# ESM Technology Plan: 2022-2025. Table of Contents.

Please Note: this plan is intended to be viewed online due to the many links embedded within it.

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# **Executive Summary**

The ESM Technology Integration Investment Plan was developed in alignment with the following:

- ESM Strategic Plan
- ESM Vision, Mission, Beliefs
- Individual School Improvement Plans within ESM
- District Plan for Children with Disabilities
- Consultation with the English as a New Language program
- Research and best practices in the instructional technology field

ESM recognizes and appreciates the students, staff members, parents, community members, and members of higher education who were engaged in the development of this plan. During the 2021-2022 school year, members of the planning committee worked on defining the focus areas, outcomes, student and staff expectations, actions steps, and expected results for each focus area.

The goal of the Technology Integration Investment Plan is to transform the learning process through seamless technology integration, and to continue to support all learners by providing the necessary resources and guidance.

The plan is organized into five major "Focus Areas" with identified outcomes, expectations for students and staff, action steps and results. The five focus areas are interdependent:

- 1. NYS K-12 Computer Science and Digital Fluency Learning Standards--State developed competencies for all students
- 2. **Professional Learning**--A plan for providing learning opportunities for staff so that they can implement the plan
- 3. **Technology Infrastructure to Support Student Learning**--Providing devices, a network, wireless connectivity and high speed internet access to support student learning
- 4. **IT Support**--A plan for supporting the technology rich environment at ESM Schools

5. **Emerging Technologies**--A structure to stay focused on "what's next" so that we continue to stay on the cutting edge

# ESM Vision, Mission and Beliefs

## Vision

The East Syracuse Minoa Central School District will be an exemplary 21st Century learning community whose graduates are prepared to excel in a complex, interconnected, changing world.

# Mission

The East Syracuse Minoa Central School District will prepare students for the 21st Century by engaging all learners in meaningful learning experiences that meet the highest educational and ethical standards in a caring, collaborative learning community supported through partnerships with parents and families, businesses, civic organizations, and higher education.

# **Belief Statements**

We believe that:

- Each individual has dignity and worth.
- The capacity to learn for each individual is boundless.
- Curiosity and exploration stimulate innovation and learning.
- High expectations and challenging curriculum lead to greater achievement.
- Effort and perseverance are essential to achieve one's personal best.
- Positive relationships are fundamental to success and growth.
- Collaboration within and among school, families and community partners is essential to meet the needs of each student.
- Acceptance and mutual respect encourages students to take the risks necessary for academic and personal growth.

- Education prepares students to become productive and responsible citizens who contribute to their communities.
- Students need to develop their strengths, confidence and resilience to meet the challenges they will face throughout life.

# Student, Parent, Community and Staff Engagement

We believe that student, staff, parent and community involvement is a vital part of any district planning. Students, staff, parents, community, business partners and higher education were extensively involved in the development and implementation of our ESM Strategic Plan. In order to develop this plan, we engaged stakeholders at formal meetings and by soliciting participation via email, online surveys, our website, printed ESM bulletins and email communications. All contributions were instrumental in developing this document and we thank them for their assistance.

We utilized technology to develop the plan collaboratively. Participants were able to comment, suggest and edit the document either at in person meetings or remotely. Using Google Docs also allowed a larger group of people to view and comment on the plan as it was developed. Participants also learned what it was like to collaborate using technology. This document is meant to be viewed online as there are many embedded links within it.

This plan was discussed, reviewed and updated with various stakeholders throughout the District during the 2021-2022 school year, including the following:

- Technology Plan Team
- Pre-K-12 Administrators
- Education Program Communications Committee
- Parent/Administrative Leadership Group
- ESM Board of Education

# ESM Technology Plan Team Members and Contributors

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# **Technology Vision**

The East Syracuse Minoa Central School District's shared vision is to prepare our students to excel in a complex, interconnected, changing world. As we continue our journey, we recognize the major shifts of the past five decades from an industrial economy to a knowledge-information age to a technological-digital world. As we reflect on these transitions in the history of our country and our world, we embrace the transformation needed in our educational system to support learning through the integration of technology. This change will stimulate inquiry, critical thinking, problem-solving, collaboration, communication, creativity and innovation in our classrooms. Our focus is on learning, the importance of technology integration, and what ESM students and staff will do with technology to deepen and demonstrate their learning, as well as collaborate with others and present their learning as global citizens.

