2022-2025

Connecting Our Bearcat Community

Solvay Union Free School District Technology Plan

Approved by the Solvay Board of Education on May 15, 2023

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Executive Summary

The Solvay UFSD Instructional Technology Plan for 2022-2025 was crafted in alignment with:

- Solvay UFSD mission statement
- Solvay UFSD technology vision
- Input from stakeholder groups, including:
    - administrators from each of the district's buildings
    - grade level teams or department representatives from each of the district's buildings
    - students from each building
    - community members
    - technology department staff members
- Priorities developed by building leadership teams and curriculum council
- Consultation with Special Education and English as a Next Language (ENL) programs
- Research and best practices established by instructional technology experts

This Instructional Technology Plan is the collective product of district administrators, educators, students, and community members. The Solvay UFSD appreciates the contributions of all stakeholders who helped to design a relevant and rigorous plan to elevate the district's approach to instructional technology.

The purpose of this Instructional Technology Plan is to synthesize and build upon district technology initiatives to improve student access to critical technology and

curriculum, integrate interactive technology into instruction, and develop learners who are confident and ethical technology users.

The plan details 3 major, interdependent goals for the next 3 academic years, 2022–2025. These goals are:

1. Implement the NYS Computer Science and Digital Fluency Learning Standards in all K–12 grade bands.
2. Improve connectivity for learners, educators, and teachers by identifying community needs with respect to technology (e.g., device or WiFi access).
3. Provide relevant and rigorous professional development for all staff in the realm of cutting-edge instructional technology.

Solvay UFSD Mission Statement and Vision

SUFSD Mission Statement:
We develop confident, continual learners who are caring community members.

SUFSD's Technology Vision:

The Solvay Union Free School District's shared mission is to develop confident, continual learners who are caring community members. To achieve this mission, Solvay Schools is committed to leveraging innovative classroom technologies that are personalized, equitable, and intended to enhance student learning outcomes through learner driven experiences. These experiences may include using technology to communicate and collaborate to solve problems, think critically, become innovative designers, and promote the need for digital safety in an ever-changing connected world.

Technology integration for **<u>students</u>** must:

- Provide equity for all, including 1:1 Chromebook access, MiFi home connectivity support, and opportunities to use the latest technology
- Personalize learning for all students
- Make education and content accessible for all learners
- Support and enhance ENL and Special Education students' experiences through assistive technology, interactive lessons, and diverse assessment opportunities
- More fully prepare students for college, career, and life after school
- Increase student learning outcomes, achievement, and engagement that embraces school values
- Allow students to transfer their learning after they leave the classroom
- Provide opportunities for students to collaboratively engage with each other
- Provide equal access and opportunities for all

Technology integration for **faculty and staff** must:

- Ensure seamless, reliable delivery of content
- Increase the efficacy of instruction to create a more dynamic and engaging learning experience where teachers are facilitators
- Increase efficiency and save time
- Be supported with opportunities for professional development
- Provide opportunities for faculty and staff to professionally connect with others locally and globally for enhanced collaboration
- Provide data that can be used to make informed decisions

Technology integration for families and community members must:

- Be used to engage and empower the families of students
- Increase communication
- Provide transparency

Background

The 2022-2025 SUFSD Instructional Technology Plan is reflective of the previous three-year plan. However, the development process for the current Plan was significantly influenced by the COVID pandemic; the abrupt shift to remote instruction in 2020 changed district expectations of student participation, connectivity needs, and instructional technology goals. To craft a new plan reflective of experiences with the pandemic, the planning committee identified district instructional technology strengths and areas for improvement through reflection, discussion, and a review of current technology equipment and software usage.

The committee found that, previously, the district worked to provide equal access to technology for all students. Particularly during the pandemic, the district was able to provide online and blended learning opportunities through the use of its previously-existing 1:1 device policy and its ability to provide MiFis (mobile WiFi hotspots) to families in need of internet connectivity. The district will ensure that all students have access to a Chromebook device and the ability to request a MiFi for their households as needed. SUFSD will deploy a replacement plan for student devices as well as improvements to the procedure for deployment of student devices for the beginning of the school year and/or the day students enroll in SUFSD. Parents and community members can expect to continue usage of technology to enhance communication with the district by messaging their student's teachers directly through the ParentSquare application and by attending conferences, CSE, and other meetings virtually.

