

# Pascack Valley Regional High School District



## Three-Year Technology Plan

*Innovation. Inquiry. Individuality.*

**July 1, 2022 – June 30, 2025**

The Pascack Valley Regional High School District's  
Vision Statement:

***Create a culture of innovation, inquiry, and individuality that promotes achievement and choice by cultivating the skills needed to compete and collaborate as ethical and responsible global citizens.***

## Table of Contents

Acknowledgements	4
I. Stakeholders	5
II. Executive Summary	6
III. Goals and Objectives	
A. History (Goals from the 2019-2022 Plan)	7
B. Goals and Objectives 2022-2025	13

## Acknowledgments

### **Pascack Valley Regional High School District Board of Education**

Ms. Joseph Blundo - President	River Vale, NJ
Ms. Gini Varghese – Vice President	Hillsdale, NJ
Dr. Kelly Blundy	Woodcliff Lake, NJ
Mr. Pat Luisi	Hillsdale, NJ
Ms. Kelly Martin	Hillsdale, NJ
Ms. Tammy Molinelli	Woodcliff Lake, NJ
Mr. James Stankus	River Vale, NJ
Ms. Deborah Stephans	Montvale, NJ
Mr. Michael Weaver	Montvale, NJ

### **District Administration**

Dr. Daniel Fishbein	Interim Superintendent of Schools
Mr. Yas Usami	Business Administrator / Board Secretary
Dr. Barry Bachenheimer	Director of Curriculum, Instruction, and Assessment
Ms. Eva Merk	Director of Special Services
Mr. Timothy Wieland	Principal, Pascack Hills High School
Mr. John Puccio	Principal, Pascack Valley High School

### **Technology and Communication**

Mr. Paul Zeller	Director of Technology and Communication
Mr. Washington Pico	Network Manager
Ms. Maria Valentino	Information and Systems Coordinator
Mr. Armen Hagopian	Systems/Network Administrator

### **District Supervisors of Instruction**

Mr. Shawn Buchanan	Physical Education and Health (Pascack Valley)
Dr. Aarti Mallya	Science, Technology Education
Mr. Joseph Orlak	Social Studies and Business (District)
Mr. Steven Papa	Physical Education and Health (Pascack Hills)
Ms. Noemi Rodriguez	World Languages, FACS, Music
Dr. Mark Russo	Mathematics, Computer Science
Dr. Sean Struncis	Guidance and Counseling Services
Ms. Valerie Mattessich	English, Media Centers, Art

This plan was prepared by Mr. Paul Zeller, Director of Technology and Communication, and will be submitted to the Pascack Valley Regional High School District Board of Education for approval in June 2022.

## I. Stakeholders

We are indebted to the individuals below for sharing their passion, expertise and commitment to our school district through their service on the District's Technology Steering Committee:

<b>Name</b>	<b>Role/Title, District/School</b>
Dr. Barry Bachenheimer	Assistant Superintendent/Director of CIA
Paul Zeller	Director of Technology and Communications
Kelly Blundy	Board of Education Member
Tammy Molinelli	Board of Education Member
James Stankus	Board of Education Member
Gini Varghese	Board of Education Member
Colleen Allmers	Parent, PVHS*
Sonia Balani	Student, PHHS**
Shawn Buchanan	Supervisor, PE/Health PVHS*
Tori Criscuolo	Student, PVHS*
Luke Dargan	Student, PVHS*
Elizabeth Egan	Teacher, PVHS*
Dr. Dan Fishbein	Interim Superintendent
Tom Gallione	Assistant Principal, PVHS*
Dasia Jarvis	Student, PHHS **
Jim Kennedy	Teacher, PVHS*
Dr. Aarti Mallya	SOI of Science & Technology
Marisa Mathias	Teacher, PVHS*
Valerie Mattessich	SOI for English/Art/Media
Luanne McGlone	Admin. Asst. to Asst. Superintendent