Collectively, we seek to empower both students and staff by providing the necessary resources and guidance as we strengthen teaching to continuously improve student learning. Our students and staff have embraced the digital age, which is demonstrated in Pre-K-12 classrooms across the District, as students use technology, not simply for the sake of using it, but to extend and enhance their learning.

It is our belief that the plan outlined on the following pages will guide the integration of technology in supporting student learning and will transform their learning.

# Focus Area 1

# NYS K-12 Computer Science and Digital Fluency Learning Standards

(Link to NYS Computer Science and Digital Fluency Learning Standards)

#### Outcome

Students will master the NYS K-12 Computer Science and Digital Fluency Learning Standards (CSDFLS), identified by grade band, by the end of June 2025.

# Introduction

From the document: "For New York State students to lead productive and successful lives upon graduation, they must understand and know how to use Technology knowledge and skills are vital for full digital technologies. participation in 21st Century life, work, and citizenship. In 2018, the New York State Legislature passed, and the Governor signed into law legislation requiring the New York State Education Department (NYSED) to create a workgroup and present draft NYS K-12 Computer Science Learning Standards to the Commissioner of Education and the Board of Regents for approval. The Standards reflect the expertise, deep thinking, advocacy, and hard work of many New York State educators, administrators, parents, and representatives of professional organizations. The related areas of computer science and digital fluency have been combined under one "umbrella" to create a comprehensive, cohesive set of learning standards that represent the essential knowledge and skills in these areas that students should possess upon graduation in order to be successful in college, careers, and citizenship in the 21st Century.

According to the United States Department of Labor Bureau of Labor Statistics, "Employment of computer and information technology occupations is projected to grow 13 percent from 2016 to 2026, faster than the average for all occupations. These occupations are projected to add about 557,100 new jobs." And these hundreds of thousands of new jobs offer significantly higher-than-average pay; the median wage for computer and information technology occupations are higher than all other occupations.

NYSED understands and respects the fact that not all students will pursue a career in technology. It is important to note, however, that for all other occupations, the number of jobs that require medium- to high-level technology skills are growing, and the number of jobs requiring no technology skills are shrinking.

As New Yorkers, we must prepare all students to live and work in our dynamic, technology-driven 21st-Century world. This imperative is the basis of the vision for the New York State K-12 Computer Science and Digital Fluency Standards."

# NYS Computer Science and Digital Fluency Learning Standards, February 2022

# Background

"NYSED views digital fluency as vital to success in college, careers, and citizenship. The NY Statewide Learning Technology Plan (2010) identifies that "technology is a path for teaching and learning, but it is also a body of practices, skill, and knowledge to be learned," and expresses the Board of Regents' expectation that "all New York State learners will develop technological literacy to enter college, become productive members of the workforce, and succeed as citizens." In addition, New York's approved Every Student Succeeds Act (ESSA) plan includes the expectation that NYSED "will work with stakeholders to provide guidance regarding digital literacy for students."

The Board of Regents approved amendments to the education regulations to establish a new certification area and tenure area for computer science in March 2018. The Department began engaging in conversations on developing computer

science learning standards shortly thereafter, and when the law requiring standards was passed in April 2018, plans for development began in earnest."

NYS Computer Science and Digital Fluency Learning Standards, February 2022

The Computer Science and Digital Fluency Learning Standards (CSDFLS) drive the vision and development of the whole technology plan, so it is the first focus area. By maintaining these learning standards, organized by grade level bands, we will know what systems to put in place, what equipment to purchase and maintain, and what professional learning is required for staff to enable staff and student success.

# NYS K-12 Computer Science and Digital Fluency Standards

Every student will know how to live productively and safely in a technology-dominated world. This includes understanding the essential features of digital technologies, why and how they work, and how to communicate and create using those technologies.

The CSDFLS are intended to provide ESM staff with a specific set of learning expectations to integrate technology use and enhance student learning.

## **Expectations for Students and Staff**

- **Students**: Students will develop their skills with technology through the use of the grade level-specific NYS K-12 Computer Science and Digital Fluency Learning Standards.
- **Staff**: Teachers will become proficient with the K-12 NYS CSDFLS and facilitate student learning to achieve grade level technology learning standards.

## Action Steps and Details:

## 2022-2025

1) Implement the NYS K-12 Computer Science and Digital Fluency Learning Standards for students, the ISTE <u>Standards for Teachers</u> and the ISTE <u>Standards for Administrators</u>.

Detail: Review the alignment of the K-12 CSDFLS with curriculum by grade level and subject to ensure that students are experiencing opportunities to develop these skills. Identify overlaps in current technology integration strategies and lessons.

