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DISTRICT VISION, MISSION AND CORE BELIEFS

Mission

Preparing ALL students for success in college, career and community leadership.

Vision

“Fort Worth ISD: Igniting in every child a passion for learning”

Core Beliefs

1. Equal access and opportunity to learn is the right of every student;
2. School curricula and instruction must be rigorous, relevant, engaging, and provide students with multiple options and opportunities for the future;
3. The ultimate measure of what is taught is what is learned;
4. Teachers are our most valuable resource, and the focus of all our efforts is to support teaching and learning;
5. Public education requires the active participation of parents and the community to obtain and maintain excellence;
6. The Fort Worth ISD community acknowledges, respects, and appreciates diversity;
7. Safe and orderly community and school environments are essential to student health, wellness, and academic success; and
8. The adequate and equitable provision and distribution of resources, a strong infrastructure that is both effective and efficient, and a system of accountability are essential to ensuring a high-performing educational system.
SUPERINTENDENT

DR. KENT PAREDES SCRIBNER

SCHOOL BOARD MEMBERS

TOBI JACKSON
President-District 2

QUINTON ‘Q’ PHILLIPS
Vice President-District 3

DR. CAMILLE RODRIGUEZ
District 1

CARIN ‘CJ’ EVANS
Secretary-District 5

ANNE DARR
District 6

DR. MICHAEL RYAN
District 7

ANAEL LUEBANOS
District 8

ROXANNE MARTINEZ
District 9
LONG RANGE PLAN FOR TECHNOLOGY

In partnership with engage2learn (e2L), Fort Worth ISD set out to design a technology plan that would capture the ambitions of the Fort Worth community to foster a robust and integral technology ecosystem. e2L facilitated a 6-month design process to ensure all stakeholders have an opportunity to voice perspectives through a representative team.

DESIGN TEAM

The Fort Worth ISD Technology Plan is the result of internal and external stakeholders collaborating on a community-based design. The Design Team member listed interacted extensively to represent the broader community and translate the FWISD vision into a technology plan that is actionable and guided for the next three to five years.

The design team is composed of various stakeholders, including district and campus staff, community members, business leaders, parents, and teachers. Students also played a vital role as panel members sharing the critical perspectives of today’s youth.

Team Members:

**Technology Staff:**
Nichole Drumgoole
Mcdny Alcantara
Daniel Baham
Debra Bell
Alex Falcon
Aracely Chavez
Henry Garcia
Laura Mathews
Robert Mendez
Larry Sandoval
Marlon Shears
Wyatt Sledge

**District Staff:**
Isaac Cervantes
Lisa Clark
Lori Colletti
Brenda DeLeon
Shana Ellason
Holly Affleck
Jennifer Akinluyi-abe
Dr. Becky Navarre
Jean Otto
Daphne Rickard
Marion Mouton
Tandi Smith
Luis Fernandez
Rosibel Jimenez

David Johnson
Jonathan Lee
Merrily Behnke
Lisa Castillo
David Pupalaikis
Sascha Sciandra
Sara Reed
Dawn Simpson

**Parents:**
Stephanie Martin
Steven Wengert

**Community:**
Chris Shropshire
Sallie Trotter
Kerry Neal
Wanda McKinney

**School Staff:**
Jeffrey Bartolotta
Quanda Collins
Shawn Hadd
Heath Jackson
Saleta Thomas
EXECUTIVE SUMMARY

The Fort Worth ISD Technology Plan is a 3 to 5-year plan designed to guide the District in technology planning, purchasing, and implementation. The Technology Plan is a long-range plan to intentionally serve as a living document that will be evaluated and updated continuously to meet the District’s changing needs and to address K-12 changes in educational technology.

Purpose

The increasing and integral role of technology within both the academic and business systems in education has been a driving force for the technology design team as they set out to modernize the technology ecosystem for Fort Worth ISD. There was intentionality in referring to the current National Education Technology Plan as it has been updated to include the aspects of learning, teaching, leadership, assessment, and infrastructure. The purpose of this document is to communicate the defined goals, aligned objectives, and specific strategies for academic and business technology systems that best serve the students and staff of Fort Worth ISD. The success of the Fort Worth ISD Technology Plan will depend on those served by it, as well as internal and external stakeholders.

