2025 – 2028 Technology Plan
Twin Cities International Schools (TCIS)
District #4077

http://www.twincitiesinternationalschools.org

Creation Date: 5/15/2025

I. Organization, Mission, Planning and Technology Needs Assessment

1. Organization Leadership and Technology Planning Committee

TCIS opened in the fall of 2001 with the mission of serving the East African immigrant community. The school has a centralized administration led by School Director Abdirashid Warsame. The School Director reports to the Board and is responsible for all daily operations at the school.

The Technology Coordinator oversees technology for the school. A technology committee made up of teachers and administrators meets as necessary to guide the technology program.

2. Demographics and School Mission

TCIS serves approximately 1000 students in kindergarten through eighth grade. The school is located at 277 12th Ave North in Minneapolis, MN. Most students are residents of Minneapolis, although some students reside in the surrounding communities. Our student population is unique in that it is almost exclusively comprised of East African immigrants and refugees. As a result, most students are ELL and qualify for free/reduced lunches. The school has experienced significant growth in its 24 years of operation, growing from approximately 200 students in 2001-2002 to around 1000 in 2024-2025.

Mission Statement:
Twin Cities International Schools will prepare all students for future success in both school and life. With a rigorous standards-based curriculum that challenges every student, we hold our community to high expectations in the pursuit of excellence. We help our students persevere and overcome obstacles that may get in their way. Through involvement in the community our students develop the character traits needed to become active and engaged citizens who will be ready to meet dynamic global challenges.

3. Technology Needs Assessment

a. Assessment of technology need is conducted in three ways.

- **Staff is surveyed for input**
- **Through staff meetings**

- **Through staff trainings**

b. We look at the National Educational Technology Standards (NETS) standards, as put forth by the International Society for Technology in Education (ISTE), to determine what technology is needed to meet the needs of the school in relation to the standards.

c. Using data from our district developed Educational Technology Survey the school will focus its efforts on addressing the areas of greatest need for faculty. The survey made it clear that we have faculty that are very strong at using technology throughout their instruction, but that we also have teachers that need additional training to be proficient.

d. Key results of all needs assessments include:

- **Strengthen computer fundamentals for students and staff**
- **Provide ongoing technology training for students and staff**
- **Research and purchase instructional software for students**
- **Implement additional SMART technologies to aid in assessment and instruction**
- **Overall our teachers feel pretty confident regarding the general use of technology, however there is significant variation when it comes to specific technologies.**
- **Technology infrastructure needs to continually be updated for the purposes of reliability, but also to take advantage of new security features.**

e. The school continually assesses technology needs that utilize Federal E-Rate funds including, but not limited to, phone and internet service, cell phone / smart phone service, and infrastructure projects including servers, server racks, uninterruptible power supplies, network switches, firewalls, phone systems, and wiring for connectivity. Each of these is part of our hardware replacement cycle (every five to six years) and replaced on an ongoing basis to ensure the school takes advantage of the newest technologies, security and network features available to the technology industry. These technologies are critical to the functioning of our school, both in terms of educating our students, but also for the purposes of maintaining a safe technology environment for our students and staff.

II. Goals and Strategies for Technology

1. **Technology is an essential element for the future of our students. In order to educate our students to become citizens, leaders, and skilled employees, technology must be integrated in the instruction so it becomes a part of their lives.**

2. **Goals and Strategies:**
   i. **The major goal at TCIS is to seamlessly integrate technology with classroom instruction and curriculum. Significant time and monetary resources has gone into providing teachers with multiple layers of training and technology resources for use in and outside**

of the classroom. Resources will continue to be allocated to research and implement effective technology in the classroom and curriculum.

ii. **Strengthen computer fundamentals with all students. Our students generally come from a disadvantaged background. As a result, they generally do not have access to technology in their homes. This results in a lower level of familiarity with technology, and thus lower fundamental computer skills. Because of this, TCIS has created a strong computer program, especially for the youngest students. In the media technology class and in the classroom, students are regularly using technology.**

iii. **TCIS has made a commitment to integration of technology into the curriculum and instruction. TCIS has Chromebook carts in every classroom, and a wireless network in which they operate. This means that teachers have direct access to maximize integration with the curriculum and instruction.**

iv. **Research and purchase software for elementary age students. In order to provide the necessary fundamental skills needed in today's society, we will continue to do research and purchase software focusing on computer fundamentals.**

v. **Educational Assistants will provide additional technology support in the classroom. TCIS has one bilingual educational assistant for every two classrooms. Providing ongoing technology training for Educational Assistants will provide additional benefits for teachers in the classroom when students are using technology.**