2) Educate teaching staff on the <u>NYS K-12 Computer Science and Digital Fluency</u> <u>Learning Standards</u> through focused and targeted professional learning opportunities. Detail: Targeted professional learning will be accomplished through whole group workshops, independent training modules/on-line courses, and one-on-one or small group instruction with the district's Instructional Technology Integration Teachers.

## Results by June 2025

- Students will demonstrate mastery of their grade level-specific technology learning standards as evidenced by their work and/or assessments.
- Teachers will make regular use of the CSDFLS in lesson design and classroom activities and have the skills to implement them.

# Focus Area 2: Professional Learning

## Outcome

By June 2025 all staff will have the skills and knowledge they need to integrate technology into daily educational activities to directly improve teaching and learning outcomes. There will continue to be opportunities to focus on "modification" and "redefinition" of technology integration from the SAMR Model where applicable, in alignment with the NYS CSDFLS.

# Background

Professional Learning (PL) helps teachers continually strengthen their practice to better meet the learning needs of all students.

We are committed to providing multiple options for staff to gain the skills and competencies they need to design, implement and assess learning experiences to engage students and improve learning.

The traditional classroom based model of professional learning continues to be valuable, but there are many other models that work as well. Flipped PL, webinars, document based learning, and mentoring provide options for different kinds of learners.

In addition, we will continue to focus on the <u>SAMR</u> Model of technology integration created by <u>Dr. Ruben Puentedura</u>. SAMR stands for:

- **Substitution**--technology acts as a direct tool substitute, with no functional change
- Augmentation--technology acts as a direct tool substitute, with functional improvement
- **Modification**--technology allows for significant task redesign
- **Redefinition**--technology allows for creation of new tasks previously inconceivable

The model indicates that the power of integration is gained through focusing integration efforts on modification and redefinition of learning tasks. By doing so, student learning becomes more student centered as opposed to teacher centered,

as well as more engaging and rigorous. The table below provides a more detailed explanation with learning examples from Dr. Puentedura.

Level	Definition	Examples	Functional Change
Substitution	Computer technology is used to perform the same task as was done before the use of computers.	Students print out worksheets, finish it, pass it in.	No functional change in teaching and learning. There may well be times when this is the appropriate level of work as there is no real gain to be had from computer technology. One needs to decide computer use based on any other possible benefits. This area tends to be teacher centric where the instructor is guiding all aspects of a lesson.
Augmentation	Computer Technology offers an effective tool to perform common tasks.	Students take a quiz using a Google Form instead of using pencil and paper.	There is some functional benefit here in that paper is being saved. In addition, students and teachers can receive almost immediate feedback on the student level of understanding of material. This level starts to move along the teacher / student centric continuum. The impact of immediate feedback is that students may begin to become more engaged in learning.
Level	Definition	Examples	Functional Change
Modification	This is the first step over the	Students are asked to write an	There is significant functional change in the classroom. While all students are

	line between enhancing traditional classroom learning and transforming the classroom. Common classroom tasks are being accomplished through the use of computer technology.	essay around the theme "And This I Believe". An audio recording of the essay is made along with an original musical soundtrack. The recording will be played in front of an authentic audience such as parents or college admission counselors.	learning similar writing skills, the reality of an authentic audience gives each student a personal stake in the quality of the work. Computer technology is necessary for this classroom to function allowing peer and teacher feedback, easy rewriting, and audio recording. Questions about writing skills increasingly come from the students themselves.
Redefinition	Computer technology allows for new tasks that were previously inconceivable.	A classroom is asked to create a documentary video answering an essential question related to important concepts. Teams of students take on different subtopics and collaborate to create one final product. Teams	At this level, common classroom tasks and computer technology exist not as ends but as supports for student centered learning. Students learn content and skills in support of important concepts as they pursue the challenge of creating a professional quality video. Collaboration becomes necessary and technology allows such communication to occur. Questions and discussion are increasingly student generated.

	are expected to contact outside sources for	
	information.	