Eva Merk	Supervisor of Special Services
Alyssa Merritt	Regional Instructional Curriculum Coordinator
Joe Orlak	SOI for Social Studies/Business/Physical Education/Internships
Steve Papa	Supervisor, Physical Education and Health PHHS**
Christine Pollinger	Assistant Principal, PVHS*
John Puccio	Principal, PVHS*
Dylan Reissman	Student, PHHS**
Noemi Rodriguez	SOI for WL/Music/ELL/FACS
Dr. Mark Russo	SOI of Math & Computer Science
Kristin Saks	Parent, PVHS*
Krishna Sampat	Student, PHHS**
Ed Sandt	Teacher, PHHS**
Evan Scalia	Board of Education Student Rep., PVHS*
Lee Ann Schwartz	Parent, PHHS**
Charleen Schwartzman	Assistant Principal, PHHS**
Hilary Siegel	Board of Education Student Rep., PHHS**
Luke Stephan	Student, PVHS*
Dr. Sean Struncis	Supervisor of Guidance
Timothy Wieland	Principal, PHHS**
Terry Winograd	Parent, PHHS**
Kathryn Wrynn	Student, PHHS**

\* PVHS denotes Pascack Valley High School

\*\* PHHS denotes Pascack Hills High School

## **II. Executive Summary**

The Pascack Valley Regional High School District vision is to create a culture of innovation, inquiry, and individuality that promotes achievement and choice by cultivating the skills needed to compete and collaborate as ethical and responsible global citizens. With sights set on this vision, our board, administration, and stakeholders have worked collaboratively to make our 1:1 initiative a reality.

The perseverance of all stakeholders has been rewarded. As we close in on nearly two decades of having a nationally recognized technology program, all participants in our learning community, students and teachers alike, continue to be encouraged to try new approaches, take educational risks, and participate in many opportunities to grow as learners and professionals. Through these experiences, coupled with the responsible use of the latest technology, this vision is a reality for everyone involved with our district.

Technology is woven into the fabric of the Pascack Valley Regional High School District as it is infused and integrated across all curricular areas. Successful integration of technology is made possible through support for creativity and professional growth of our teachers, and the results have a profound impact on the education and future of our students. Outstanding instruction, supported by our technology program, enables our students to take ownership of their education, pursuing all opportunities our district can provide for knowledge, critical thinking, collaboration, and exploration.

Excellence is only achieved through tireless effort. As we have for the past 18 years, board members, administration, faculty, staff, students, and parents work together to seek and achieve excellence with our Technology program. We will continue to explore and embrace the ever-changing tools needed for achieving our vision. We will continue to work with our community to provide an outstanding and progressive educational environment for our students. We will continue to seek out new global connections to prepare students for the global economy.

With technology playing an appropriate role, our vision of preparing students to be ethical and responsible citizens of our society will continue to be within reach.

### **III. Goals and Objectives**

#### **A – History (Goals from the 2019-2022 plan)**

- 1. With the continued support of the Board of Education and District Administration, further explore technologies in line with the district vision.**

**Goal Narrative:** Our district vision is to create a culture of innovation, inquiry, and individuality that promotes achievement and choice by cultivating the skills needed to compete and collaborate as ethical and responsible global citizens. With the global world constantly changing, we need to assure our technology resources are helping our entire learning community be innovative and inquisitive individuals, who have the opportunities to achieve success.

#### **Objectives and Activities**

- 1.1 Curriculum and Technology Committee members meet periodically to discuss how technology is supporting curricular needs**
- 1.2 Continue to support blended and online course initiatives under the direction of the Curriculum Office**
- 1.3 Work with administration and faculty to assure we are procuring and using the best resources that meet the needs of our curricula and vision.**



**Goal Achievement:** This is a recurring goal for the Technology Plan, assuring oversight as well as continued collaboration with all district stakeholders. The committee acknowledges this goal as having been achieved, as we have made progress with respect to all the objectives. Our use of technology continues to not only prepare our students for their future, but as was necessary with the pandemic, demonstrates that we are ready to meet the most immediate and demanding changes our schools have seen in the last century.

**Objective 1.1** – Our committee has met as appropriate during these previous three years to: discuss progress with regards to the current plan; provide helpful suggestions for improvement; and to determine new goals and objectives for the 2022-2025 plan. The pandemic introduced unforeseen challenges for instruction, but with the help of both the Curriculum/Technology Committee and the Restart Committee, discussions led to evaluation of new technologies and practices. Committee members were open about what was working and areas we could improve, and everyone worked together to make the best of a trying situation.