Scope

The scope of the Technology Plan provides strategies for enhancing the learning environment through the use of modern and effective technological tools with relevant instructional strategies. The Technology Plan takes into account all information regarding the process undertaken by the District, including insights gained through the stakeholder survey, documentation of existing conditions, and technology profiles. The Technology Plan can also serve as an additional resource for articulating the vision and organizational strategies to create and evaluate systems that effectively integrate technology into the learning experience. These strategies are defined in a professional development scaffold, a responsible rollout plan, and a recommended construct for a sustainability committee and plan. The strategies include prudent actions which can deliberately and effectively progress toward achieving the goals.
PROJECT PROCESS/METHODOLOGY

The e2L design process involves four stages to enlist problem-solving and creativity and resulting in an innovative design. The e2L stages include Engage, Design, Create, and Lead. Through each stage of the process, e2L facilitates the design team through research, reflection, ideation, and collaboration opportunities to ensure that the process takes into account broader perspectives, continuously aligns back to the FWISD Core Beliefs, and strengthens the development of the Learner Profile.

Engage

The Engage stage is an essential launching component of the design process as it is intended to include all stakeholders and gather input about the goals for the educational system that can inform the decision-making process throughout. Engaging students, parents, teachers, administrators, and community members in the dialogue leads to the creation of strong systems that support the shift from teacher to learning and strategic abandonment of programs and systems that no longer serve learners.

The FWISD Technology Plan design processes engaged stakeholders in three manners: Survey, Design Team, and Student Panel. The Survey was designed and published on the district website and in multiple languages to increase ease of access and strengthen communication for participation. The Design Team invitation process included inviting parents, community members, local higher education leadership, and local business owners. Also, a team of students served on a panel to assist the Design Team with the perspective of today’s youth, their goals as learners, and how they envision the future of education for those who follow.

Survey Responses

For what purposes do you find yourself using technology? (Check all that apply)

Students

For what purpose do you find yourself using technology? (Check all that apply)
How would you describe your proficiency with technology devices?

<table>
<thead>
<tr>
<th>Field</th>
<th>Expert</th>
<th>Proficient</th>
<th>Beginner</th>
<th>No Knowledge</th>
</tr>
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<tbody>
<tr>
<td>Desktop</td>
<td>34%</td>
<td>65%</td>
<td>1%</td>
<td>0%</td>
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<tr>
<td>Laptop</td>
<td>36%</td>
<td>62%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Chromebook</td>
<td>14%</td>
<td>68%</td>
<td>15%</td>
<td>3%</td>
</tr>
<tr>
<td>iPad</td>
<td>24%</td>
<td>58%</td>
<td>11%</td>
<td>6%</td>
</tr>
<tr>
<td>Windows</td>
<td>33%</td>
<td>64%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Mac OS</td>
<td>13%</td>
<td>36%</td>
<td>29%</td>
<td>22%</td>
</tr>
<tr>
<td>iOS</td>
<td>20%</td>
<td>51%</td>
<td>17%</td>
<td>12%</td>
</tr>
<tr>
<td>Projector</td>
<td>19%</td>
<td>65%</td>
<td>10%</td>
<td>7%</td>
</tr>
<tr>
<td>Smartboard (Interactive Display)</td>
<td>16%</td>
<td>61%</td>
<td>17%</td>
<td>7%</td>
</tr>
<tr>
<td>Document Camera</td>
<td>15%</td>
<td>50%</td>
<td>22%</td>
<td>12%</td>
</tr>
</tbody>
</table>

For what purpose do you find yourself using technology? (Check all that apply)

- Communication: 99%
- Teacher Productivity: 87%
- Research: 73%
- Presentation: 88%
- Creating Content: 90%
- Collaborating Multimedia: 60%
- Sharing Content: 70%
- Instructional Application: 37%
- Digital Content: 77%
- Other: 8%
Design

The Design stage is a research-based process that involves the community, is student-focused, transparent, and actionable. It is a critical stage with a process that ensures all agreed-upon components align to district priorities. The determinations during the Design stage become the basis for the remaining stages and catalysts for change.

Technology Call to Action

The process is launched with the design team defining the Technology Call to Action. The Call to Action drives the whole process of creating. It should be what we hope will happen for students as a result of their time in school. It should exceed the current capability of the educational system and serve as the focal point for the entire Strategic Plan. Throughout the process, Design Team members consistently referred to the Call to Action to ensure the design components would align with it.

The FWISD Technology Plan Design Team developed the following Technology Call to Action:

Create a culture that empowers and equips every student with the tools and resources to achieve their greatest potential.

Technology Plan Goals

**Goal 1:** Create and provide FWISD stakeholders the opportunity to attain, learn and apply key technology knowledge and skills to elevate the student learning experience.

**Goal 2:** Create sustainable and efficient standards for device and solution adoptions that meet the needs of all students and programs.

**Goal 3:** Develop an effective & efficient collaborative communication process for all stakeholders to share information, which yields useful data for decision-making that will result in successful students’ outcomes.

**Goal 4:** Develop a sustainable, comprehensive device and resource lifecycle management plan that ensures equitable program-focused access in an ever-changing world.