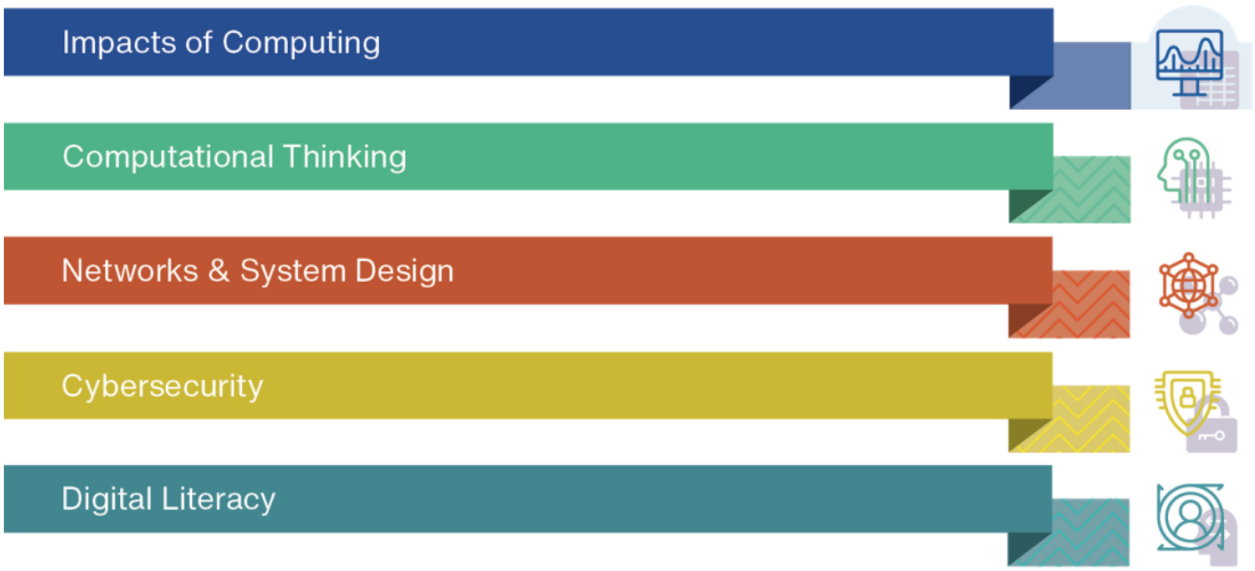
The 2022-2025 plan will improve upon the connectivity and security for stakeholders by supporting the need for updates to improve the security and reliability of the district's WiFi; continuing to provide access to those in their homes who need connectivity; and utilizing the National Institute of Standards and Technology (NIST) Framework and EdLaw2d to ensure proper protocols are being followed in regards to cyber security and personal identifiable information.

Additionally, the previous plan called for the creation of a robust digital citizenship curriculum. SUFSD plans to continue this work through the implementation of the NYS Computer Science and Digital Literacy Standards for all learners. This will include devoted time for curriculum mapping, developing and acquiring curriculum resources, providing professional development to staff, and aligning credit-bearing courses to the Computer Science and Digital Literacy Standards.

Finally, SUFSD plans to continue and improve its professional development offerings. During the next 3 years, the district's Technology Plan includes the call to provide rigorous professional development for instructional technology initiatives to use technology programs (e.g., Google apps for education, Kami, ParentSquare, etc.) for everyday use.

