

# Jefferson School District 2024-2025 Strategic IT Plan and Transition

In the 2024-2025 school year, the IT department faces challenges due to a reduction in staffing to one full-time employee. While it is unfortunate that funding limitations prevent the retention of two positions within the school district, we must now determine how to adjust services to align with the department's resources. With two full-time employees having served in the IT department for four years, the task of identifying critical services for the district's IT infrastructure and deciding which tasks to discontinue or delegate to individual schools is considerable. As we remove 1,440 support hours from the district next year, we will need to revert IT service and support offerings to levels similar to those offered during the 2019-2020 school year. This document explores the following proposals for the next year:

1. Creating a Student-Led Tech Program
2. Creating Stipends for Teachers
3. An overview of services currently offered and expected changes for next year
4. Transition Plan for Spring of 2024

## Student-Led Tech Program

It is important to acknowledge that while establishing a student tech team is beneficial, it should not be viewed as a remedy for replacing a full-time employee. Implementing this program will increase the workload next year during its implementation, reducing capacity in IT for other forms of support. Collaboration with other Tech directors is underway to expedite the design phase of this project, although the ramp-up process is substantial. Implementing this program four years ago, as initially proposed, could have mitigated support burdens.

### Challenges of Starting a Student-Led Tech Program

Starting a student-led tech program comes with several challenges and will not be a panacea to losing a full-time employee. Here are some of the things I have to consider when designing this program and this has to be done in the next couple of months to start a program next Fall.

- Determining the program's goals and objectives
- Scope of security to give students and how to monitor them
- What tasks to give students to keep them engaged and busy
- How do we communicate, monitor, and follow up on assigned tasks?
- Developing a curriculum that aligns with educational standards and meets the needs of students
- Ensuring the program is accessible to students of all skill levels

- Students will not be able to start handling support until they are trained, which can't happen until school starts which is also my busiest time of the year

### **Training Students:**

- Training students to do tech work takes time and resources
- We do not have any computer science curriculum at Jefferson that prepares students for supporting teachers or any teachers who can act as mentors so all training and mentoring will fall on me
- Students may need to learn new software, hardware, and other technical skills. I don't expect any student will know how to replace a keyboard on a Chromebook or will be familiar with how to work with multi-monitor displays and networked projectors.
- Providing ongoing training and support to students

### **Time Management:**

- Students have limited time during the school day
- In reality, during the first two months of school all tech support requests are going to take 2 - 3 days longer to complete. I will have to receive the request and then schedule to teach the student how to perform the support, then the student will have to coordinate with the teacher to provide support.
- I will have to balance supporting the district while also training and supporting students

### **Establishing a New Program:**

- Establishing a new program takes time and effort
- Building a team of student support staff will take time and the process will likely repeat each year

## **Teacher Stipends**

Implementing Tech-Leads in each school, assigned to a teacher or media specialist, is a positive initiative to enhance technology support at the school level. However, there are several considerations regarding paying teachers extra to take on these duties.

### **History of Tech-Leads at Jefferson**

It is important to recall the previous utilization of teachers in these roles and the subsequent disbandment. Initially, upon my arrival at Jefferson, each school had Tech-Leads who fulfilled

various responsibilities, including rostering students in software programs, providing initial tech support in classrooms, and advising on software and hardware needs. However, inconsistencies arose in data management, with some teachers misusing administrative credentials, leading to security breaches and unauthorized changes. This lack of standardization and resistance to participate exacerbated during the COVID pandemic, prompting the assignment of Becca Mallery as a TOSA in 2020. Ultimately, centralization and standardization within the IT department became necessary and teachers had their admin privileges removed.

### **Considering the Challenges Faced by Tech-Leads**

Understanding past challenges, let's examine the Pros and Cons of utilizing Tech-Leads next year.

Pros:

- With IT support for Student Information System (SIS) and Gradebook being decentralized, having Tech-Leads to address support issues at each school will be beneficial.
- Tech-Leads can facilitate discussions on software and hardware needs, offering valuable insights.
- They can disseminate training on software and hardware efficiently to teachers and staff, which is more feasible than coordinating with IT.
- With software program rostering returning to each school, Tech-Leads can effectively manage troubleshooting, especially during the busy periods at the beginning of the school year.