**Goal 5:** Establish a modern, sustainable technology ecosystem to support each 21st-century learner.

Create

The Create stage serves as the component of the design process where the Design Team dissects the concepts found in the goals and makes them actionable. While engaging the community in the Design stage is necessary for clarifying the vision, the design process during the Create Stage serves as the bridge from vision to action. What follows are the Specific Results and Strategies to apply action to the determined goals.
Technology Plan Goals, Specific Results, and Strategies

1 Create and provide FWISD stakeholders the opportunity to attain, learn and apply key technology knowledge and skills to elevate the student learning experience.

1.1 Establish core technology competencies to support student learning.
- Incorporate updates to yearly technology surveys to conduct needs assessments
- Align all technology professional development with District technology competencies using recognized technology standards while maintaining compliance
- Align teacher professional development with curriculum

1.2 Monitor alignment and implementation of core competencies to professional learning.
- Create surveys, focus groups, and other data gathering techniques to gather implementation success and needs
- Update job descriptions to include minimum technology competencies
- Provide training for new and existing applications and device adoptions
- Identify technology integration model classrooms

1.3 Develop a professional learning strategy that fosters continuous growth.
- Design presentations, manuals, resources, and tools that align with the needs
- Communicate professional development learning plan to stakeholders
- Continuous feedback loop provided after professional development
2 Create sustainable and efficient standards for device and solution adoptions that meet the needs of all students and programs.

2.1 Identify standards to support and align the needs of students and programs.
   - Develop framework for collaboration teams

2.2 Monitor alignment, implementation, and utilization of devices and programs.
   - Create a process for continuous feedback and support
   - Establish processes to monitor alignment and implementation
   - Create an implementation process

2.3 Establish a districtwide culture of customer service that encourages stakeholder engagement and partnerships.
   - Establish specific expectations and turnaround times for servicing student and staff devices (SLAs)
   - Establish a common understanding of customer service that aligns with the core values and culture.

3 Develop an effective & efficient collaborative communication process for all stakeholders to share information, which yields useful data for decision-making that will result in successful students’ outcomes.

3.1 Leverage identified communication tools to share unified messaging to all stakeholders.
   - Determine tool(s) to be used based on the message and stakeholders
   - Identify yearly/recurring/periodic* communication messaging

3.2 Use quantitative and qualitative data to guide decision-making.
   - Collect information from stakeholders
   - Create a dashboard to share aggregated data
   - Design process for sharing information

3.3 Create a system that uses common language to communicate with all stakeholders of the District.
   - Identify the audience
   - Identify the mode(s) of communication
   - Create standards for the communication
Develop a sustainable, comprehensive device and resource lifecycle management plan that ensures equitable program focused access in an ever-changing world.

4.1 Establish a sustainable and equitable governance framework.
- Implement feedback tools that represent the FWISD community.
- Create a profile that will allow us to identify categories of stakeholders that are key components to an equity-based solution.
- Create a standard operating procedure specific to the resources for each stakeholder group.

4.2 Review and evaluate tools and applications on a yearly basis for effectiveness in meeting student and program needs.
- Create a standard operating procedure specific to the resource for each stakeholder group.
- Implement an evaluation system that focuses on the effectiveness of the tools and applications being used.

4.3 Establish replacement and refresh cycles that maintain up-to-date technology for staff, students, and network infrastructure.
- Create a tool to receive feedback regarding technology needs before refresh deployment occurs.
Establish a modern sustainable technology ecosystem to support each 21st-century learner.

5.1 Develop and monitor standards, governance, and PMO oversight to ensure successful technology initiatives

- Design the committee construct and standards of practice to update and maintain a sustainable ecosystem
- Define technology autonomies for schools through a theory of action
- Identify the operating system and standards of practice

5.2 Provide an equitable and sustainable technology lifecycle

- Develop an equitable and sustainable technology lifecycle

5.3 Establish replacement and refresh cycles that maintain up to date technology for staff, students, and network infrastructure.

- Establish opportunities for student engagement in the Department of Technology
- Partner with the Office of Innovation to define roles and responsibilities

5.4 Modernize the technology infrastructure

- Design and maintain a robust, highly available modern technology infrastructure

5.5 Modernize the technology applications

- Design and maintain a robust, highly available modern technology applications
Technology Standards for Classrooms, Libraries and Common Spaces

Technology plays a vital role in preparing students for college, careers, and life. To ensure students are acquiring the necessary skills to thrive, the right tools need to be provided to support the desired learner experience. Technology requirements can be considerably different for elementary schools and secondary schools. To ensure technology is truly differentiated for specific audiences, technology profiles were developed.