Goal 1: Implementation of NYS Computer Science and Digital Fluency Standards

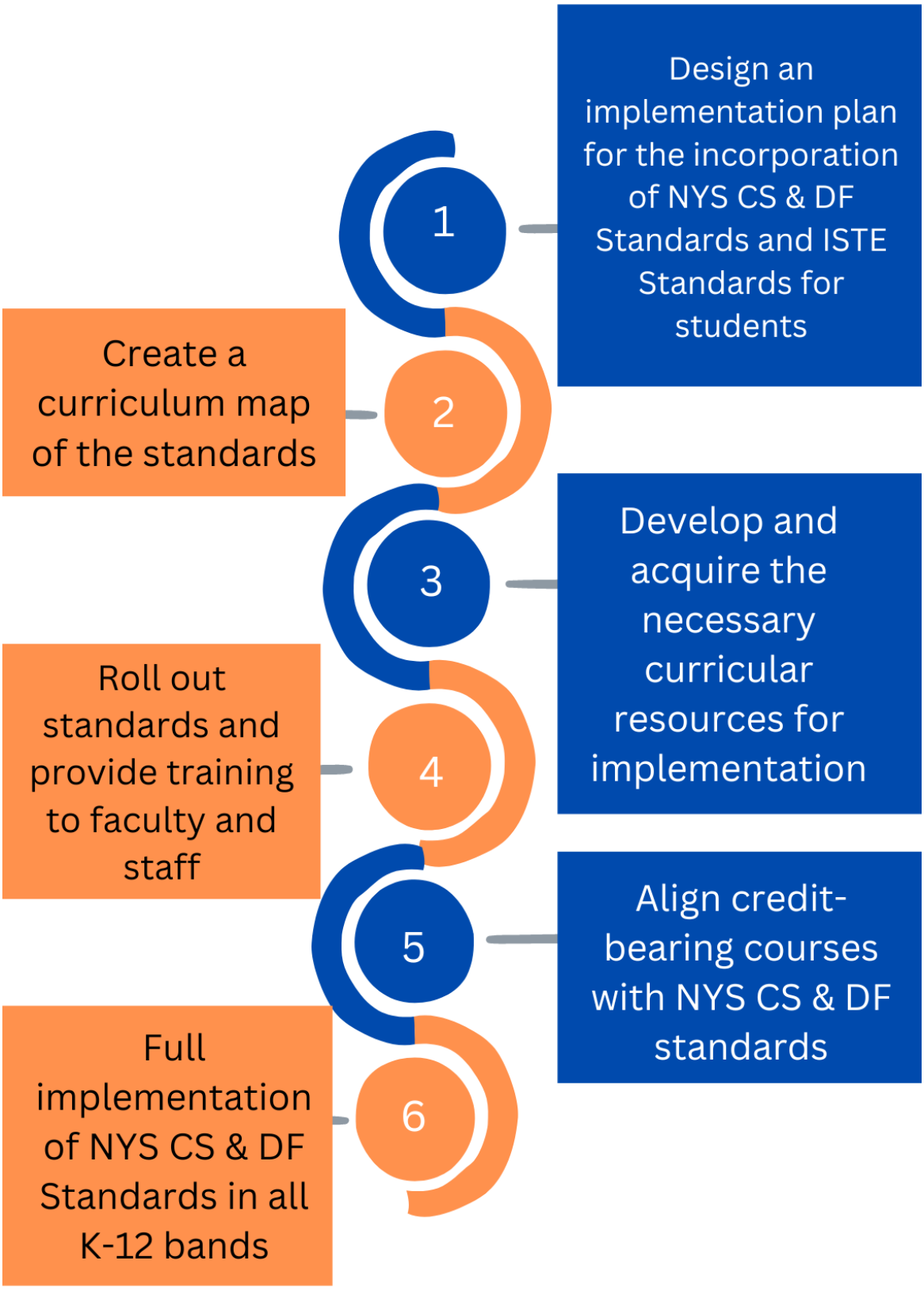
The New York State K12 Computer Science and Digital Fluency Learning Standards were adopted by the Board of Regents in December 2020. The new standards focus on five key concepts:



For example, in the domain of cybersecurity, expectations for student capabilities in each grade band are outlined below:

	Grades K-1	Grades 2-3	Grades 4-6	Grades 7-8	Grades 9-12
Response	**K-1.CY.5** Identify when it is appropriate to open and/or click on links or files.	**2-3.CY.5** Identify unusual activity of applications and devices that should be reported to a responsible adult.	**4-6.CY.5** Explain suspicious activity of applications and devices.	**7-8.CY.5** Describe actions to be taken before and after an application or device reports a security problem or performs unexpectedly.	**9-12.CY.5** Recommend multiple actions to take prior and in response to various types of digital security breaches.
	The emphasis is on recognizing when it is safe and appropriate for students to open links, with teacher guidance.	***The emphasis is on recognizing situations in which students should notify a trusted adult when a device or application does not perform as expected (pop-ups, authentication and/or loading issues).***	***The emphasis is on describing simple forms of suspicious behavior in common applications and devices, including suspicious data/links, viruses and malware.***	***The emphasis is on explaining appropriate actions to prevent and address common security issues for common situations.***	***The emphasis is on analyzing different types of breaches and planning appropriate actions that might be taken to prevent and respond to a security breach.***

