser focus of all efforts. Moreover, the plan articulates five strategies that are aligned with the district's core values to realize the plan's goal. The plan envisions full stakeholder participation in technology-enriched learning communities that inspire intellectual curiosity and prepare students with the knowledge and skills to excel in college and chosen careers in a digital age.

## The Plan's Vision

All students will be empowered and prepared to participate as full citizens in a dynamic, global, and digitally-enabled society in which they create, achieve, engage, contribute, and flourish in meaningful communities through universal access to people, information, and ideas.

### We envision communities where

- Students are reflective, resourceful, and engaged problem solvers working together;
- Digital curricular resources offer students multiple opportunities to integrate challenging content, represented through different mediums including text, video, audio, graphic, and multimedia formats;
- Technology supports disciplined inquiry and making students' thinking visible as they make sense of complex and real-world phenomena;
- There are ambitious expectations for all students, and the flexibility for grouping and access to learning is in place to meet their needs;
- Students confidently engage in complex authentic tasks;
- Highly effective teachers and all staff members have the resources and support to expertly engage students in digital learning activities, spaces, and technologies and communicate with their parents/guardians about their progress;
- Technology-enhanced formative and performance assessments are used effectively to make daily instructional decisions and to provide meaningful feedback to students that empowers them to own their

learning; and

- Technology is used to differentiate instruction and scaffold teaching and learning opportunities that meet the learning needs and diverse backgrounds of all students.

### We envision school workplaces as communities where

- The focus of our work is on the success of all students and employees;
- Colleagues from across offices work collaboratively in designing and developing applications and technology solutions;
- Staff models the effective uses of technology in their work to solve problems, communicate effectively, and collaborate with others;
- Teachers, administrators, and others engaged in the education process demonstrate creativity, innovation, curiosity, and habits of continuous growth and exploration;
- All members engage as full participants in virtual learning communities through universal access to people, knowledge, and ideas; and
- Students, teachers, administrators, parents and all interested community members needs, perspectives, and experiences are valued and used to inform decisions, product development, and support

## We strive to help teachers

- Use their knowledge and inquiry of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in face-to-face and virtual environments.
- Design, develop, and evaluate authentic learning experiences and assessments incorporating contemporary tools and resources to maximize content learning in context.
- Exhibit knowledge, skills, and instructional processes representative of an innovative professional in a global and digital society.
- Continuously improve professional practice, model lifelong learning, and exhibit leadership in school and professional community by promoting and demonstrating the effective use of digital tools and resources.

## So that students can

- Demonstrate creative thinking, knowledge building, and develop innovative products and processes using technology.
- Use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
- Participate fully in learning communities that are universally designed with multiple modalities, entry points, and ways to represent their thinking and what they know.
- Apply digital tools to gather, evaluate, and apply knowledge and skills to synthesize information and solve real world problems.
- Use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions.

## Goal, Strategies, and Actions

As technologies transforms the way people communicate, work, and live, it also dramatically transforms how we teach and learn. Remarkable changes in the variety and flexibility of digital content are facilitating important shifts in the ways teachers are teaching and students are learning. These changes present new opportunities to extend and personalize student learning beyond the classroom walls, to connect teachers and students, classrooms and communities, to access learning resources anywhere and at anytime, and to remove limits to individuals' inquiry and exploration.

To address these new opportunities, the 2015–2019 Strategic Technology Plan is centered on a single goal that provides an overarching, laser focus of all efforts. Realization of the plan's goal rests on five strategies and specific actions for each strategy.

The 2015–2019 Strategic Technology Plan is a blueprint for how VCS will organize resources and prioritize our efforts. This updated blueprint articulates how we will integrate technology to improve the learning outcomes for our students, support the professional learning and development of our staff, and enhance the effectiveness of our services. The strategies of the 2015–2019 Strategic Technology Plan explicitly align with each attribute of the VCS core values.

## Goal

All learners will participate in technology enriched learning communities that inspire intellectual curiosity and prepare them with the knowledge and skills to excel in college and chosen careers in an evolving digital age.