The data captured from the survey allowed teachers and principals to share direct input on the specific challenges and benefits of technology hardware options for the classroom and to indicate the most appropriate technology for different grade levels: PK-1, 2-5, 6-8, and 9-12, libraries and common spaces. Based on this data, the research on educational technology, and the Texas standards for instructional technology, technology profiles were designed. The profiles establish district standards for classroom technology, support the technology plan goals, and inform decision-making for technology initiatives and purchases.

Profiles were developed for specific needs of classrooms at elementary and secondary school levels. The analysis, along with the defined profiles for technology, informed recommendations to improve technology service delivery.
**Productivity Applications:**

<table>
<thead>
<tr>
<th>Grade Levels</th>
<th>Libraries</th>
</tr>
</thead>
<tbody>
<tr>
<td>PK-2</td>
<td>3-5</td>
</tr>
<tr>
<td></td>
<td><img src="Icon1.png" alt="Icons" /></td>
</tr>
</tbody>
</table>

Current Learning or Content Management System

**Audio/Visual:**

<table>
<thead>
<tr>
<th>Grade Levels</th>
<th>Libraries</th>
</tr>
</thead>
<tbody>
<tr>
<td>PK-2</td>
<td>3-5</td>
</tr>
<tr>
<td></td>
<td><img src="Icon5.png" alt="Icons" /></td>
</tr>
</tbody>
</table>

Interactive Flat Panel Wall Mount
Teacher Microphone System

**Power:**

<table>
<thead>
<tr>
<th>Grade Levels</th>
<th>Libraries</th>
</tr>
</thead>
<tbody>
<tr>
<td>PK-2</td>
<td>3-5</td>
</tr>
<tr>
<td></td>
<td><img src="Icon9.png" alt="Icons" /></td>
</tr>
</tbody>
</table>

Charging Bank in Classroom
Chargers at Home
Mobile/Flexible Charging Based on Campus Needs

**Lead**

The final component of the design process, the Lead stage, is intentional for creating an accountability system. Designing an accountability system captures specific, multiple measures that the stakeholders determine, which contribute to the accomplishments. More specifically, the outcomes from the Lead stage which follow are the Year 1 Action Plans, a Responsible Rollout plan, a Professional Development plan, a Budgeting forecast, and a Sustainability Committee plan.
Technology Action Plans for Year 1

**Goal One**

Create and provide FWISD stakeholders the opportunity to attain, learn and apply key technology knowledge and skills to elevate the student learning experience.

**Objective 1.1** Establish core technology competencies to support student learning.

**1.1.1 Incorporate updates to yearly technology surveys to conduct needs assessments**

**Action Steps:**

1. Identify technology-related questions for the District Stakeholder survey
2. Update yearly BrightBytes survey to include questions to match technology initiatives
3. Schedule cross-functional team to identify all stakeholder needs for technology professional development
4. Review and evaluate survey and CFT feedback to develop District’s technology competencies.
5. Identify professional development needs for newly hired employees.
6. Align PD with device rollout and implementation
7. Align PD with District Curriculum

**1.1.2 Align all technology professional development with District technology competencies using recognized technology standards while maintaining compliance**

**Action Steps:**

1. Define district technology competencies
2. Align with recognized technology standards
3. Verify compliance to standards
4. Identify learning opportunities
5. Define and prioritize learning objectives
6. Develop differentiated learning plans

**1.1.3 Align teacher professional development with curriculum**

**Action Steps:**

1. Define curriculum-related technology professional development needs
2. Align with feedback and data results from the survey
3. Identify learning opportunities
4. Define and prioritize learning objectives
5. Develop differentiated learning plans
Goal Two

Create sustainable and efficient standards for device and solution adoptions that meet the needs of all students and programs.

Objective 2.2 Monitor alignment, implementation, and utilization of devices and programs.

2.2.1 Create a process for continuous feedback and support

**Action Steps:**

1. Develop and deploy quarterly surveys to students, teachers, parents, and other stakeholders
2. Update yearly BrightBytes survey to include questions to match technology initiatives
3. Schedule cross-functional team to identify all stakeholder needs for technology professional development
4. Review and evaluate survey and CFT feedback to develop District’s technology competencies.
5. Identify professional development needs for newly hired employees.
6. Align PD with device rollout and implementation
7. Align PD with District Curriculum

2.2.2 Establish processes to monitor alignment and implementation

**Action Steps:**

1. Develop a rubric for measuring alignment to the defined District criterion
2. Conduct yearly verifications to identify devices or programs that are out of alignment. Devices and programs that are out of alignment will be reevaluated to determine inclusion in the District-wide criterion
3. Determine utilization metrics and data gathering techniques
4. Reevaluate/relocate for better utilization
5. If results are positive, a plan for a device refresh cycle is adopted

