

**NAVARRO
INDEPENDENT SCHOOL DISTRICT
TECHNOLOGY PLAN
July 2019–July 2024
Board of Trustees Approval 6/17/2019**

Executive Summary

Our district is committed to providing quality educational opportunities for our students regardless of socioeconomic status. There are high expectations for student achievement from the district, the parents, and the community. In an increasingly competitive global economy, it is not enough for students to acquire subject-level mastery alone. Skills like creativity, problem-solving, communication, critical writing and analytical thinking are necessary for all levels of success, from entry-level jobs to engineering and technical fields. In the 21st century, technology plays a major role in making these expectations become realities. Our district is committed to making technology an integral part of every student's education and supporting our employees' success.

The focus of this plan is to provide training and technical support that interfaces with the individual needs of our educational community. Hardware, software, and personnel needed to support, update, and maintain the technology program adds the dimension of flexibility that is needed for this ever-changing field. Teachers have embraced the concept that we are life-long learners, and that technology integration is a fluid environment, requiring a constant circle of training, implementation, and application.

A sound technology plan, properly implemented, will provide direction that will enable us to reach our goals of utilizing technology to improve instruction, increase efficiency at all levels of implementation, and remain on the cutting-edge of technology advancements. New technologies have the potential to accommodate the needs, interests, and learning styles of our diverse population, thereby individualizing the learning process. Our goal is to increase student achievement and narrow the gap between high and low achievers regardless of ethnicity, socioeconomic status, or ability. We will strive to give students and staff the tools they need to be emergent thinkers, well-equipped to solve the problems of the next century.

TABLE OF CONTENTS

Executive Summary	2
Vision and Goals	4
Assumptions	5
Demographics	5
Needs Assessment	7
Existing Conditions	7
Administrative Systems	7
Infrastructure	7
Staffing	8
Campus Technology Related Activities	8
Career and Technology Courses - High School and Junior High	8
Software	9
Current Campus Technology Setup	9
Technology Needs	11
Evaluation	14
Technology Plan Goals	16
Technology Plan Objectives	17
Goal 1: Improve academic achievement for all students.	17
Goal 2: Provide ongoing, research based, high quality, job related professional development to support teaching, learning and the business of the district.	22
Goal 3: Meet industry standards for technology connectivity, telecommunications, human and hardware resources to support the educational and administrative needs of the district.	24
Goal 4: Provide access to communication and collaboration resource tools to support district operations, campus operations, student achievement and parent connections.	29
Proposed Budget	32
Obsolescence and Replacement Guidelines	33
Replacement Schedules	34

Vision and Goals

Navarro ISD provides a safe, positive environment cultivating creative problem solvers that make sound, ethical decisions.

- We value relationships.
- We engage learners.
- We foster resilience and confidence.
- We encourage forward thinking.

BOARD GOALS for 2019-2024

Goal 1: NISD will provide modern and inviting facilities that inspire a learning community.

Indicators of Success:

- Adequate space for a growing population
- Expanded technology infrastructure
- Safe learning environment with enhanced security measures

Goal 2: NISD will foster and support a professional learning community that attracts and develops a diverse staff that engages all students.

Indicators of Success:

- Competitive compensation
- Foster team attitude for continuous improvement with collaboration at grade, campus, and district levels
- Implement Technology Literacy Proficiency Program to support interactive student learning and technology integration

Goal 3: NISD will meet individual academic needs, challenging students to their highest potential and developing college and career readiness.

Indicators of Success:

- Course offerings, strategies, and extracurricular activities that meet the needs of individual students and prepare them for college and career success.
- Continuous improvement on state accountability measures, such that learning gaps narrow:
- Each campus earns a Domain I (performance of all student groups) grade of "A"
- Each campus improves Domain III performance (student growth) by one letter grade
- The District earns an overall grade of "A"
- Effective communication within the district and campus and between the classrooms and the home.
- Effective counseling and K-12 instruction that addresses communication, social skills, professional character, and work ethic.
- Increase rigor in the classroom to help level out the disparities between grades and campuses, as well as demographic groups.

Digitization and miniaturization of information processing power are expanding exponentially and are changing the world, our lives, and our communities at an overwhelming speed. To be viable, schools must adapt to this new environment. We must embrace and seize technology's potential to capture the hearts and minds of this, the first digital generation, so that the work designed for them is more engaging and respects their superior talents with digital devices and connections.

We hold that:

- The technologies that make this new digital world possible must be viewed as opportunities and tools that can help us in educating and socializing the young both in and outside the school.
- The virtual social-network connected and tech-savvy generation will not tolerate the one size-fits-all mass production structures that limit learning to particular times and places and conventions.
- The potential of learning anywhere, anytime, “any path, any pace” must be embraced. Future learning will be a combination of learning at school, virtual learning, learning at home, and in the community.
- Educational opportunities need to extend equitably to the home.
- Virtual learning should become the norm in every community to meet the needs of students who prefer such an environment.
- The secondary school credit system should be expanded beyond school walls so that any place/any time learning, including virtual learning, are equally valued and supported.
- We (families, schools, churches, youth organizations, etc.) cannot control access to information by the young and recognize that once existing boundaries no longer exist.
- Children and youth need role models and adult guidance and connections even more than in the pre-digital era. However, the role of adults is changing. It is becoming one that is more about facilitating understanding, raising questions, and designing engaging tasks that produce learning rather than lecturing and instructing.
- School leaders, including board members, must work to bring the public into conversations that are needed not just to support these transformations but to help shape them and create ownership.