## Strategies

1 Inspiring Innovative Learning

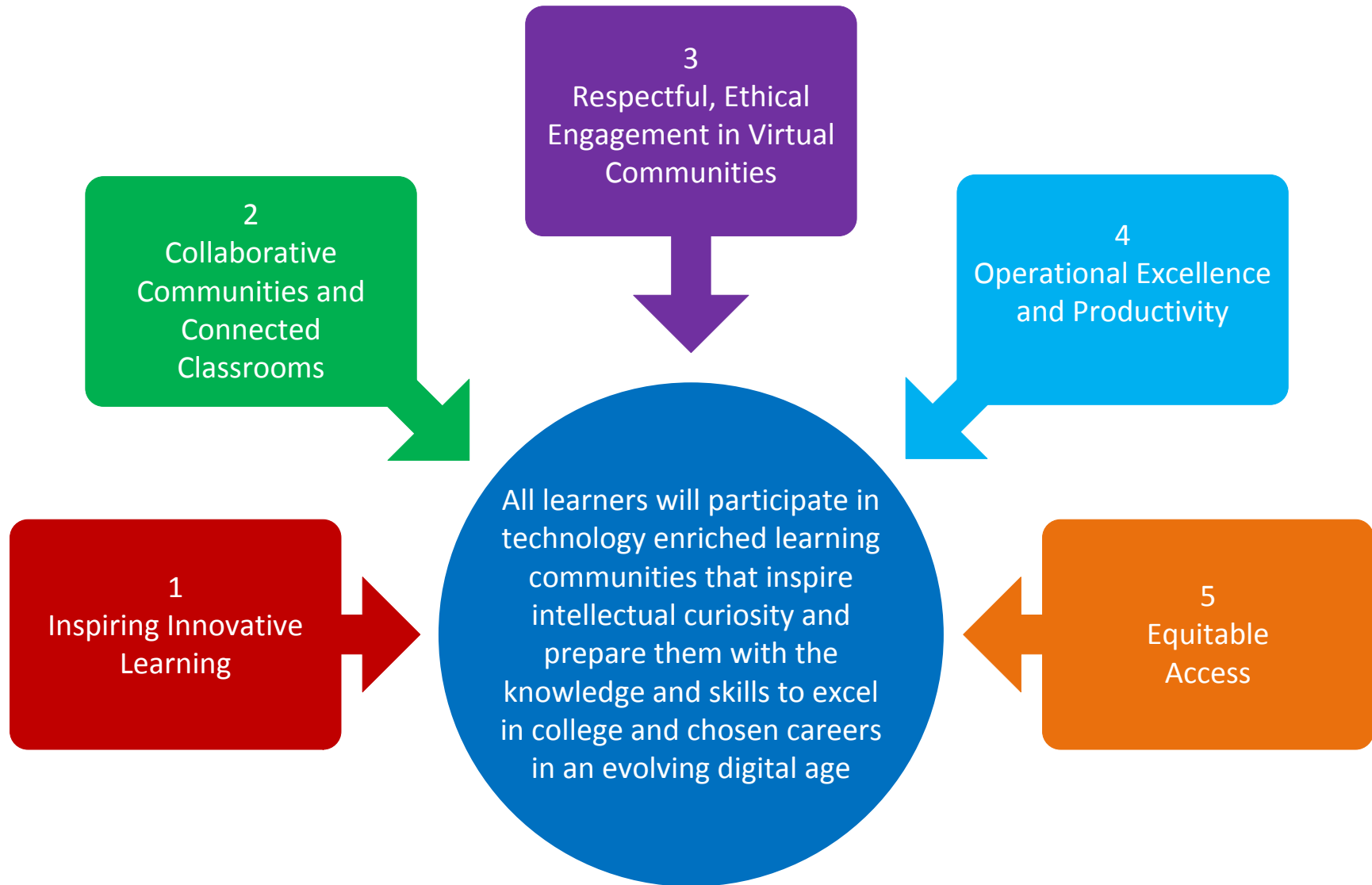
2 Collaborative Communities and  
Connected Classrooms

3 Respectful, Ethical Engagement in  
Virtual Communities

4 Operational Excellence and  
Productivity

5 Equitable Access

# Strategic Technology Plan





# 1 Inspiring Innovative Learning

Improve teaching and learning through the effective integration of technology and through building staff capacity in the effective use of technology to enhance and support learning.