2.2.3 Create an implementation process

**Action Steps:**

1. Identify Key Stakeholders- Class focused (CTE, art), grade level
2. Build a cross-functional deployment team. (Include involvement of all impacted areas for collaboration)
3. Ensure all registration forms are updated with new device info, AUP
4. Initial deployment will include short professional learning to ensure participants are able to log in, access to Email, Classlink, curriculum, prior documents and files saved to the cloud, and device return.
5. New Teachers should have a separate training from existing teachers (Additional training materials such as short videos should be created for referencing)
6. Weekly Communication - INSIDE FWISD - Town Hall meeting? Videos? MS Team Groups with Specific assignments
7. Revitalize/Rebrand the initiative (Refresh and Reevaluate based on results)
8. Reconfigure the Ed Tech support sites
9. Starting point metrics to determine the application usage through student analytics
10. Onboarding the new device (SCCM) Device Management System
Objective 2.3 Establish a districtwide culture of customer service that encourages stakeholder engagement and partnerships.

2.3.1 Establish specific expectations and turnaround times for servicing student and staff devices (SLAs)

Action Steps:
1. Create stakeholder group to review and provide feedback on current procedure for requesting service
   - Including industry partners, faculty, staff, administrators, parents, students, etc. feedback
   - Including auto-escalation of the tickets
2. Internal analysis of data from stakeholder groups on current processes to identify and bridge customer service gaps based on industry standards & best practices.
3. Implement changes to close gaps and provide data to prioritize tickets
4. Documentation of actions based on trends of recurring issues. (After analyzing all information from customer feedback and reports, changes can be made to improve the service(s))
5. Develop a survey for verification of completion of service attached to the ticket completion email
6. External evaluation (audit) of services provided. Use audit to identify blindspots and subsequent action items
7. Transparency of data, systems, and procedures. A procedure will be documented, including clear steps, screenshots with expectations, and resolution closure. Then the document will be reviewed periodically for proper implementation. (using the results from ticketing systems’ reports as well as customers’ feedback)

2.3.2 Establish processes to monitor alignment and implementation

Action Steps:
1. Develop a rubric for measuring alignment to the defined District criterion
2. Conduct yearly verifications to identify devices or programs that are out of alignment. Devices and programs that are out of alignment will be reevaluated to determine inclusion in the District-wide criterion
3. Determine utilization metrics and data gathering techniques
4. Reevaluate/relocate for better utilization
5. If results are positive, a plan for a device refresh cycle is adopted

2.3.3 Create an implementation process

Action Steps:
1. Identify Key Stakeholders: Class focused (CTE, art), grade level
2. Build a cross-functional deployment team. (Include involvement of all impacted areas for collaboration)
3. Ensure all registration forms are updated with new device info, AUP
4. Initial deployment will include short professional learning to ensure participants are able to log in, access to Email, Classlink, curriculum, prior documents and files saved to the cloud, and device return.
5. New Teachers should have a separate training from existing teachers (Additional training materials such as short videos should be created for referencing)
6. Weekly Communication - INSIDE FWISD - Town Hall meeting? Videos? MS Team Groups with Specific assignments
7. Revitalize/Rebrand the initiative (Refresh and Reevaluate based on results)
8. Reconfigure the Ed Tech support sites
9. Starting point metrics to determine the application usage through student analytics
10. Onboarding the new device (SCCM) Device Management System
Goal Three

Develop an effective & efficient collaborative communication process for all stakeholders to share information, which yields useful data for decision-making that will result in successful students' outcomes.

Objective 3.3 Create a system that uses common language to communicate with all stakeholders of the District.

3.3.1 Identify the audience

**Action Steps:**

1. Determine who needs to receive communication
2. Determine what type of communication this is: District-wide; Central Administration; Campus Administrators; Parents; Teachers; Students; Partnerships
3. Create Canvas Course to track communication and disseminate to different stakeholders, such as P, AP, Child Nutrition Manager

3.3.2 Identify the mode(s) of communication

**Action Steps:**

1. Identify compliance requirements (CIPA/FERPA)
2. Use Multi-Layered approach to reach maximum audience
3. Establish Turn-Around Time for approvals
4. Create an Internal District-Wide Calendar which denotes when each department cannot lose network access (due to testing/payroll/computer updates/etc.)
5. Refer to District-Wide Calendar before sending communication
3.3.3 Create standards for the communication

**Action Steps:**

1. Determine Priority: Emergency; Annual; Quarterly; Monthly; Weekly
2. Two Week Minimum - Advance Notice (recommended) especially if a response or action is expected
3. Identify required authorizations & required cc's
4. Develop a flow chart to select mode of communication-based on audience
5. Create standardized templates to be used for all communication and content
6. Provide Translations (multilingual) for each recipient
7. Use Simplified Language; avoid technical jargon/acronyms
8. Proof and spell check communication
9. Send internally one day prior, if possible
10. If external? Send to Communications for review

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**Goal Five**

**Establish a modern sustainable technology ecosystem to support each 21st-century learner.**

**Objective 5.1** Develop and monitor standards, governance, and PMO oversight to ensure successful technology initiatives.