From <a href="https://sites.google.com/a/msad60.org/technology-is-learning/samr-model">https://sites.google.com/a/msad60.org/technology-is-learning/samr-model</a>

# **Expectations for Students and Staff**

#### Students:

- Adopt and implement new technologies in their learning
- Access and use a variety of tools and resources to demonstrate learning in a variety of ways
- Demonstrate the ability to be producers and creators of learning content as opposed to consumers
- Develop computer science and digital fluency skills and demonstrate responsible use of technology

## Staff:

- Facilitate and inspire student learning and creativity through the use of technology tools, resources, and instructional strategies
- Design and develop engaging and interactive digital learning experiences and assessments
- Model digital age work and learning
- Promote and model digital fluency and responsibility
- Engage in professional growth and leadership

## Action Steps:

## 2022-2025

1) Continue a strong focus on the <u>SAMR Model</u> for highly effective technology integration professional learning. Develop differentiated professional learning offerings for technology integration and align it with professional learning plans and budget.

## Tasks for this action step include:

- Work with staff to help them assess their technology use along the SAMR continuum
- In all PL offerings, help staff plan technology integration that focuses on "modification" and "redefinition"
- Focus on the needs of Special Education and English-language learners as their needs will differ

2) Implement PL aligned with the NYS CSDFLS, the SAMR Model, and ISTE Standards for <u>Teachers</u> and <u>Administrators</u>.

Detail: As part of the overall ESM Professional Learning Plan, we will offer professional learning opportunities that align with individual needs of teachers and administrators and the priorities of the technology plan.

We will offer professional learning opportunities through:

Job-embedded modeling and support	Informal Peer Mentoring
Peer sharing	New teacher induction
In-person workshops	Superintendent's conference days
Flipped workshops	Learning clubs
Webinars	PLCs
In-person small group settings	Summer PL workshops
Web-based resource collections	Summer Leadership Institute for Administrators
Model teaching by Instructional Technology Integration Specialists	Pre-K-12 Administrative Meetings
BOCES offerings	School staff meetings

3) All School Improvement Plans (SIPs) will include technology integration goals as part of their SIP for the year, utilizing the SAMR Model and including the needs of Special Education students, as well as English-Language Learners.

# Tasks include:

- Reinforcing the SAMR Model with all staff and District Leadership
- Including technology integration goals in school improvement plans

## **Results by June 2025**

- All instructional and administrative staff will have the skills and knowledge to implement or observe lessons utilizing the SAMR Model.
- All instructional staff will demonstrate the skills, knowledge and behaviors of digital age professionals to facilitate student learning aligned with the NYS CSDFLS and ISTE <u>Teacher</u> and <u>Admin</u> Standards.
- All instructional and administrative staff will participate in professional learning opportunities that align with their needs.
- During each of the plan years, all School Improvement Plans will have technology goals, including a focus on the needs of Special Education Students and English-Language Learners.

# Focus Area 3: Technology Equipment

# and Infrastructure to Support Student Learning

#### Outcome

From September 2022 through June 2025, all students and staff will have a computing device available to them and a networking infrastructure to support anytime, anywhere, collaborative and transformative learning.

## Background

Equipment and infrastructure can be broken into three broad areas:

- Devices:
  - ESM has a 1 to 1 computing environment for all students and staff.
  - Students generally use Chromebooks and iPads.
  - Pre-K and elementary teachers have access to Chromebooks as well as a teacher PC in their classroom/work location.
  - Middle and high school teachers have Chromebooks assigned to them since their classrooms are often used by other teachers.
  - Pre-K-12 classrooms, including special areas, all have Prometheans and were replaced in 2018.
  - K-8 Chromebooks were replaced in 2019-2020.
  - 9-12 Chromebooks were replaced in 2020-2021.
- Network/Servers/Wireless:
  - The network was upgraded in July 2021 and due to be upgraded in July 2026.
  - The wireless network installed in July 2016 is due to be replaced in July 2022. We have full coverage in all spaces in district buildings.
  - Internet access needs have increased every year for the last six years.
    Bandwidth needs will increase as online content continues to grow richer.

- We have two internet connections: one through BOCES and one direct to the internet. This provides us with redundancy should one of the connections fail.
- Storage:
  - Our server and data storage environment was shifted to a local cloud model at CNYRIC in July 2019. ESM maintains 33 servers in our virtual server environment with 10 terabytes of data storage. This strategy allows us to increase or decrease our capabilities without the need to change hardware.
  - Over the last seven years, we have shifted many software resources to the cloud. Not only are many of these resources free or low cost, but they also allow the District to reduce investment in high powered computers and locally installed software. More importantly, by having software and storage "in the cloud" our students and staff have access to their data from anywhere.

# **Expectations for Students and Staff**

# Students:

- Use technology to maximize learning in alignment with their personalized learning plans and IEPs.
- Collaborate with the district in exploring and implementing new technologies that could enhance learning through focus groups and the district technology committee.