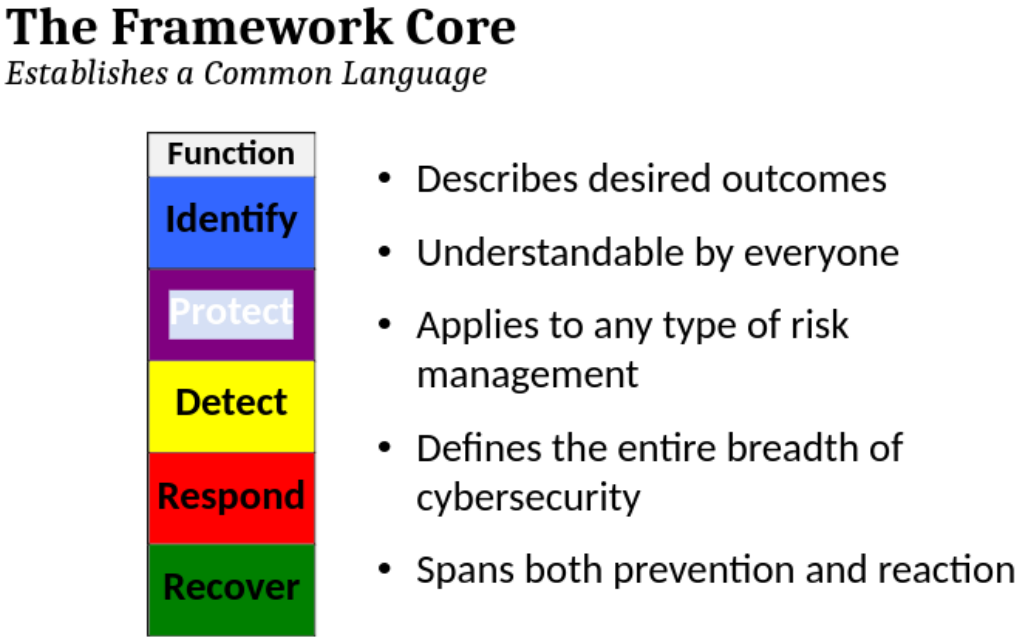
Detailed Action Steps for Goal 1



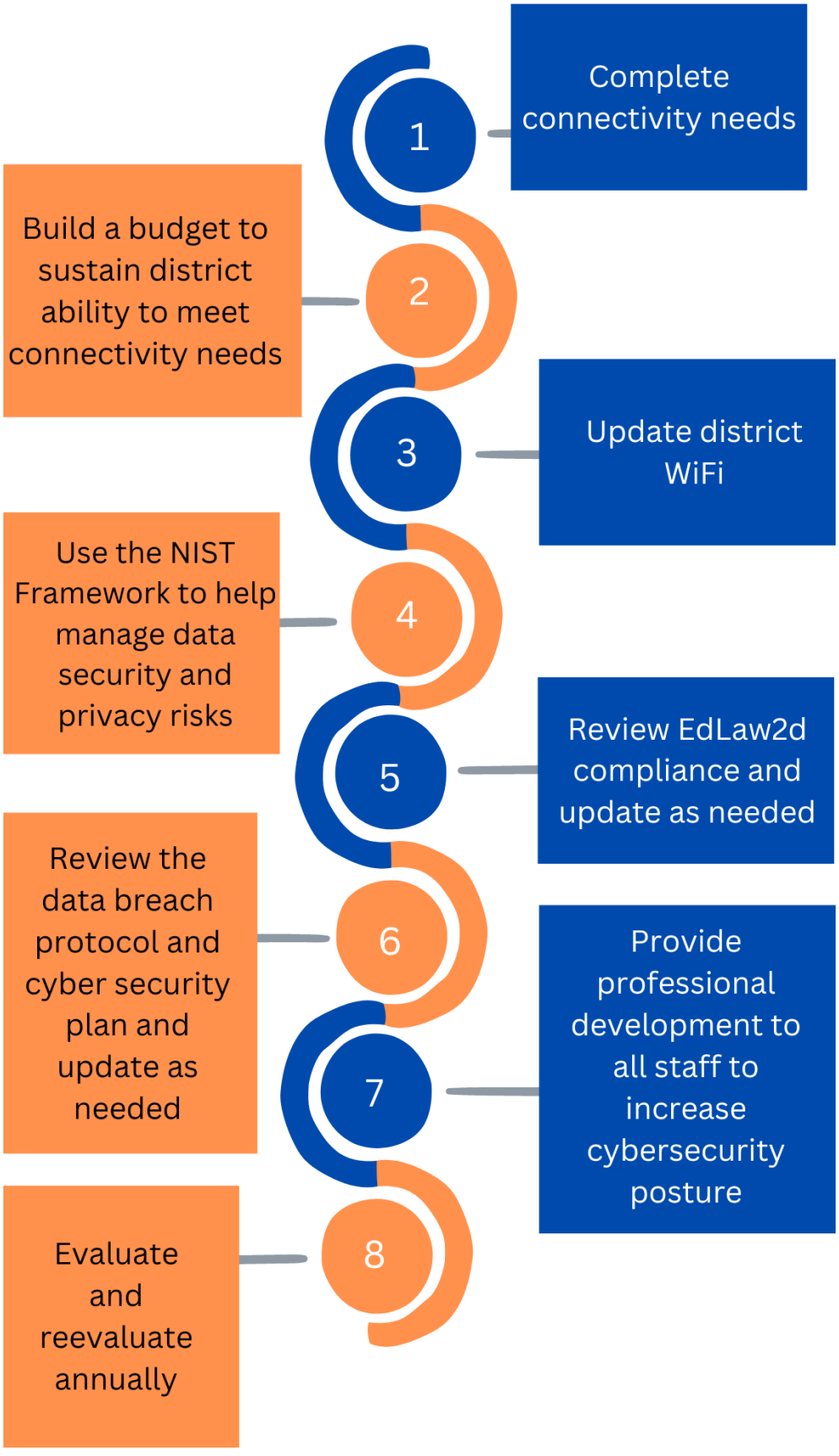
Goal 2: Improve Connectivity for Learners, Educators, and Leaders