One particular area of continued discussion is the use of Canvas. For the 2021-2022 school year, the director of curriculum, working with the subject area supervisors and the technology department, implemented a mandatory Canvas course template, standardizing the way information is presented to the students. Discussions have followed, identifying how this has been helpful and ways it can improve further.

**Objectives 1.2 and 1.3** – While the technology department was already making strides with supporting the new blended Financial Literacy curriculum, the pandemic forced the hand of every school district in the country to more effectively provide online and blended curriculum offerings. To address instructional needs during pandemic, the curriculum and technology departments worked in lock step to make adjustments and purchases as needed for online learning. The technology department was instrumental in assuring online and hybrid learning was as effective as possible during the pandemic, implementing various software and hardware solutions for teachers and students.

As we emerge from the pandemic, we have and continue to evaluate these technologies to determine which technologies we should retire and which technologies we may leverage going forward. We also feel that with how things have evolved, we no longer have a need for objective 1.2, as this has become the norm and evaluation of this process overlaps with current objective 1.3.

**2. Assure students, teachers, and administrators have access to the appropriate educational resources at anytime, from anywhere.**

**Goal Narrative:** Finding and procuring the best resources possible is important; however, the ability to access these resources effectively is crucial. Working technology is no longer considered a luxury or “nice to have,” it is an expectation. Our technology program must continue to provide not only people facing systems that help them achieve their goals and tasks, but a robust infrastructure that keeps our backend systems and networks operational all of the time. This goal has been in our district technology plan for over 15 years and must continue to be a goal to assure the vision is always within reach.

**Objectives**

- 2.1 Assure proper networking monitoring tools are implemented to assure network uptime**
- 2.2 Continuously evaluate internal and Internet bandwidth and upgrading the respective circuits as necessary**
- 2.3 Implement and maintain appropriate system and network infrastructure that assures performance, security, and redundancy**
- 2.4 Maintain the District Technology Disaster Recovery Plan**

**Goal Achievement:** Working to assure access to appropriate educational resources at any time, from anywhere, has been the mission of the technology department for more than a decade. This goal was tested with the onset of the pandemic as there were no alternatives; technology had to be available for instruction to take place. The curriculum and technology departments worked together to achieve this goal.

**Objectives 2.1, 2.2, and 2.3** – We continue to maintain appropriate service agreements with manufacturers and procure the necessary tools to assure maximum network uptime. An example of this is we recently upgraded all of our uninterruptible power systems, which included a new monitoring system that notifies the appropriate personnel if a system has gone down.

Evaluation of our bandwidth led to an upgrade at both schools for Internet. Leveraging the NJ Digital Readiness for Learning and Assessment (DRLAP) Broadband Internet Access program, the district was able to make this upgrade with essentially no increase in cost. Evaluation of our inter-building connections has determined that we continue to meet the needs of the district. The local area network edge switching environment has been replaced over the last three years to assure we can meet the demands of new technologies, and in preparation for the wireless network replacement, which occurred in the summer of 2021.

The committee feels we continue to meet and exceed expectations of these objectives; however, they have identified that objective 2.2 largely overlaps with 2.3 and recommends consolidating this into one objective for the next plan.

**Objective 2.4** – The Disaster Recovery Plan is a comprehensive document that includes: full contact information of key stakeholders; identity and category of the types of possible disasters; proper communication protocols in the event of a disaster; identification of the primary, secondary, and tertiary systems; and documentation written for an IT professional to use for restoring technology services in a disaster.

The technology is constantly changing, requiring this document to be updated regularly, making this a perpetual goal.

### **3. Continue to explore and maintain shared technology service opportunities.**

**Goal Narrative:** Shared technology services have proven to be mutually beneficial for the Pascack Valley Regional High School District and the districts we have participated with. As we move forward, the district will continue to explore ways where we can collaborate and share services that will help provide students with a consistent experience, lower purchasing and renewal costs, and allow for knowledge sharing in an attempt to reduce or eliminate the need for outside consultants. Achievement of this goal can only be achieved if other districts are willing to engage, collaborate, and participate for a mutual benefit.