Assumptions

Our beliefs about the role of technology in education are based on the following assumptions:

- All segments of the District will have equal access to technology resources.
- All buildings will have proper physical layout support in the areas of data connections, electrical outlets, video connections, and air conditioning.
- Technology will support the educational process in all classrooms.
- Learning is a constructivist process where students create their own knowledge through active participation in meaningful tasks.

Demographics

Navarro ISD is comprised of 1943 students. It is located in Central Texas in a semi-rural area. The district has been considered a small rural school district until recently. Over the last 10 years many family farms have been sold to housing developments to serve the growing population of the surrounding cities. There is one campus serving students from pre-kindergarten through grade three, one intermediate school serving grades four, five and six, one junior high school serving grades seven and eight, and one high school.

To increase student achievement, there is a need to individualize the educational process to accommodate the needs, interest, current knowledge, and learning styles of each student. Technology has this capability. Racial and ethnic disparities in the accessibility of technology within the home constitute a great concern. Equitable access to information technologies is necessary for the education of bilingual and migrant students. Access to educational technologies is more valuable to low-achieving students than to their higher-achieving peers.

There is a need to expand students’ scope of knowledge by providing for a wider range and greater depth of information. The Internet puts vast amounts of knowledge at the student's fingertips. New computing and

networking technologies have the potential to empower historically disadvantaged groups of Americans with greater access to the sorts of knowledge-building and communication tools that might help them to overcome at least some of their respective disadvantages.

Technologies have the potential to substantially mitigate some of the disparities associated with socioeconomic variables. With no major industry in this rural, Central Texas county, students have limited awareness of job possibilities and the competencies required to enter the workforce.

To enable Navarro ISD students to participate in the world economy and to engage in highly-compensated economic activities, technological resources are needed for students to access information educational software through a variety of remote opportunities, consult with experts in a variety of fields, and further expand their own knowledge and experiences. Navarro ISD students need learning environments that extend beyond the walls of the school or the limited resources of the rural community.

Needs Assessment

A comprehensive needs assessment utilizing data from teacher surveys, meetings with Campus Technology committees, and inventories was conducted to analyze the current status of technology in the district and determine future needs. Items analyzed included: infrastructure, hardware, software, programs, courses, technology resources, staff development, and technical support. Results from the needs analysis are as follows:

Existing Conditions

Administrative Systems

- District-provided global electronic mail accounts for all staff members
- Written policies in place on acceptable use of the Internet, World Wide Web content, network management, and equipment donations.
- District web page (Edlio)
- Combined Finance and Student Information System (TxEIS)
- Data Management Program (Eduphoria)
- Site Based Plans Management System (Plan for Learning)
- PEIMS Data Review System (OnData Point)
- Electronic Evaluation System (Eduphoria)
- Professional Development Portfolio System for staff (Eduphoria)
- Emergency Notification System (K12 Alerts)
- District Wide Library circulation and catalog automated (Destiny)
- District Wide Textbook System (Destiny)
- District Wide Asset Management System (Destiny)

Infrastructure

- Internet 1000GB (Spectrum) to TXED at the Education Service Center Region 13 in Austin
- ShoreTel Telephones and voicemail in every classroom and office
- Direct access to the Internet for all students and staff
- Fiber optic backbone and digitally switched technologies
- Single mode fiber (10gig) - connecting Core in Technology Center, Band Hall, Event Center, Elementary School and Intermediate Annex
- 4-Layer 3 Cisco 2960 10/100/1000 - 24 port 10G switches - Elementary School
- 6-Layer 3 Cisco 2960 10/100/1000 - 48 port 10G switches - Core in Technology Center
- 1-Layer 3 Cisco 3850 10/100/1000 - 48 port Elementary School
- 1-Layer 3 Cisco 4500-X 10/100/1000 - 16 port Event Center
- 3-Layer 3 Cisco 2960 10/100/1000 - 24 port Elementary School
- 7-Layer 3 Cisco 2960-X 10/100/1000 - 48 port Junior High School, AG Buildings, Portables
- 12-SmartPro 1.5kVA 1350W Line Interactive Sine Wave Uninterrupted Power System
- Cisco Meraki Wireless Management System
- 21-Meraki MR42 Cloud Managed Access Point
- 25 Layer 3 Cisco 3560 10/100 48 port switches - Intermediate, Junior High, and High School campuses
- 20 Layer 3 Cisco 3560 10/100 24 port switches - Intermediate, Junior High, and High School campuses
- 25 UPS - Uninterrupted Power Supplies
- 31-Meraki MR16 Cloud Managed Access Points
- 142-Meraki MR18 Cloud Managed Access Points
- 11-Meraki MR66 Cloud Managed Access Points
- 10 centrally located servers (6 virtual servers)
- Ethernet to the desktop in every classroom - 4 drops in older Elementary, 8 drops in new Elementary classrooms, 1-2 drops in Intermediate and Junior High classrooms, 6 drops in High School classrooms

Staffing

Technology Director (district wide)
Network Administrator
Technology Specialist (district wide)
High School/Junior High School Instructional Technologist
Elementary School/Intermediate School Instructional Technologist
Campus Webmasters
Dedicated Registrars/PEIMS clerk at Elementary School, Intermediate School and High School
Shared Registrar/PEIMS clerk/Campus Secretary at Junior High School
Dedicated Librarians at Elementary School and Intermediate School
Shared Librarian at Junior High School and High Schools

Campus Technology Related Activities

Career and Technology Courses - High School and Junior High

Digital and Interactive Media (DIM)
Information Technology & Security Academy
Principles of Information Technology

Dual Enrollment Distance Learning College Level Academic Classes
Hour of Code - All campuses
Weekly news broadcast - Intermediate School
Lego Mindstorm Robotics Teams - Intermediate, Junior High and High Schools