## Objectives

- ❑ The technology specifications for teaching and learning spaces will be considered to support flexibility in reconfiguring classrooms and learning beyond the classroom walls and school day.
- ❑ Implement program of professional learning opportunities that supports staff across grade levels in using and effectively integrating digital technologies into curricula to help students make their thinking visible, make sense of real world phenomena, collaborate in learning communities, and engage in disciplined inquiry
- ❑ Promote and encourage an online/blended learning strategy that ensures overall quality of online learning that is aligned with the district's vision for teaching and learning.
- ❑ Implement a comprehensive digital communications strategy focused on parents, internal staff, and community at large
- ❑ Recognize and promote best practices to facilitate successful integration of digital technologies, including assistive technology, into the curriculum
- ❑ Integrate technology enhanced learning activities aligned

with state standards, 21<sup>st</sup> century skills, and transformative instructional practices to enable students to fully participate in today's information-rich global society.

## 2 Collaborative Communities and Connected Classrooms

Develop and expand online learning to connect classrooms, cultivate relationships, and encourage resource sharing between and among students, teachers, staff, parents/guardians, and college and community partners.

### Objectives

- ❑ Facilitate dynamic collaborative professional learning communities by connecting members anytime and anywhere.
- ❑ Provide conferencing and collaboration technologies to overcome distance and time, facilitate adult and student virtual learning, and sustain communities of practice and collaborative sharing.
- ❑ Strengthen partnerships and awareness to facilitate increased communication, knowledge sharing, and community networking for staff, students, parents/guardians, and college and community partners.
- ❑ Enhance our technology-enabled interactive learning communities to establish learning environments that showcase student work and progress reporting.
- ❑ Enhance the breadth and access of curricular and instructional digital resources for all grade levels and content areas.
- ❑ Engage all students with a range of technology solutions

and practices to increase student communication, participation, and collaboration.

# 3 Respectful, Ethical Engagement in Virtual Communities

Foster a culture of respectful and ethical engagement in the use of digital technologies so that all staff and students engage in the norms of appropriate, responsible use of technology.

## Objectives

- ❑ Enhance and maintain curricular materials that teach students and staff to advocate and practice safe, legal, and responsible use of information and technology.
- ❑ Foster a culture that reflects a positive attitude toward technology use, collaboration, learning, and productivity and demonstrates personal responsibility for lifelong learning.
- ❑ Continue to raise awareness of appropriate behaviors and safeguards for participating in a digital community.
- ❑ Examine and refine policies and regulations as necessary regarding the use of technology and its use by the school community.

# 4 Operational Excellence and Productivity

Expand the integration of management and analytic systems to support improvement in learning outcomes, strengthening of customer service delivery and user experiences, and making efficient use of time.

## Objectives

- ☐ Implement effective and reliable system-wide messaging, database management and data center systems to support anywhere, anytime access and high-quality customer services.
- ☐ Enhance and ensure safe and secure access, use, and availability of technology systems.
- ☐ Maximize staff efficiency and self-service by transforming paper based workflows to digital systems.
- ☐ Update and/or replace instructional and administrative systems to improve learning environments and performance outcomes.
- ☐ Enhance learning infrastructure to facilitate anywhere, anytime access and use of digital content and resources.

# 5 Equitable Access

Expand partnerships and organize internal resources to ensure equitable access and participation in the expanding VCS digital community.

## Objectives

- ❑ Upgrade full-building wireless technologies so schools and offices can access digital content, curricular, and instructional resources with greater flexibility and efficiency.
- ❑ Expand access and functionality of the VCS virtual community to serve all staff, students, and parents/guardians.
- ❑ Review and ensure that systems are accessible and support equitable access to digital curricula and participation in the virtual community.
- ❑ Assess and plan for the equitable distribution of technology resources for staff and students
- ❑ Assess the need for and provide appropriate technology for students with special needs.