3. **Additional General Strategies:**
   i. **Ongoing implementation of the NETS Standards as put forth by ISTE. These standards can be found at http://www.iste.org.**
   ii. **Ongoing use of SMART Boards and SMART Document Cameras in every classroom, allowing for interactive use of technology during lessons.**
   iii. **Using computer based assessments in math and reading. This information is used for reading and math placement in the classroom.**
   iv. **Using multi-dimensional data warehouse solution to compile, analyze, and make data driven decisions.**
   v. **Ongoing utilization of individual student learning plans database software tailored to the needs of each student.**
4. **TCIS uses many tools to assess the needs of students and drive instruction. One example is student reading and math scores are tracked from year to year. In addition, the school administers a number of other standardized tests, some required by the state and some chosen by the school. This information is used to determine if individual student performance is improving. This data is also compiled to determine the overall effectiveness of programs on a school wide basis.**

5. **With the increase of computer-based assessments, TCIS is continually assessing the need for additional computers, infrastructure upgrades, and bandwidth upgrades.**

6. **TCIS uses technology to communicate with many of its stakeholders. E-mail is used frequently between teachers as well as the partners working with the school. The school also has a website which is a source of communication for the community and students.**

7. **Staff is provided technology training during staff meetings and staff development. In addition, specific technology training needs are provided as needed, either by in-house trainers, or by outside consultants.**

III. Policies and Procedures

1. **TCIS Internet Acceptable Use and Safety Policy #524. This policy can be found on the school website at: https://www.twincitiesinternationalschool.org/site/Default.aspx?PageID=185**
   The components include:
   a. **Purpose**
   b. **General Statement of Policy**
   c. **Limited Educational Purpose**
   d. **Use of System is a Privilege**
   e. **Unacceptable Uses**
   f. **Filter**
   g. **Consistency With Other School Policies**
   h. **Limited Expectation of Privacy**
   i. **Internet Use Agreement**
   j. **Limitation on School District Liability**
   k. **User Notification**
   l. **Parent's Responsibility; Notification of Student Internet Use**
   m. **Implementation: Policy Review**

2. **TCIS has implemented content filtering through the web filter that meets the Internet Safety and CIPA Compliance requirements. The filtering restrictions include blocking of the following categories.**
   - **Adult/Sexually Explicit**
   - **Alcohol & Tobacco**
   - **Gambling**
   - **Intimate Apparel & Swimwear**
   - **Sex Education**
   - **Tasteless & Offensive**
   - **Criminal Activity**
   - **Hacking**
   - **Intolerance & Hate**

- **Violence**
- **Weapons**
- **Spyware**
- **Phishing & Fraud**
- **Illegal Drugs**
- **Games**
- **Personals & Dating (Includes Social Networking Sites)**
- **Advertisements**
- **Chat**
- **Proxies & Translators**
- **Peer-to-Peer**
- **Spam URLs**

3. **TCIS blocks additional websites on an as need basis.**

4. **In addition, the school has addressed the new "Protecting Children in the 21st Century Act." Our media technology course has an emphasis on Internet Safety and Cyber Bullying.**

5. **TCIS uses Google Cloud services to provide off-site data storage as part of our disaster recovery procedure.**

6. **School staff, parents, and students are kept up to date on technology policies through staff and student/parent handbooks. In addition, these policies are available on the school website.**

IV. Technology Infrastructure, Management and Support

1. **TCIS has a 5GB per second internet connection. In the near term this connection is meeting the needs of the school in terms of online testing, streaming media, and general internet research requirements. Federal E-Rate funding is used to partially cover the costs of this service.**

2. **The school will soon need a faster internet connection to reflect increasing bandwidth needs. Ongoing bandwidth testing, as part of our network assessment process, will be used to determine the necessity of this increase. Cost will also be a factor in this decision.**