Software

IXL Math	NWEA: Map	Apex	BrainPop	Reading Eggs
Accelerated Reader	Study Island	Flocabulary	BrainPop/BrainPop Jr	Rosetta Stone
Star Reading	Britannica Spanish Reference Center	Read 180	TEKS Resource System	System 44
Star Math	Discovery Education Streaming	Starfall	Go Guardian	OverDrive
400 iPad Apps	Gale Databases	Eduphoria	Boardmaker	Turnitin
iStation	Online Textbooks	iCEV	Stemscopes	World Book Online
Reading Plus	Britannica Online	Destiny	Learning.com	IXL
Squid	WeVideo	Plan 4 Learning	Meraki	Premiro Edge/School Cafe
Go Guardian	Office 365	LanSchool	Ondata Suite	Sophos
TxEIS Suite	Destiny	Applitrack	Boardbook	LightSpeed
Timeclock Plus	ESPED	Testhound	AESOP	GoGopher Suite

Current Campus Technology Setup

Navarro High School

1>1 Chromebook implementation at the High School
 4 (30 unit) course specific computer labs
 1 (30 unit) computer lab attached to the library
 1 (30 unit) iPad cart for band
 NEF Funded 3D Printer
 1>1 desktop for teachers
 1>1 Chromebook for teachers
 iPads for teachers when requested
 LCD projector in all classrooms
 Sound/projector system in gym/cafeteria
 Closed circuit television system
 Video security system - Stand alone system
 Paging/Announcements system

Navarro Junior High School

1>1 Chromebook implementation at the Jr High School
 1 (20 unit) iPad cart for Art
 1>1 desktop for teachers

1>1 Chromebook for teachers
iPads for teachers when requested
LCD projector in all classrooms
Epson Interactive Projector in all Science Classrooms
Sound/projector system in gym/cafeteria
Video security system - Stand alone system
Paging/Announcements system

Navarro Intermediate School

5 iPad carts (22-30 iPads per cart) 12 Chromebook carts (25-30 Chromebooks per cart)
2 iPod carts
5 iPads per classroom (4th and 5th)
NEF funded Chromebooks/iPads in some classroom
NEF Funded 3D Printer
1>1 desktop for teachers
1.> tablet Windows for teachers
1>1 iPad for teachers
1 (40 unit) dedicated computer lab Interactive board and projector in all classrooms

Sound/projector system in cafeteria
Closed circuit television system (CCTV)
Video security/Access Control systems
Paging/Announcements system

Navarro Elementary School

5 iPad carts with 22 - 30 iPads
1 iPod cart
5 iPads per classroom
NEF funded Chromebooks/iPads in some classroom
1>1 desktop for teachers
Extended desktops in some classrooms
1 (30 unit) dedicated computer lab
1 (25 unit Chromebox) sign-up lab Interactive board in all classrooms
LCD projector in grade 1-3 classrooms
Epson Interactive Projector - PreK and Kindergarten
Sound/projector system in gym/cafeteria
Closed circuit television system
Video security system - Stand alone
Paging/Announcements system

Technology Needs

Elementary School Campus

- Replace teacher computer/workstation (current 2009-2010)
 - Replace computer/workstation for administrative staff (2009)
 - Replace virtual systems devices in library/classrooms with chromebooks/chromeboxes
 - Replace units in dedicated computer lab with ChromeBoxes and monitors with web cameras (2009-2010)
 - Replace monitors in ELF lab with monitors with web cameras
 - 4 Printers for classrooms/offices
 - Integration of technology TEKS into the classroom on a consistent basis
 - Replace interactive boards with interactive projectors
 - Add HDMI as an input for projectors
 - Increased access to other technologies (iPads, chromebooks, other emerging trends)
 - 2 (30 unit) Chromebook carts for campus projects and testing
 - Access Points Upgrade existing Access Points add additional for better coverage - apx 25
-
- Upgrade security video system to district standard
 - Upgrade CCTV and video announcements

Intermediate School Campus

- Replace computer/workstations for administrative staff (2009)
- Replace computers with ChromeBoxes in signup lab
- Continued Integration of technology TEKS into the classroom on a consistent basis
- Increased access to other technologies (iPads, chromebooks, other emerging trends)
- 1 chromebook cart (30 chromebooks) per 6th grade teacher
- Upgrade CCTV system and video announcements

Junior High School

- Replace teacher computer/workstation (2010)
- Replace computer/workstation for administrative staff (2009)
- Replace computers in course specific computer lab (2012)
- Add HDMI as an input for projectors.
- Add additional cameras to video security system connected to district network
- Interactive projectors
- Integration of technology TEKS into the classroom on a consistent basis
- Upgrade Access Points
- 1>1 Chromebook replacements

High School

- Replace teacher computer/workstation (2012)
- Replace computer/workstation for administrative staff (2009)
- Add HDMI as an input for projectors
- Interactive projectors

Integration of technology TEKS into the classroom on a consistent basis

Current software for CTE computer lab (Adobe, Microsoft, etc)

Upgrade video security system

Upgrade Access Points

Purchase chromebooks for freshman class

1>1 Chromebook replacement

Central Office

Replace computer/workstation for administrative staff

Access points

District

4 New Servers

Storage Array Network (SAN) with multiple chassis that allows for redundancy and hard drive space to accommodate online content

Connection to fiber backbone - Athletic Field

Upgrade video security system

Upgrade phone system

Work on district and campus websites to increase ADA accessibility

Upgrade digital archive system

Evaluation

The purpose of the District's technology plan is to focus technology resources on increasing student achievement and the efficient and effective management of data. The technology plan will be evaluated to determine if the written plan has the potential to create change in the District. The evaluation of the plan will focus on the potential to change instruction to better meet the needs of the diverse NISD student population.