Cons:

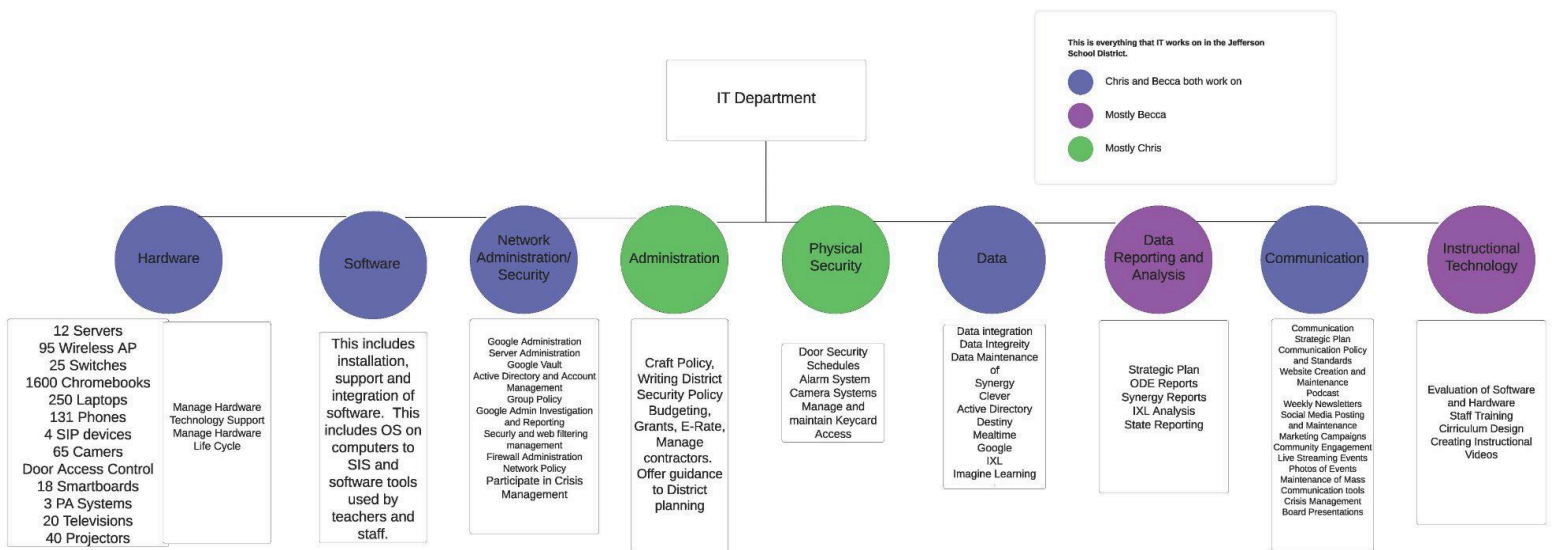
- Tech-Leads operate independently of my supervision, necessitating reliance on principals to ensure collaboration with IT.
- As teachers, Tech-Leads have primary responsibilities beyond IT tasks, potentially leading to IT-related tasks being deprioritized.
- While proficient users, Tech-Leads may not possess advanced technical expertise, limiting the depth of support they can provide.

### **Looking Ahead**

As more IT functions transition back to each school, the role of Tech-Leads is poised to become increasingly beneficial. However, it is crucial for these leads to embrace and comprehend their responsibilities fully. Additionally, support from administrators will be essential in ensuring compliance with established standards.

# Overview of Current Services and Anticipated Changes

Below is a chart of the IT department's current roles and responsibilities.