3. **Our telecommunications capacity currently allows for a phone in all classrooms via a Cisco VOIP phone system. In addition, we utilize a Dialmycalls mass communication cloud based system when we need to contact our families with important messages.**

4. **TCIS has five physical servers. These servers are used for AD, DNS, DHCP, Group Policy, NPAS, Security System, Phone System, Printing.**

5. **The servers range in age from one to ten years old.**

6. **Our replacement cycle is as follows:**

Year	Server
July 1, 2025-June 30, 2026	Badge Server Replacement
July 1, 2026-June 30, 2027	Print Server Replacement
July 1, 2027-June 30, 2028	Based on Cloud Computing Changes

7. **TCIS has implemented an IBM BladeCenter S, running six independent blades all with virtualization capability. Current blade servers meet the following purposes: computer-based testing, printer management and test caching if needed. Future deployments will be determined based upon whether or not a server needs to stay physical for technical reasons.**

8. **Our school is moving away from physical servers to cloud based systems for redundancy and remote access capabilities. Email, file storage, cloud camera systems have already been migrated to cloud environment.**

9. **Microsoft Windows Active Directory, Group Policy, and G Suite is used to manage folder, printer, workstation, Chromebook, server, and network security.**

10. **The servers and network are protected by a Cisco Firepower 2140 for intrusion prevention, and a multi-layered approach to anti-virus protection.**

11. **Within the school there are 56 wireless access points. From these access points all laptops and Chromebooks are connected via a wireless LAN controller. In addition, the school has a guest wireless network that functions on a separate Virtual Local Area Network (VLAN) for computers that are not owned by the school, but need internet access while at our school.**

12. **The school has standardized on the Windows platform for computers and servers, along with Chromebooks for Students.**

13. **Students at TCIS do not use handheld devices, but will evaluate their possible use in the future.**

14. **As technology purchases are made, interoperability is always taken into consideration. This includes both hardware and software. When considering hardware, the primary issue is ensuring network and application compatibility. When considering software, TCIS looks for solutions that are SIF (Schools Interoperability Framework) compliant and also work with our current operating systems.**

15. **The student to computer ratio is roughly one computer for every one student.**

16. **The teacher to computer ratio is one computer to one teacher.**

17. **The age of computers used for instruction is roughly five years.**

18. **Our computer replacement cycle is as follows:**

Year	Chromebooks	Teacher Workstations
July 1, 2025-June 30, 2026	50	10
July 1, 2026-June 30, 2027	50	20
July 1, 2027-June 30, 2028	50	20

19. **Administration workstations are replaced as needed.**

20. **All of our web based databases, including the Synergy student information system, Viewpoint data warehouse solution, Student Plans individual learning plans solution, SpEd Forms special education software, and Destiny Library Manager implement SSL encryption to ensure that student and teacher data and passwords are secure.**

21. **Technology is supported by a full time Technology Coordinator.**

22. **Consultants are brought in when needed for specific technology projects.**

23. **Technology staff is provided education and training on an as need basis as new hardware and software are implemented. This training is usually included as part of project implementation, but additional formal training is scheduled when appropriate.**

24. **TCIS continually looks at ways to improve network security and plans strategies to make improvements.**

25. **The greatest challenge faced is having enough time and money to keep both the infrastructure hardware and software up to date.**

V. Role of School Media Center/Library

1. **TCIS has two centralized media center/libraries. The school has focused on creating literature rich classrooms with a media center/library that fills in where needed.**

2. **The media center/library has a Chromebook cart stationed within it for continued student education.**

3. **The media center/library is integral in supporting the Success For All reading program. The media center provides students with support, classroom libraries, leveled books, supplemental reading materials, and trade books for use in carefully structured opportunities to read, discuss, and write.**

4. **TCIS integrates technology into the curriculum. With this in mind, the media center works closely with the technology department and classroom teachers to integrate technology to meet the needs of students. Relevant research, as well as the results of student academic achievement, drives how technology is used within the curriculum.**

5. **TCIS has adopted the NETS standards for both students and teachers. Please see the ISTE website at http://www.iste.org for more details.**

   Student Performance Indicators:
   - **Creativity and Innovation**
   - **Communication and Collaboration**
   - **Research and Information Fluency**
   - **Critical Thinking, Problem Solving, and Decision Making**
   - **Digital Citizenship**
   - **Technology Operations and Concepts**