The technology plan will undergo a rigorous evaluation process that will be both formative and summative. Monitoring reports will be made to the Superintendent at mid-year and at the end of the budget year. The Technology Director will be responsible for these reports. The formative reports will answer these questions:

- Are we meeting our defined objectives?
- Are the activities listed in the plan adequate to meet the objectives?
- What changes should be made in the technology plan?

The summative evaluation process will monitor our progress towards the following:

- Curriculum documents will be revised to meet the changing state standards and the integration of technology. Progress will be documented through staff participation in planned on-site and out-of-district curriculum development activities.
- Promotion of technology and Internet literacy among students will be encouraged by assigning students interactive projects, research via search engines and in on-line resources and other activities designed to take full advantage of current technology. Progress will be determined through reviewing teacher lesson plans, student computer log-in reports, and student projects.
- Technology knowledge and training needs assessments will be given to staff and students as an ongoing self assessment of their skills and needs. Data will be analyzed from these self assessments to determine additional staff development and student needs.
- On-going, sustained, and intensive, high-quality professional development will be scheduled which will enhance the use of technology to create new learning environments. Evidence of this activity will be documented in the District Staff Development Plan and through the district school calendar. Participants will complete evaluation instruments rating the staff development sessions. Data will be analyzed for the overall effectiveness of the programs.
- Activities will be planned and evaluated that lead to improvements in classroom instruction that prepares students to meet challenging student academic achievement standards. Progress will be evaluated through student projects, teacher lesson plans, and improvement in student performance on State and local assessments, the number of students taking Advanced Placement courses and tests, and an increase in the number of students working towards a Distinguished Achievement Certificate.
- Technology advancements will be used to collect, manage and analyze student data to enhance school improvement efforts. Staff meetings to discuss disaggregated data and strategies for improvement will be documented. Student achievement data will be tracked to determine strengths and weakness within the curriculum and among staff members.

The District Technology Committee will compile data to evaluate the effectiveness of the technology plan in terms of the stated objectives. The Technology Committee will make recommendations for the revising and updating of the technology plan. The Superintendent and Board will review the recommendations, set policy, and allocate funds to support technology for the District.

Technology Plan Goals

Goal 1: Improve academic achievement for all students.

- Objective 1: Implement the Technology Integration Matrix (TIM) model to support an interactive student learning environment and technology integration into the standard curriculum.
- Objective 2: Enable all students to demonstrate solid proficiency and independent use of technology supporting academic achievement and college and career readiness.
- Objective 3: Teachers and staff will utilize appropriate technology resources to support the diverse learning needs of students.
- Objective 4: Administrators, teachers, students and parents will have access, as appropriate, to technology resources to support teaching, learning and the business of the district.

Goal 2: Provide ongoing, research based, high quality and job related professional development to support teaching, learning and the business of the district.

- Objective 1: Provide professional development opportunities aligned to the ISTE Teacher and Administrator Technology Standards and the T-TESS and T-PESS technology expectations.
- Objective 2: Provide professional development in a variety of formats to meet the individual and collective needs of district staff.

Goal 3: Meet industry standards for technology connectivity, telecommunications, human and hardware resources to support the educational and administrative needs of the district.

- Objective 1: Provide necessary human resources to facilitate technology as an integral part of administrative and instructional systems.
- Objective 2: Create and maintain a broad-based technology capacity among services.
- Objective 3: Install, maintain, enhance or replace as necessary intra-campus and inter-campus network connectivity, including cabling, networking equipment and wireless access.
- Objective 4: Provide minimum guidelines and standards for network and classroom infrastructure, hardware purchase, implementation, maintenance and replacement.
- Objective 5: Establish selection procedures, acquire, maintain, update or replace software and electronic resources.
- Objective 6: Implement a district wide Storage Array Network (SAN) and/or backup solution.
- Objective 7: Implement a district wide power management solution.
- Objective 8: Implement district wide security measures.

Goal 4: Provide access to communication and collaboration resource tools to support district operations, campus operations, student achievement and parent connections.

- Objective 1: Provide systems to support the acquisition, transmittal and analysis of student performance data to support instructional improvement.
- Objective 2: Expand communication with parents and community partners through technology to increase student performance, community engagement and school to home communications.
- Objective 3: Provide services and maintenance to support communication for human resources, business operations, strategic planning and employee collaboration district wide.

To achieve each goal and objective, strategies and activities have been identified in the tables that follow. In addition, evaluation strategies have been identified to monitor progress in implementing the plan.

Technology Plan Objectives

Goal 1: Improve academic achievement for all students.				
Objective 1.1: Implement the Technology Integration Matrix (TIM) model to support an interactive student learning environment and technology integration into the standard curricula.				
Budget Category: \$0.00				
Strategies:		Evidence:	Person(s) Responsible:	Timeline:
1.1.1	Implement the Technology Literacy and Proficiency Program for all classroom teachers and administrators.	Staff Development Timeline and Progress Updates	Chief Academic Officer	2019-2024
1.1.2	Monitor and Review the TLPP annually to adjust strategies, timelines and progress toward overall goals.	Meeting Minutes Annual Review Assessment	Chief Academic Officer	2019-2024
1.1.4	Divide campus teachers into cohorts based skill sets.	Campus Cohorts	Instructional Technologists; Chief Academic Officer	2019-2024
1.1.5	Schedule lesson planning sessions with cohorts to assist in identifying team goals for integrated lessons.	Lesson Planning Sessions	Cohort Teachers; Instructional Technologists	2019-2024
1.1.7	Cohort teams will identify at least 2 common goals for technology integration each year to implement within the classroom to assist in building the teacher technology tool kit.	Lesson Planning Sessions Staff Development	Campus Administrators; Instructional Technologists; Chief Academic Officer	2019-2024
1.1.8	Create classroom examples of technology integration based on TIM tied to NISD YAG and Curriculum.	Video Database creation	Classroom Teachers; Instructional Technologists; Chief Academic Officer	2020-2024