#### **Objectives**

- 3.1 Where possible in the region, use similar resources providing a more consistent technology experience for students**
- 3.2 Share Technology Services with interested districts for the purpose of more robust services and a reduction in cost**
- 3.3 Actively participate in groups at the regional, County and State levels to ensure the best technology experience for all K-12 students in Pascack Valley**

**Goal Achievement:** For over a decade, the Pascack Valley Regional High School District has worked with neighboring districts to explore both formal and informal ways to share services so that all districts will have access to better resources with an overall lower cost for all parties involved. Through inter-local agreements, regional cooperatives, consortiums, and state and national contracts, we continue to find ways to meet this goal for the interests of our community.

**Objectives 3.1 and 3.3** – The technology leaders of the region districts meet regularly to discuss new technology initiatives. The districts cannot always purchase/utilize the same technologies, but where we can, we see mutual benefits. The following is a list of technologies that we, along with at least one other district, purchased in an effort to provide a more consistent experience for students, lower costs, and/or share technical knowledge: communication management system; content filter; firewall appliance; hyper-converged virtual environment; Learning Management System; Student Information System; threat management software; website hosting provider.

Beyond the immediate region, Pascack Valley Regional continues to be active in County, State, and national organizations, helping to stay abreast of changes in technology that will help better serve our community. A newer organization that we are active with is the New Jersey Cybersecurity and Communications Integration Cell (NJCCIC), which provides up-to-the-minute intelligence on security threats and concerns, as well as provides professional development for improving security systems.

The district continues to leverage consortium and contract pricing for technology purchases in a never-ending attempt to keep costs down for the community.

**Objective 3.2** – The Hillsdale Public Schools have worked with Pascack Valley Regional High School District for nearly a decade to leverage several shared services through interlocal agreements, including Internet bandwidth, virtual servers, and engineering services. This has offered lower costs to Hillsdale than if they had purchased these services on their own, while helping Pascack Valley Regional offset and lower its own costs. This arrangement continues to be a success and one we look forward to continuing sharing. In addition, we have had initial discussions with other districts who are considering formally sharing similar services. These opportunities will continue to be explored.

## **B – Goals and Objectives for 2022–2025**

- 1. With the continued support of the Board of Education and District Administration, further explore technologies in line with the district vision.**

**Goal Narrative:** Our district vision is to create a culture of innovation, inquiry, and individuality that promotes achievement and choice by cultivating the skills needed to compete and collaborate as ethical and responsible global citizens. The world is constantly changing and we need to ensure our technology resources are helping our entire learning community be innovative and inquisitive individuals, who have the opportunities to achieve success.

### **Objectives and Activities**

- 1.1 Curriculum and Technology Committee members meet periodically to discuss how technology is supporting curricular needs.**
- 1.2 Work with administration and faculty to ensure we are procuring and using the best resources to meet the needs of our curricula and vision.**

**2. Ensure students, teachers, and administrators have access to the appropriate educational resources at any time, from anywhere.**

**Goal Narrative:** Finding and procuring the best resources possible is important; however, the ability to access these resources effectively is crucial. If we learned anything from the pandemic, it is that access to technology is required. Our technology program must continue to provide systems that help them achieve their goals and tasks, which is accomplished by maintaining a robust and resilient infrastructure. This goal has been in our district technology plan for nearly two decades and must continue to be a goal to ensure the vision is always attainable.

**Objectives and Activities**

- 2.1 Ensure that proper networking monitoring tools are implemented to ensure network uptime.**
- 2.2 Evaluate, upgrade, implement, and maintain all systems and networks to ensure proper performance, security, and redundancy.**
- 2.3 Maintain the District Technology Disaster Recovery Plan.**

### **3. Continue to explore and maintain shared technology service opportunities.**

**Goal Narrative:** Shared technology services have proven to be mutually beneficial for the Pascack Valley Regional High School District and the districts we have participated with. As we move forward, the district will continue to explore ways where we can collaborate and share services that will help provide students with a consistent experience, lower purchasing and renewal costs, and allow for knowledge sharing in an attempt to reduce or eliminate the need for outside consultants. Achievement of this goal is largely based on the willingness of districts to engage, collaborate, and participate for a mutual benefit.

#### **Objectives and Activities**

- 3.1 Actively participate in groups at the regional, County, State and national levels to ensure the best technology experience for all K-12 students in Pascack Valley.**
- 3.2 Where possible in the region, use similar resources providing a more consistent technology experience for students.**
- 3.3 Share Technology Services with interested districts for the purpose of more robust services and a reduction in cost.**