Staff:

- Plan for and implement equipment and infrastructure purchases in alignment with the essential competencies.
- Continue to shift our infrastructure to the cloud.
- Plan for and replace equipment and infrastructure to maintain an "anytime/anywhere" computing environment and model it with students.

# **Action Steps:**

# 2022-2023

1) Research replacement Chromebooks. Pre-K-5 will be replaced by September 2023 and grades 6-12 by September 2025.

Detail: Chromebook devices have changed since we began using them. Tablet type Chromebooks and Android OS will all need to be reviewed as part of the next wave of purchases.

2) Investigate abandoning iPads except for specific uses (Special Education, ELL) due to the device cost and maintenance needs.

Detail: iPads were the first mobile device and widely adopted years ago in many school districts. Since then, inexpensive Chromebooks have become predominant and provide not only a lower purchase cost (\$250 for a Chromebook vs \$500 for an iPad) but also no device maintenance.

We still have older iPads and we will begin to receive requests for replacements. We will need to investigate the desirability of declaring our "device strategies" to provide transparency.

3) Maintain a technology "forecast/look ahead" document to plan long term technology initiatives.

Detail: Since a technology plan is three years in duration, some technology assets will be deployed after this plan's timeframe. We will continue to maintain a technology forecast document to keep longer term action plans in mind.

This document is meant to be a forecast, and will be adjusted as goals, technologies and budgets change. See the <u>Technology History/Look Ahead</u> document for more information.

- Assess and document current status of technology in use at ESM (district as well as student and staff owned).
- Maintain a long term document that shows all review/replacement cycles for installed technologies.

- Use this document in planning for this Technology Integration Investment Plan as well as in future versions.
- Plan for budgets after Smart Schools funds are spent.

4) Survey students about what we are doing well and what we could be doing better to support them with digital tools at ESM.

5) Analyze and support the shift to digital curriculum materials.

Detail: Traditional curriculum materials have consisted of printed textbooks and supplementary materials. As Internet usage has increased in schools, more and more teachers have embraced using online resources. Textbook companies have made the switch as well, offering their materials in an online format. This aligns well with our goal of having an anytime, anywhere environment.

The shift to digital curriculum materials must be supported by our adopted devices, since it will replace the textbook as the "portal" to materials.

# Tasks include:

- Review school districts that have transitioned to digital curriculum materials
- Collaborate with Curriculum Office to identify and implement next steps in the transition to digital curriculum materials
- Implement digital curriculum materials as appropriate, with a focus on the needs of Students with Disabilities and English Language Learners
- Assess implementation and adjust as needed

# 2023-2024

1) Develop the 2025-2028 Technology Plan.

3) Develop an upgrade plan for network infrastructure by July 2025.

# Results by June 2025

- Identified replacement plan for student computing devices
- Declare device strategies to staff to make clear what we will buy and provide for different learning environments, and what is abandoned and no longer supported
- Current technology forecast/Look Ahead document for planning focuses

- Up to date survey of student input on possible tech plan changes
- Continue shift to digital curriculum changes as appropriate

# Focus Area 4: IT Support

## Outcome

ESM will have sufficient support staff for all its technology so that installation, repair and research for technology is completed in accordance with an ESM Service Level Agreement (SLA).

# Background

A service level agreement is used in many organizations to document the level and quality of service that is provided to customers. In a school district the customers are students and staff, and the provider is the IT department. With an SLA both groups have the same expectations with regard to scope, speed and quality of work.

## **Expectations for Students and Staff**

## Students:

- Provide suggestions and ideas about improving the IT support and installation process.
- Use equipment responsibly and in a way that minimizes the need for repairs and downtime.
- Assist ESM middle and high school in student led IT support structures (iStaff).

#### Staff:

- Provide suggestions and ideas about improving the IT support and installation process.
- Educate students in the proper use of technology so as to minimize downtime of technology assets.

# Action Steps

# 2022-2025:

1) Create a Service Level Agreement with ESM students, staff, parents and administration for repairs and new technology implementations.

2) Create staffing recommendations, aligned to the equipment and infrastructure plan, for budget development.

3) Review staffing each year during the budget cycle in light of changes to support needs.

4) Engage students at all levels to assist with technology support and deployment. Analyze and communicate IT internship/IT support opportunities for students.

5) Continue to plan for remote learning due to an emergency situation, such as weather, natural disaster, or pandemic.