Goal 1: Improve academic achievement for all students.				
Objective 1.2: Enable all students to demonstrate solid proficiency and independent use of technology supporting academic achievement and college and career readiness.				
Budget Category: \$1,314,955.00				
Strategies:		Evidence:	Person(s) Responsible:	Timeline:
1.2.1	*Provide online Tech App curriculum for grades K-5	Use of curriculum, lesson plans	Technology Director	2019-2024
1.2.2	Develop benchmark assessments in Technology Applications to be administered yearly to grades 3 and 5 to monitor basic skills progress in alignment with the TEKS.	Development/Identification of Benchmark assessments	Chief Academic Officer; Instructional Technologists; Technology Director	2019-2024
1.2.3	Provide the yearly benchmark assessment to 8th grade students using Learning.com in accordance with TEC 39.0235.	Completion of Benchmark assessment	Chief Academic Officer; Instructional Technologists; Technology Director	2019-2024
1.2.4	Provide 3rd and 5th grade students with a yearly technology applications benchmark to monitor basic skills progress in alignment with Technology Applications TEKS.	Completion of benchmark assessments	Technology Director; Chief Academic Officer	2019-2020
1.2.5	Maintain 1:1 technology devices to students at the Junior High and High School.	Purchase of devices to maintain 1:1 access	Technology Director; Chief Academic Officer	2019-2024
1.2.6	Increase student use of technology at the Elementary and Intermediate campuses through the use of carts.	Purchase of additional devices to reach 2:1 access of device to students	Technology Director; Chief Academic Officer	2020-2024
1.2.7	Develop a scope and sequence of technology concepts and skills based on the Technology Applications TEKS (K-8) and ISTE NETS within the curriculum.	Published Scope and Sequence of skills aligned to Technology Applications TEKS and ISTE NETS within the curriculum	Instructional Technologists; Chief Academic Officer	2019-2018
1.2.8	Examine the Technology Applications TEKS by grade level and create a curriculum guide of technology competencies for students.	Technology Applications TEKS Introduction, Practice and Mastery Guide for all grade levels to accompany all grade level curriculum	Instructional Technologists; Chief Academic Officer	2019-2024
1.2.9	Incorporate Technology Applications TEKS into content area YAGs for grades K-8.	Technology Applications TEKS added to YAGs	Classroom Teachers; Instructional Technologists	2019-2020
1.2.10	Promote Technology Applications offerings at the elementary and intermediate campuses to support student acquisition of basic and programming skills to	Technology Applications Courses available to Grades K-6. Score and Sequence	Campus Administrators; Chief Academic Officer	2019-2024

	support classroom learning.	documents.		
1.2.11	Provide training annually to all students in cyber-bullying, cyber education and Internet safety.	Classroom lesson planning documents Delivery schedule	Chief Academic Officer	2019-2024
1.2.12	Provide online testing opportunities for students through Eduphoria, MAP and formative assessment instruments.	Purchase of Testing Student Data	Chief Academic Officer; Technology Director	2019-2024
1.2.13	Provide electronic and online support for student online career portfolios through the Success 101 course at the High School.	Student online portfolios	Chief Academic Officer; CTE Director; High School Principal	2019-2024
1.2.14	Identify the appropriate Career and Technology Education Pathways for students to meet industry guidelines and certification requirements.	CTE pathways STudent Information meetings Course Development Certification of Students.	Chief Academic Officer; CTE Director Instructional Technologist	2019-2024
1.2.15	Provide instructional support resources and study materials online and through classroom integration to support increased student performance on the SAT, ACT, PSAT and TSI.	Online Instructional Resources to Students using 1:1 devices SAT,ACT, PSAT, TSI performance rates	Chief Academic Officer; High School Principal; High School Academic Dean; High School Librarian	2019-2024
1.2.16	Facilitate options for online dual credit options, AP courses, certification programs and career pathways in collaboration with local college and universities.	Online course offering AP course support Certification programs Career Investigation Programs	Chief Academic Officer High School Principal; High School Academic Dean	2019-2024
1.2.17	Provide access to online career investigation programs and resources to elementary, intermediate and junior high campuses to support college and career pathways.	Access to Online Career Investigations NEPRIS	Chief Academic Officer; Campus Principals	2019-2020
1.2.18	Identify and locate funding to support a Learning Management System to support student learning needs in an environment that support single sign-on access to classroom resources, syllabus materials, grades, coursework, homework and other study materials.	Review of Resources Analysis of funding source District Selection of Product.	Chief Academic Officer; Technology Director	2020-2021
1.2.19	Purchase a Learning Management System to support student learning needs in an environment that support single sign-on access to classroom resources, syllabus materials, grades, coursework, homework and other study materials.	Purchase of System	Chief Academic Officer	2021-2024
1.2.20	Create a district implementation plan to phase in campus, student, teacher and parent use of the Learning Management System.	Development of Implementation Plan	Chief Academic Officer; Instructional Technologists	2021-2024
1.2.21	Implement a 2 year adoption process of the Learning Management System for campuses, teachers, students and parents.	Implementation of Program Professional Development Sessions Training Materials	Chief Academic Officer; Instructional Technologists	2021-2023
1.2.22	Develop course sequences for grades 4-6 to ensure an alignment of increasing technology exposure and skill among students as they progress through Technology Applications TEKS.	Course Sequence Development	Chief Academic Officer; Instructional Technology Specialist	2019-2020

Goal 1: Improve academic achievement for all students.