   Teacher Performance Indicators:
   - **Basic operations and concepts**
   - **Social, ethical and human issues**
   - **Technology productivity tools**
   - **Technology communication and research tools**
   - **Technology problem solving and decision making tools**

6. **The media specialist and classroom teachers work collaboratively to address the NETS standards.**

7. **The media specialist integrates technology to help achieve the Minnesota media standards as well. These include:**
   - **Inquiry, Research, and Problem Solving: The student will learn a continuous cycle of questioning, gathering, synthesizing, evaluating, and using information individually and collaboratively to create new knowledge and apply it to real world situations.**
   - **Expanding Literacy's: Read, view, listen and communicate in any format for a variety of purposes.**
   - **Technology Use and Concepts: Explore multiple technologies, evaluate their suitability for the desired educational or personal task, and apply the tools needed.**
   - **Ethical Participation in a Global Society: The student will participate productively in the global learning community and demonstrate safe,**

ethical, legal and responsible behavior in the use of information and technology.

VI. Professional Development

1. **The staff development system is broken down into two categories:**
    a. **Technology Hardware and Software: Staff members are trained to use technology hardware and software through informal and formal training. These training sessions take place as needed and are led by someone with experience or expertise with that particular technology.**
    b. **Curriculum integration: The goal of TCIS is to integrate technology into the curriculum. In order to provide this integration there is a committee of staff that meets to discuss ways that technology can be integrated into the standards based curriculum.**

2. **TCIS has adopted the NETS standards developed by ISTE. We address these standards through the trainings that faculty receive. The standards can be accessed through the ISTE website at http://www.iste.org/.**

3. **Training staff for technology curriculum integration is an ongoing process. Staff are continually examining the curriculum and seeking ways that technology can be integrated. Informal training takes place as teachers and staff share ideas during staff and department meetings about how they are integrating technology into the curriculum. Teachers are observed by administration often during the school year. Part of this ongoing teacher evaluation includes technology integration.**

4. **The greatest challenge for technology staff development is finding the time and resources needed.**

VII. Strategic Technology Implementation Plan

1. **The timeline below will address most of the anticipated hurdles that the school will face. To achieve these steps the school will need to work diligently to ensure all parties at the elementary school are on board and coordinating the development of the technology plan as a living document.**

2. **The timeline covers July 1, 2025 through June 30, 2028**

2025-2026

July 2025	• **Install Chromebooks into carts** • **Badge Server Upgrade**

August 2025	• **Student Information System conference** • **Upgrade wireless infrastructure** • **Technology training for staff**
September 2025-June 2026	• **Ongoing evaluation of software and curriculum integration** • **Ongoing data organization in Google Cloud** • **Technology committee meetings** • **Technology training for staff**

2026-2027

July 2026	• **Install Chromebooks in carts** • **Network evaluation to determine any necessary improvements**
August 2026	• **Student Information System conference** • **Technology training for staff**
September 2026-June 2027	• **Ongoing evaluation of software and curriculum integration** • **Technology committee meetings as necessary** • **Technology training for staff**

2027-2028

July 2027	• **Install Chromebooks in carts** • **Network evaluation to determine any necessary improvements**
August 2027	• **Student Information System conference** • **Technology training for staff**
September 2027-June 2028	• **Ongoing evaluation of software and curriculum integration** • **Technology committee meetings as necessary** • **Technology training for staff**

VIII. Evaluation Plan

1. **The following performance measures will be used to determine program effectiveness.**
    - **Students will be assessed annually regarding their progress in meeting NETS standards at recommended grade level.**

- **All instructional staff will be required to show proof of competency of stated standards for professional development. Results of such evaluation will be part of the employee's permanent record.**
- **Faculty will be required to document their plans for integration of technology into the curriculum. These plans will be submitted to the Curriculum Coordinator for approval.**

2. **The Technology Coordinator will meet with the administration on an annual basis to provide an overview of the technology programs effectiveness. At that time, the Technology Coordinator will make recommendations for program improvements.**

3. **The technology plan is reviewed annually to ensure the school is on track, or needs to make adjustments.**