Solvay UFSD seeks to provide a robust, secure network to ensure sufficient, reliable high-speech connectivity for learners, educators, and leaders. The district's WiFi must be consistent across each building. Additionally, the district will continue to provide students in need with MiFi hotspots to provide connectivity in the student's home.

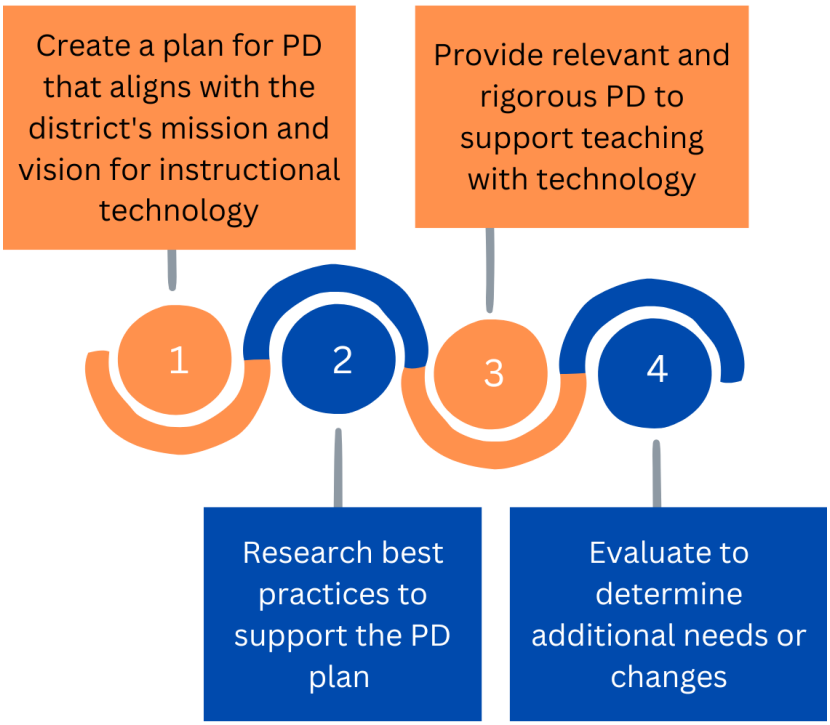
In order to improve district cybersecurity posture, SUFD will use the National Institute of Standards and Technology (NIST) Framework to help manage data and privacy risk factors. The district will continuously review EdLaw2d compliance and use ClassLink and GoGuardian to gather data about students' use of applications. SUFSD will also review its data breach protocols based on best practices and guidance from the CNY Regional Information Center (CNYRIC)'s Data Privacy & Security Service.



Detailed Action Steps For Goal 2:



Goal 3: Provide Rigorous and Relevant Professional Development for All Staff

Personalizing and enhancing learning experiences for students will require district staff to use innovative technology, and teachers must be empowered to lead students in exploration of new software and applications. To fully prepare students for life beyond K-12 education, educators in Solvay UFSD must teach students how to use technology to communicate and collaborate to solve problems, think critically, become innovative designers, and practice ethical digital citizenship.

Using classroom observation data and evidence gathered through HelpDesk requests, Instructional Technology staff will analyze staff needs with respect to professional development. Training in district-supported technology tools (e.g., Kami, Chromecast, GoGuardian, and ClassLink) as well as assistive technology and the use of Computer Science and Digital Fluency Standards will be provided regularly. Additionally, the district plans to improve its cybersecurity posture by offering various training sessions to improve the staff's understanding and knowledge of EdLaw2d, PII, phishing, and potential causes for data breaches. Professional development offerings will be reevaluated monthly at the technology committee meetings and curriculum council meetings in order to provide teachers with an opportunity to express their needs and interests.