Objective 1.3: Teachers and staff will utilize appropriate technology resources to support the diverse learning needs of students.

Budget: \$601,500.00

Strategies:		Evidence:	Person(s) Responsible:	Timeline
1.3.1	Continue support and funding of summer and after school gifted and talented programs incorporating robotics and science investigations.	Summer Robotics and Engineering Program Robotics and Engineering clubs; Summer Enrichment Program.	GT/Advanced Academics Specialists	2020-2021
1.3.2	Support electronic ARD, Goal and IEP programs district-wide.	Software utilization Professional Development	Director of Special Education	2019-2024
1.3.3	Provide technical and instructional support for special education software to support assistive and adaptive	Software utilization Installation and	Technology Director	2019-2024

	technology needs.	Maintenance of Systems		
1.3.4	Adopt and Maintain digital formative and summative assessment tools for teachers to utilize in the digital classroom.	Implementation of digital assessment tools in the classrooms	Chief Instructional Office	2019-2024
1.3.5	Maintain campus and district website presence to provide instructional resources and content online to support curricula.	Maintenance of the TEKS Resource System Online Instructional and Library Databases Online Textbook Resources	Technology Director	2019-2024
1.3.6	Identify and locate funding to support a Learning Management System to support student learning needs in an environment that support single sign-on access to classroom resources, lesson plans, syllabus materials, grades, coursework, homework and other study materials.	Review of Resources Analysis of funding source District Selection of Product.	Chief Academic Officer; Technology Director	2018-2019
1.3.10	Continue the use of MAP assessments to support Math, Reading, Writing and Science to measure achievement levels as they are tied to RtI, student learning needs, current TEKS readiness, potential STAAR performance and College and Career Readiness.	Purchase of MAP Student Testing Data	Chief Academic Officer; Campus Principals	2019-2023
1.3.11	Continue to support the use of Eduphoria Aware to develop common unit assessments to track student progress toward academic goals.	Eduphoria Training Common Assessments Online Assessment Data Review by Teaching Teams	Chief Academic Officer; Campus Principals	2019-2023
1.3.12	Use Edmentum to support credit recovery or acceleration of credit for High School graduation.	Purchase of program Yearly Subscriptions Student Course Completion	Chief Academic Officer; High School Principal	2019-2023
1.3.13	Use and expand IXL Math, Imagine Math and Apex, and System 44 as RtI support for Elementary , Intermediate and Junior High students struggling in Math.	Purchase of program yearly subscription Student use data	Chief Academic Officer; Technology Director; Campus Principals	2019-2023
1.3.14	Use and expand Summer Reading Program options for PreK and ESL students.	Purchase of Program Yearly Licenses GROW project Data	Chief Academic Officer; Instructional Technologist; Technology Director; Elementary Principal	2019-2023
1.3.15	Use Accelerated Reader as a supplemental reading program to promote student interest in reading and advance reading levels for all students.	Purchase of Program Yearly Licenses Student reading data Student Assessment Levels	Chief Academic Officer; Technology Director; Campus Principals	2019-2024
1.3.16	Utilize and support library databases as supplemental classroom instructional supports - GALE Databases, Britannica Online, Britannica Spanish, Discovery Education Streaming.	Maintenance of Library Databases Student, Parent and Teacher access Usage Reports	Librarians; Technology Director	2019-2023
1.3.17	Use existing reading intervention programs to assist struggling readers - STAR Reading, Flocabulary, Read 180, System 44, iStation, StarFall, Read 180, Reading Plus, Apex..	Purchase of Program Licenses Student/Campus Usage Reports	Chief Academic Officer; Campus Principals	2019-2024
1.3.18	Review usage reports of reading and math intervention programs to streamline campus use and vertically align intervention programs.	Review Committee Assignment Meeting Minutes Program Recommendations	Chief Academic Officer	2019-2023
1.3.19	Provide access to BrainPop and BrainPop Junior for classroom teachers to provide classroom supplemental materials and online instructional support.	Purchase of Brain pop Student/Campus Usage Reports	Technology Director, Chief Academic Officer	2019-2023
1.3.20	Provide remote learning access for homebound students.	Usage Reports Network Connectivity Availability of Devices State Waiver	Chief Academic Officer; Technology Director	2019-2023

		Application		
1.3.21	Provide equipment and software to support Career and technology programs at the High School and Junior High Campus.	Purchase of equipment and software.	Chief Academic Officer; CTE Director	2019-2023

Goal 1: Improve academic achievement for all students.

Objective 1.4: Administrators, teachers, students and parents will have access, as appropriate, to technology resources that support teaching, learning and the business of the district.