**5.1.1 Design the committee construct and standards of practice to update and maintain a sustainable ecosystem**

**Action Steps:**

1. Establish a Technology Steering Committee and governance mechanism to support technology initiatives.
2. Determine and document standards for technology infrastructure, computing devices, and classroom technology; update the district education specifications and technology design guide accordingly.
3. Review and standardize procurement processes and authorizations to ensure proper technology input into hardware, software, and technology services.
4. Evaluate all new and existing instructional software and systems to ensure proper agreements and strategic alignments still exist.
5. Review standards and policies to ensure alignment with section 508 compliance for technology purchases.
6. Establish formal CyberSecurity program
Objective 5.2 Define technology autonomies for schools through a theory of action

**Action Steps:**
1. Design and communicate a protocol to engage schools in the theory of action while managing autonomously within the standards for technology infrastructure, computing devices, and classroom technology.
2. Collaborate with campus teams to identify their defined actions aligned to the theory of action.
3. Review and communicate with campus teams progress toward desired outcomes as a result of defined actions.

Objective 5.3 Identify the operating system and standards of practice

**Action Steps:**
1. Create a technology service catalog along with service level agreements (SLAs) for all instructional technology services.
2. Identify Key Performance Indicators (KPIs) for each major technology service.
3. Create or update IT standard operating procedures (SOPs) and policies in alignment with best practices and relevant compliance objectives.
4. Create standard maintenance windows for technology updates and patches.
5. Create an application portfolio, maintained by IT PMO.

Objective 5.2 Provide an equitable and sustainable technology lifecycle.

5.2.1 Develop an equitable and sustainable technology lifecycle

**Action Steps:**
1. Develop a rubric to determine readiness of technology implementations priority.
2. Leverage E-Rate program to maximize financial reimbursement for internet, network equipment, and other eligible services for all District campuses.

Objective 5.4 Modernize the technology infrastructure.

5.4.1 Design and maintain a robust, highly available modern technology infrastructure

**Action Steps:**
1. Upgrade circuits at all schools to 10GB.
2. Upgrade to modern email security platform.
3. Deploy Private LTE network to support student connectivity at home.
RESPONSIBLE ROLLOUT

To ensure the development and maintenance of an effective technology plan that aligns to and supports the FWISD goals, the stakeholder design team recommended the following annual timeline of staffing support. This timeline creates capacity within the system to responsibly implement and continuously support the standards defined in the Technology Profiles for FWISD. It focuses on developing infrastructure through human resources, processes, and systems to deliver an exceptional instructional technology experience across the entire district.

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Composition Breakdown of Cohort (Campuses/Feeder Patterns, Grades, Content Areas, Volunteers, Other, etc.)</th>
</tr>
</thead>
</table>
| Year 1   | • Curriculum & Instruction (content areas) & Digital Learning Specialists (needs assessments for faculty/staff and the ability to integrate tech above the substitution level)  
• All specialty departments/areas and stakeholders are invited and made aware of the plan so they can develop their planning and budgeting for this initiative  
• Establish practices for inventory control for campuses  
• Student Device Team to assist campuses with oversight and coordinate w/CTE and campus Student Tech Squads  
• Identify the champions/liaison at the campuses.  
• Build out the support model and identify current and needed resources  
• Develop the criteria for EDs to select early adopters  
• Internal and external communication with all stakeholders (district, community, etc.) such as town halls, videos, and media (branding) of the plan |
| Year 2   | • Continued Curriculum & Instruction (content areas) & Digital Learning Specialists (needs assessments for faculty/staff and the ability to integrate tech above the substitution level)  
• Device administrators, facilitators, and DoT implement practices for inventory control  
• Confirm availability of devices in the supply chain |

<table>
<thead>
<tr>
<th>Campus Level</th>
<th>Device</th>
<th>Fall 2022</th>
<th>Spring 2023</th>
<th>Device Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School</td>
<td>iPad</td>
<td>18,000</td>
<td>18,500</td>
<td>36,500</td>
</tr>
<tr>
<td>Middle School</td>
<td>iPad</td>
<td>3,000</td>
<td>13,200</td>
<td>16,200</td>
</tr>
<tr>
<td>High School</td>
<td>Macbook Air</td>
<td>15,000</td>
<td>8,000</td>
<td>23,000</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>Macbook Air</strong></td>
<td><strong>36,000</strong></td>
<td><strong>39,700</strong></td>
<td><strong>75,700</strong></td>
</tr>
</tbody>
</table>