To make this transition work IT will need to go back to offering core services. Here's a breakdown of the critical IT infrastructure and services that are essential for the smooth operation of a school district:

## Core Infrastructure

- **Network & Connectivity:**
  - **Wired Network:** Robust Ethernet switches and cabling forming the backbone for connecting devices and accessing resources.
  - **Wireless Network:** Secure Wi-Fi access points for laptops, tablets, and other mobile devices, enabling flexibility for students, teachers, and staff.
  - **Internet Connectivity:** Reliable, high-bandwidth internet access to provide essential connection to online learning resources, administrative systems, and communication tools.
  - **Firewalls & Security:** Comprehensive security systems to protect the

network perimeter, filter traffic, and safeguard sensitive data from unauthorized access and cyber threats.

- **Servers & Data Storage:**
  - **On-Premise Servers:** Physical servers housed within the district's data center(s) to run critical applications and store local data.
  - **Cloud Storage:** Secure cloud-based storage solutions for backups, file sharing, collaboration, and potentially for primary data storage.
- **End-User Devices:**
  - **Desktop Computers:** Workstations in classrooms, computer labs, and administrative offices.
  - **Laptops and Tablets:** Portable devices for students and educators, often part of 1:1 device initiatives that enable learning anywhere.
  - **Interactive Whiteboards/Displays:** Interactive teaching and learning tools for classrooms.
  - **Printers and Scanners:** Multifunction devices for printing, copying, and scanning needs.

## Critical Services

- **Student Information System (SIS):** A centralized software platform for managing student data, including attendance, grades, schedules, enrollment information, and more.
- **Learning Management System (LMS):** An online platform providing resources, assignments, communication tools, and class management functions to facilitate teaching and learning processes.
- **Email and Collaboration:** Secure email servers and cloud-based collaboration tools for communication among students, educators, staff, and parents.
- **Productivity Software:** Office suites and educational software for creating documents, presentations, spreadsheets, and other learning materials.
- **Identity and Access Management:** Systems for managing user accounts, passwords, and access permissions to resources, ensuring authorized access to different systems.
- **IT Helpdesk and Support:** A technical support team for troubleshooting device and network issues, providing timely assistance for users.

## Emerging and Supportive Technologies

- **Cloud Computing:** Flexible and scalable infrastructure for diverse applications and data storage, offering potential cost efficiencies and easier maintenance.
- **Virtualization:** Running multiple virtual machines on a single physical server to optimize resource usage and reduce hardware footprint.

- **Cybersecurity Tools:** Advanced solutions for threat detection and prevention, including antivirus, firewalls, intrusion detection/prevention systems (IDS/IPS), and endpoint protection.
- **Assistive Technology:** Supporting students with disabilities; this could include text-to-speech software, screen readers, alternative input devices, and more.

The IT department currently manages an average of about 1000+ tickets per year. Given there is no indication that we will see a reduction in tickets next year it will be imperative that IT strictly adheres to only supporting critical IT infrastructure.

We are working on creating an appendix that will include a comprehensive list of all of the functions being performed by IT and whether these services will continue, be discontinued or moved to individual schools.

# Transition Plan for Spring of 2024

To prepare for next year, IT will start pairing back its services so we can train and transition staff at each school in preparation for next year. Below is an outline of some of the key items happening this spring.

## March

- Becca and I will be making a comprehensive list of all job functions and tasks performed by IT. We will identify what is a Critical IT component. All other components will cease or be moved to other departments.
- Managing the installation of new camera systems
- Start the design of creating a Student-Led Tech Department

## April

- Finish Installation of new camera system and train staff on its management
- Start Safety Assessment as required by the Justice Department Grant.
- Start training key personnel on taking over Synergy responsibilities
- Continue work on the design and implementation of Student-Led Tech department

## May

- Train staff on all identified items that will no longer be supported by IT. I know these will include data analysis, IXL, reporting, and strategic planning, which will be moving back to the schools responsible for reporting.

## June

- End of Year closeout- All staff will have to turn in computers at the end of the year **without exception**. IT will not have the capacity to perform upgrades during the school year so all updates must be performed during the summer. People needing a computer can use their own personal computers to access their school accounts during the summer.
- Finish up and finalize any training and transitioning of services back to the schools.
- Finish up Safety Assessment with Maintenance over the summer