Budget: \$2,150,000.00

Strategies:		Evidence:	Person(s) Responsible:	Timeline:
1.4.1	Develop a library services plan outlining library standards and expansion needs to support instruction.	Plan Development	Technology Director	2019-2023
1.4.2	Encourage email communication with parents and community by staff members.	Published email addresses	Chief Academic Officer, Technology Director	2019-2023
1.4.3	Provide training support to parents for the use of online communication tools concerning student grades, teacher communication, lesson plans and online systems.	Training Logs, Records of Participation	Chief Academic Officer, Instructional Technologists	2019-2023
1.4.4	Provide real time access to parents of their student's grades at all campuses.	Software installed and in use, Link on Web Page, Parent Login	Technology Director	2019-2023
1.4.5	Maintain home user access to NISD Library Systems for community, students, parents and homebound students.	Software installed and in use	Technology Director	2019-2023
1.4.6	Increase the use of electronic communication (Google/Office 365) to increase efficiency and effectiveness and decrease expenditures for paper.	Automated Processes Cloud-based Docs	NISD Staff	2019-2023
1.4.7	Provide ongoing training to staff in the use of communication systems	Training Logs	Instructional Technologists	2019-2023
1.4.8	Maintain teacher web pages to facilitate one way communication between teachers, students, parents and the community.	Web Pages	Technology Director, Campus Webmasters, Campus Administrators, Instructional Technologists	2019-2023
1.4.9	Increase the use of automated communication systems to inform parents of events and student needs. K-12 Alerts and Remind	Programs in use	Technology Director	2019-2023
1.4.10	Develop parental access to online systems that will allow for payment of student activities.	Programs researched and purchased, implemented	Technology Director Business Manager	2019-2023
1.4.11	Provide online learning opportunities that provide simulations or virtual environments to students to experience real world learning (e.g. virtual field trips; science experiments).	Publication in lesson plans	Instructional Technologists	2019-2023
1.4.12	Incorporate simulations from online content curricula.	Publication in lesson plans Maintenance of online textbooks	Chief Academic Officer; Technology Director; Instructional Technologists	2019-2023
1.4.13	Maintain online delivery of content for credit recovery and dropout prevention.	Maintenance of Credit Recovery and Dropout Program	High School Campus Administrator	2019-2023
1.4.14	Implement the device replacement schedule for all users.	Replacement purchases	Technology Director	2019-2023
1.4.14	Maintain the purchase and loading of assessment databanks to support online test development for students and teachers.	Purchase of assessment databanks	Chief Academic Officer; Technology Director	2019-2023
1.4.16	Maintain the online textbook cataloging system.	Maintenance of system	Technology Director	2019-2023
1.4.17	Maintain a standard classroom technology configuration schedule identifying hardware, infrastructure and devices necessary for the 21st Century classroom.	Classroom Technology Configuration Schedule	Technology Director; Chief Academic Officer	2019-2023
1.4.18	Maintain a standard office/administrative configuration schedule identifying hardware, infrastructure and devices necessary to support the business of the district.	Office/Administrative Configuration Schedule	Technology Director; Chief Academic Officer	2019-2023
1.4.19	Develop standard software/online resource image for students.	Software Procedure	Technology	2019-2023

			Director; Chief Academic Officer; Instructional Technologists	
1.4.20	Develop a standard software/online resource image for teachers.	Software Procedure	Technology Director; Chief Academic Officer; Instructional Technologists	2019-2023
1.4.21	Develop a standard software/online resource image for administrators and District/Campus office staff.	Software Procedure	Technology Director; Chief Academic Officer; Instructional Technologists	2019-2023
1.4.22	*Expand existing closed circuit television (CCTV)access to allow for video streaming on campus sites.	Closed Circuit television updated	Technology Director	2021-2024

Goal 2: Provide ongoing, research based, high quality, job related professional development to support teaching, learning and the business of the district.

Objective 2.1: Provide professional development opportunities aligned to the ISTE Teacher and Administrator Standards and the T-TESS and T-PESS technology expectations.
Budget: \$0.00

Strategies:		Evidence:	Person(s) Responsible:	Timeline:
2.1.1	Develop the iSucceed University as the storehouse of professional development resources, courses and trainings.	Website Launch	Chief Academic Officer; Instructional Technology Specialists	2019-2023
2.1.2	Create in-house training videos and handouts to address common technical and basic skills for staff.	Posted videos, online training and instructional materials.	Chief Academic Officer; Instructional Technology Specialists	2019-2023
2.1.3	Meet with cohort groups to identify group training needs.	Meeting Minutes	Instructional Technology Specialists	2019-2023
2.1.4	Provide staff development sessions based on cohort group needs.	Training Materials Attendance Rosters	Instructional Technology Specialists	2019-2023
2.1.5	Develop a comprehensive training schedule to meet overall district needs.	Training Schedule Attendance Rosters	Instructional Technology Specialists; Chief Academic Officer	2019-2023
2.1.6	Schedule meetings with classroom teachers to develop individualized training plans to assist in advancing technology integration.	Completed staff development plans	Instructional Technology Specialists;	2019-2023
2.1.7	Incorporate competencies into the campus and district teacher and administrator evaluation documents.	Evaluation documents	Chief Academic Officer	2019-2023
2.1.8	Provide professional development to campus and district administrators to support technology integration based on the Technology Integration Model.	Training Rosters Training Materials	Chief Academic Officer	2019-2023
2.1.9	Provide campus administrators with teacher integration levels based on the Technology Integration Matrix and ISTE Standards.	Teacher levels	Chief Academic Officer	2019-2023
2.1.10	Work with district administrator to develop walk-through instruments to assess technology integration based on teacher level as related to T-TESS.	Completed walk-through documents	Chief Academic Officer	2019-2023

Goal 2: Provide ongoing, research based, high quality, job related professional development to support teaching, learning and the business of the district.

Objective 2.2: Provide professional development in a variety of formats to meet the individual and collective needs of district.