Year 3   • Continued Curriculum & Instruction (content areas) & Digital Learning Specialists (needs assessments for faculty/staff; increasing rigor/integration of tech into curriculum)  
• Device administrators, facilitators, and DoT identify, maintain, and improve upon inventory control practices  
• Beginning of planning for replacing devices from initial rollouts based upon aging of devices (for Apple devices - vintage/obsolete designations).
## Professional Development

<table>
<thead>
<tr>
<th>Focus</th>
<th>Target Audience</th>
<th>Responsible Role for Facilitation/ Preparation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic computer knowledge</td>
<td>Teachers, Campus admin, Executive Director</td>
<td>Instructional Technology Specialists</td>
</tr>
<tr>
<td>Identifying early adopters workshop</td>
<td>Executive Directors</td>
<td>3rd-party, Ed Tech</td>
</tr>
<tr>
<td>Tier 1- Support Training</td>
<td>Help Desk</td>
<td>3rd Party</td>
</tr>
<tr>
<td>FWISD Integrations</td>
<td>Cohort 1, 2021 Teachers and campus admins</td>
<td>Ed Tech &amp; Teaching and Learning</td>
</tr>
<tr>
<td>FWISD Integrations</td>
<td>Cohort 2, 2022</td>
<td>Ed Tech &amp; Teaching and Learning</td>
</tr>
<tr>
<td>FWISD Integrations</td>
<td>Cohort 3, 2022</td>
<td>Ed Tech &amp; Teaching and Learning</td>
</tr>
<tr>
<td>Field Support Training</td>
<td>Technician</td>
<td>3rd Party</td>
</tr>
<tr>
<td>Inventory Management</td>
<td>Campus staff, Customer Service, Warehouse</td>
<td>FWISD Technology</td>
</tr>
<tr>
<td>Apple integration with FWISD curriculum</td>
<td>Teaching and Learning, Ed Tech</td>
<td>3rd Party, Ed Tech</td>
</tr>
<tr>
<td>Students Orientation</td>
<td>Students</td>
<td>Teachers/ 3rd party vendor/ Ed Tech/</td>
</tr>
<tr>
<td>Family Orientation</td>
<td>Students</td>
<td>FWISD Technology</td>
</tr>
<tr>
<td>Communication of PD Plan Workshop</td>
<td>All Stakeholders</td>
<td>Communication, School Leadership, Technology, Ed Tech</td>
</tr>
<tr>
<td>Support Materials</td>
<td>All Stakeholders</td>
<td>Communication, Ed Tech</td>
</tr>
</tbody>
</table>
SUSTAINMENT PLAN

Sustaining and maintaining a modern technology learning educational system enlists consideration for infrastructure as well as hardware with a Lifecycle Management plan, allocation of fiscal resources with an Ongoing Sustainment Budget, and clarity around the constraints and Assumptions upon which a forecast is developed.

Lifecycle Management

A robust technology refresh plan is essential to the promotion of productivity and innovation in the classroom. Aged devices can hinder the teachers’ ability in the classroom through the downtime of technology. Aged equipment leads to increased support services, devices out of circulation in repair, incompatibility with newer applications and platforms, with increased cost of ownership being greater than the purchase of new equipment. The table below outlines the expected life cycle for Fort Worth ISD technologies.

<table>
<thead>
<tr>
<th>Lifecycle Expectancy</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Next-Gen Firewall</td>
<td>5</td>
</tr>
<tr>
<td>Network Switches/Routers</td>
<td>7</td>
</tr>
<tr>
<td>Uninterruptible Power Supply</td>
<td>5</td>
</tr>
<tr>
<td>Network Access Points</td>
<td>4</td>
</tr>
<tr>
<td>Desktop Computers</td>
<td>5</td>
</tr>
<tr>
<td>Laptop Devices</td>
<td>4</td>
</tr>
<tr>
<td>Tablet Devices</td>
<td>4</td>
</tr>
<tr>
<td>Data Center Servers</td>
<td>5</td>
</tr>
</tbody>
</table>
SUSTAINABILITY

The last component of the Lead phase in the design process is to determine a continuity and sustainability plan and team construct. The Sustainability Team is charged with optimizing the technology plan from year to year by reviewing goals and outcomes achieved and setting additional milestones for the subsequent year. The design team determined the balance of stakeholder representation needed to sustain the plan as well as a recommended monthly meeting cadence.

COMMITTEE/PLAN

We need this committee to...