Detail: Students can provide a wealth of technology support. At Pine Grove Middle School, students participate in iStaff, a group of students who assist teachers in troubleshooting and "how to" type of support. We would like to increase this type of support because it provides a service learning opportunity for our students, as well as helping the District.

During the Covid-19 pandemic we were able to leverage our 1 to 1 infrastructure to shift to remote learning in two days time. We did learn that we needed to provide internet access for some families, and provided it. Moving forward we will make remote learning a priority in our emergency response.

# Specific tasks include:

- Create a student technology support model to provide support for District owned or personal equipment
- Identify areas students could provide support for, while keeping security in mind. Also determine whether their support could count for credit, service hours, etc.
- Provide professional learning opportunities for students and staff as needed

• Continue to update the District emergency response plan to account for multiple disaster scenarios combined with extended remote learning.

6) Review each of the previous year action plans and update as necessary.

#### 2025-2028

1) Develop the 2025-2028 Technology Plan.

#### **Results by June 2028**

- Service Level Agreement (SLA) developed for ESM Schools
- Staffing in place during each plan year to implement the SLA
- Student led helpdesk model developed for implementation

# Focus Area 5: Emerging Technologies

#### Outcome

ESM will keep a focus on emerging technologies as an ongoing part of the technology committee's work. This planning involves reviewing, testing and either implementing or abandoning new technologies.

#### Background

Technology never stands still. It continues to change and make improvements. This focus area will help us keep our plan "future focused" and evolving.

#### **Expectations for Students and Staff**

#### Students:

- Provide ideas and technologies for review by the district technology committee.
- Pilot promising technology and provide feedback.

#### Staff:

- Provide ideas and technologies for review by the district technology committee.
- Pilot promising tech and provide feedback.

#### **Action Steps**

#### 2022-2025:

1) Continue to find, investigate and adopt/abandon new technologies.

Detail: Since technology is always changing, we need a way to stay current on promising educational technologies by crowd-sourcing ideas from students, staff and experts.

2) Continue to grow the use of Virtual Reality (VR) and Augmented Reality (AR) at ESM.

Details: Currently sharing one VR kit across the district. Students are also starting to design their own 3D/AR projects to demonstrate their knowledge.

3) Investigate adding additional courses at the middle or high school level in computer science.

Detail: We currently offer one course: C++. We will review what the other commonly taught programming languages are and implement a plan to offer them.

4) Investigate how we can grow our e-sports club into a larger opportunity for students at ESM.

Detail: Rolled out the first e-sports club at ESM High School during the 2021-2022 school year.

#### **Results by June 2025**

- Continue to collect and investigate new technologies to see their applicability in our educational environment
- VR and AR capabilities will be expanded
- Expanded computer science classes offered throughout the District
- Roadmap and plan for e-sports implementation
- Other ideas as they come forth

# iTLC

#### Instructional Technology Leadership Committee

In order to keep the plan on track and current, our Instructional Technology Leadership Committee (iTLC) will continue to lead, monitor, review progress and provide feedback on a regular basis. Members will represent all District program areas. The team will:

- Stay current with technology trends
- Review, monitor, and provide feedback on plan implementation
- Recommend changes to action steps to achieve the stated outcomes
- Provide ongoing feedback on professional learning needs and offerings
- Develop future action steps
- Communicate the plans status to stakeholders
- Begin development of 2025-2028 District Technology Plan in the last year of this plan

Through an ongoing planning structure, we will provide an environment that provides students and staff with the tools and knowledge to enhance their learning.

# **Resources Used in Plan Development**

Committee members reviewed many resources to help in their planning. Some of the major ones are listed for reference, but their own research, professional networking and experience also assisted us as we developed the plan.

If you are reading this as a digital document, items in blue are links to the source material.

ESM Strategic Plan	ESM Professional Development Plan
ESM School Improvement Plans	ESM District Plan for Children with Disabilities
2021 Horizon Report, Teaching and Learning Edition 2022 Horizon Report, Teaching and Learning Edition	<u>SAMR</u> Model (substitution, augmentation, modification, redefinition) of technology use
ESM Technology History and Look Ahead/Forecast	TPACK Framework for Technology Integration
ISTE Technology Standards: • <u>Teachers</u> • <u>Administrators</u>	<u>NYSED 2017 Policy Brief on Assistive</u> <u>Technology for Students with Disabilities</u>
ESM Shared Decision Making Plan	<u>Technology Enhanced Instruction for</u> <u>English as a Second Language (ESL) and</u> <u>Bilingual Education</u>
ESM 2018-2021 Technology Plan	CDW-G (Business Partner)

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