## Process for Development of the Plan

The process for developing the 2015–2019 Strategic Technology Plan is grounded in the commitment to engage a broad range of perspectives from internal and external stakeholders. Over the course of one year, a diverse group of administrators, teachers, librarians, parents, and Board of Education members met monthly.

The ideas generated have been distilled into themes that then shaped the development of this plan's goal, strategies, and actions to frame the shared vision of teaching and learning that the plan articulates.

Most ideas are focused on having the ability to provide every student with engaging and inspiring opportunities to bring the world into the classroom, integrate greater access to mobile technologies and digital content, and supply more responsible and safe use and interaction with technology.

# Appendix A

## Stakeholder Participants

Thank you to the following individuals for your participation, honest input, and contribution toward the development of the 2015–2019 Strategic Technology Plan.

David Henderson  
Jill Pollack  
Eric Pasho  
Kylie Hegeman  
Linda Tabit  
Brad Malone  
Chris Wuest  
Leah Daniels-Farren  
Chris Barnard  
Gary Gilbert  
Melissa Goho  
John Palomaki  
Doug Schmidt  
Ted Shawe  
Regina Muscarella

Recommendation	Strategies	2015-2016	2016-2017	2017-2018	2018-2019
<p>Apply technology to curricular areas in which:</p> <ul style="list-style-type: none"> <li>The use of technology is common place in and outside of schools; and</li> <li>Without the application of technology curricular goals could not be achieved.</li> </ul> <p>Examples of curricular areas that meet the above two criteria include</p> <ul style="list-style-type: none"> <li>Computer aided design</li> <li>Computer business applications</li> <li>Computer drawing and painting</li> <li>Computer use in fine and performing areas</li> <li>Ensuring that students have basic computer technology literacy</li> <li>Research via the computer</li> </ul>	<div>1</div> <div>4</div>				
Continue to replace laptop computers in the hands of staff on a 5-year schedule and desktops used by staff on a 6-year cycle.	<div>4</div> <div>5</div>				
Switch all the student computers in the Intermediate School over to Chromebooks. This includes carts, library, and computers used by special education students.	<div>1</div> <div>2</div> <div>4</div>				
Switch all the student computers in the Junior High School over to Chromebooks. This includes carts, library, and computers used by special education students.	<div>1</div> <div>2</div> <div>4</div>				
Purchase and install more classroom based instructional technology such as interactive white boards, document cameras, student response systems, laptops, Chromebooks, and tablets	<div>1</div> <div>2</div> <div>4</div> <div>5</div>				



Recommendation	Strategies	2015-2016	2016-2017	2017-2018	2018-2019
Support inclusion of students with disabilities in the core content areas at all grade levels through assistive technology including hardware, software, and peripherals.	1 2 4 5				
Move towards a more mobile and collaborative environment for technology use in our libraries	1 2 5				
Continue to enhance professional development plan with learning opportunities for staff with technology in these areas: <ul style="list-style-type: none"> <li>Google Apps for Education</li> <li>Infusing technology in instruction and curriculum writing</li> <li>Online assessments</li> <li>Digital citizenship</li> </ul>	1 2 3 4				
Hire one technology integration teacher and evaluate the need for additional staffing in this area					
Evaluate how the district communicates digitally with our community. This will include the role that our website, listservs, social media, teacher websites, etc. play.	2				
Use the International Society for Technology in Education Student Standards as a basis for incorporating technology into instruction. <ul style="list-style-type: none"> <li>When curriculum is written, how technology can be used will be considered</li> <li>Grade level technology standards</li> </ul>	1 2 5				

Recommendation	Strategies	2015-2016	2016-2017	2017-2018	2018-2019
Perform a review of the current state of teaching digital citizenship, internet safety, and proper electronic etiquette.	3				
Complete the transition from Exchange to Gmail	1 2 4 5				
Complete the transition from Powerschool to Schooltool	4				
Upgrade our wireless network to provide higher speeds and densities	4 5				