- Ensure that decision making is always cross-functional
- Plan and project oversight to ensure completion
- Provide checks and balances; accountability.
- Provide stakeholder involvement from the design process through implementation.
- Plan & Make Recommendations for financial sustainability
- Communicate plan to the greater community

What this committee was designed to do...

- Represent the stakeholders and address their concerns to maintain a clear process.
- Assure alignment with the original goals and objectives
- Review data and results to determine next steps/actions
- Cooperatively problem solve and drive systemic change
- Answer the who, what, where, when, and how

Who this committee represents...

- Well respected members from across FWISD and the community
- Excellent communication & leadership skills; ability to engage all stakeholders to help make this a community project
- Members that will create and maintain stakeholders’ trust (Accountable and committed)
Equal Community Representation

- Community Members
- Local Business Owners
- Students
- Campus-Based Educators
- Campus-Based Leaders
- Non-Technology District Leaders
- Higher Education Members
- Technology Dept. Members

12.5% 12.5% 12.5% 12.5% 12.5% 12.5% 12.5% 12.5%
# Ongoing Sustainment Budget

<table>
<thead>
<tr>
<th>Technology Type</th>
<th>2022-2023</th>
<th>2023-2024</th>
<th>2024-2025</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Tablets</td>
<td>$25,500</td>
<td>$25,500</td>
<td>$25,500</td>
<td>$76,500</td>
</tr>
<tr>
<td>Teacher Laptops</td>
<td>$45,900</td>
<td>$45,900</td>
<td>$45,900</td>
<td>$137,700</td>
</tr>
<tr>
<td>School Administration Devices</td>
<td>$600,000</td>
<td>$300,000</td>
<td>$300,000</td>
<td>$1,200,000</td>
</tr>
<tr>
<td>Student Devices (EL &amp; MS)</td>
<td>$13,500,000</td>
<td>$1,440,000</td>
<td>$1,440,000</td>
<td>$16,380,000</td>
</tr>
<tr>
<td>Student Devices (SH)</td>
<td>$1,980,000</td>
<td>$1,980,000</td>
<td>$1,980,000</td>
<td>$5,940,000</td>
</tr>
<tr>
<td>Classroom Displays</td>
<td>$520,000</td>
<td>$520,000</td>
<td>$520,000</td>
<td>$1,560,000</td>
</tr>
<tr>
<td>Labs/Media Center</td>
<td>$1,200,000</td>
<td>$1,200,000</td>
<td>$1,200,000</td>
<td>$3,600,000</td>
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<tr>
<td>Network Switches</td>
<td>$2,500,000</td>
<td>$2,500,000</td>
<td>$500,000</td>
<td>$5,500,000</td>
</tr>
<tr>
<td>Network Routers</td>
<td>$725,000</td>
<td>$725,000</td>
<td>$725,000</td>
<td>$2,175,000</td>
</tr>
<tr>
<td>Network Wireless Access Points</td>
<td>$900,000</td>
<td>$900,000</td>
<td>$900,000</td>
<td>$2,700,000</td>
</tr>
<tr>
<td>Firewall</td>
<td>$400,000</td>
<td>-</td>
<td>-</td>
<td>$400,000</td>
</tr>
<tr>
<td>PA Systems</td>
<td>$1,500,000</td>
<td>$1,500,000</td>
<td>$1,500,000</td>
<td>$4,500,000</td>
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<tr>
<td>Fire Alarms</td>
<td>$1,350,000</td>
<td>$1,350,000</td>
<td>$1,350,000</td>
<td>$4,050,000</td>
</tr>
<tr>
<td>Security Video Cameras &amp; Access Controls</td>
<td>$625,000</td>
<td>$625,000</td>
<td>$625,000</td>
<td>$1,875,000</td>
</tr>
<tr>
<td><strong>TOTAL COSTS</strong></td>
<td>$25,871,400</td>
<td>$13,111,400</td>
<td>$11,111,400</td>
<td>$50,094,200</td>
</tr>
</tbody>
</table>

## Assumptions

- Sustainment budget does not represent the IT OPEX cost model for all IT services and operations.
- Does not include all IT campus systems such as HVAC sensors, etc.
- Counts include 5% routine failure/replacement pool for devices.
- 1% lost stolen used for teacher devices for replacement within refresh years.
- 6% lost stolen used for student devices for replacement within refresh years.
- E-Rate will cover 85% of Firewall and Network expenses except in the year 2023-2024 and beyond as the $13M allocated to the District will have been spent. The new five-year allocation window starts in 2025-2026.
- Student and Teacher devices will be sold to 3rd parties at end-of-life (EOL) or sold to student(s) for the same amount the District can receive for a device from a 3rd party. Recovered funds will be used to sustain the plan.
Hard Work...Graduation...Dreams...SUCCESS!