Budget Category: \$50,000.00

		Evidence:	Person(s)	Timeline:
--	--	-----------	-----------	-----------

Strategies:			Responsible:	
2.2.1	Develop technology training that is job embedded for teachers, administrators and support staff.	Technology training courses	Chief Academic Officer; Instructional Technology Specialists	2019-2023
2.2.2	Expand existing online tutorials to provide just in time training for district technology resources.	Online Tutorial Publication	Chief Academic Officer; Instructional Technology Specialists	2019-2023
2.2.3	Maintain the use of Eduphoria workshop to provide online professional development, post face to face training sessions and track existing staff development activities.	Eduphoria maintenance and contract	Chief Academic Officer; Technology Director	2019-2023
2.2.4	Use Eduphoria Strive to match appraisal data with staff development data and goal setting.	Strive Implementation Planning Training Materials and rosters	Chief Academic Officer; Technology Director	2019-2023
2.2.5	Provide face to face training for parents and community members in the use of district resources.	Training materials Attendance rosters	Chief Academic Officer; Instructional Technology Specialists	2019-2023
2.2.6	Provide technology trainings and resources for new employees yearly.	Training Materials Attendance rosters	Chief Academic Officer; Instructional Technology Specialists	2019-2023
2.2.7	Model appropriate technology use in all staff development sessions.	Training Materials Observation data	Chief Academic Officer; Instructional Technology Specialists	2019-2023
2.2.8	Provide opportunities for staff to attend out of district technology trainings and state level conferences.	Training Rosters Conference Attendance	Chief Academic Officer; Technology Director	2019-2023
2.2.9	Maintain the use of web-based data tools (Aware; OnData Point; Lead4Ward) to assist campuses and district with data analysis through professional development offerings.	Training Documentation Attendance Rosters Use of Data	Chief Instructional Office; Instructional Technology Specialists	2019-2024

Goal 3: Meet industry standards for technology connectivity, telecommunications, human and hardware resources to support the educational and administrative needs of the district.

Objective 3.1: Provide the necessary human resources to facilitate technology as an integral part of administrative and instructional systems.

Budget: \$266,000.00

Strategies:		Evidence:	Person(s) Responsible:	Timeline:
3.1.1	Maintain certification levels of all technical and instructional support staff to continue quality services on products supported by the district.	Documentation of completed certifications Goal setting documents	Chief Academic Officer; Technology Director	2019-2024
3.1.2	Track staff development of all district technology staff.	Professional development transcripts	Chief Academic Officer; Technology Director	2019-2024
3.1.3	Maintain and enhance instructional technology skills among Instructional Technologists to support teachers, administrators and paraprofessional staff.	Training materials; Professional Development Transcripts	Chief Academic Officer	2019-2024
3.1.4	Maintain a training schedule and support structure at the campus level to support cohort teams and technology integration best practices.	Training schedule	Instructional Technologists; Chief Academic Officer	2019-2024
3.1.5	Assess progress of teachers and administrators through the TLPP	T-TESS	Campus	2019-2024

	(Technology Literacy and Proficiency Program).	T-PESS	Administrators; Chief Academic Officer;	
3.1.6	Provide professional learning opportunities to district and campus administrators to support the TLPP and appropriate uses of technology.	Training dates and materials	Chief Academic Officer	2019-2024
3.1.7	Evaluate district needs and provide necessary human infrastructure to support PEIMS, Libraries, technology training, maintenance and network services to approach industry standards.	Needs Assessment and Documentation	Chief Academic Officer; Technology Director	2024-2023
3.1.8	Add 1-2 support technicians to approach industry technician standards for end users in mid-sized organizations (375 end users to 1 technician).	Industry standards End User Totals Work Orders	Technology Director	2019-2023
3.1.9	*Increase technology support staff to include a systems administrator to support district wide management systems ie. Classlink, Google Console and mobile device management and a district support technician to maintain work orders and technology upgrades and inventory. .	System Administrator	Technology Director	2024-2023
3.1.10	Increase technology support to address database/PEIMS/textbook end user accounts.	Clerk	Technology Director	2023-2024
3.1.11	Increase Instructional technology staff to assist with the growing population and increased dependence of technology.	Instructional Technologist	Chief Academic Officer; Technology Director	2023-2024
3.1.12	Review state standards and recommendations for library staffing and maintenance to accommodate for district growth.	Needs assessment State standards review	Chief Academic Officer	2019-2024
3.1.13	Develop a plan to address personnel or resource needs of libraries to accommodate for district growth.	Library Services Plan	Chief Academic Officer	2019-2024
3.1.14	Provide support and funding for library upgrades to furniture, collections and student support.	Library Services Plan	Chief Academic Officer and Campus Principals	2019-2024

Goal 3: Meet industry standards for technology connectivity, telecommunications, human and hardware resources to support the educational and administrative needs of the district.

Objective 3.2: Create and maintain a broad based technology capacity among services.
Budget: \$81,500.00

Strategies:		Evidence:	Person(s) Responsible:	Timeline:
3.2.1	Provide centralized support for the network servers, administrative and instructional software.	Documentation of support structure	Network Administrator	2019-2024
3.2.2	Ensure software used at multiple sites is supported centrally using images to address various job responsibilities or student use.	Deployment of appropriate software to campuses Software Procedure	Technology Director; Chief Academic Officer	2019-2024
3.2.3	Maintain and update practices to track service requests through Eduphoria and response time to monitor support provided and to isolate trends in technical support.	Work Order Process and Procedure	Technology Director	2019-2024
3.2.4	Review support performance annually and adjust policies and practices to ensure optimal service to all stakeholders.	Publication of policies and procedures	Technology Director	2019-2024
3.2.5	Maintain a monthly schedule of meetings of Instructional Technologists with teachers and administrators to support instructional needs at the campus and district sites.	Publication of meeting schedule	Chief Academic Officer	2019-2024
3.2.6	Ensure technology funds are distributed appropriately to support campus needs for instructional, technical and professional development.	Budget allocations	Technology Director	2019-2024
3.2.7	Continually review the district approved technology plan to document progress and completion of strategies and goals.	District Technology Planning Meetings Updates to Plan	Chief Academic Officer; Technology Director	2019-2024
3.2.8	Identify members of a District Technology Planning Committee to review, monitor and update the approved District Technology Plan.	Membership role Meeting Minutes	Chief Academic Officer; Technology Director	2019-2024
3.2.9	Identify members of campus Technology Planning Committees to support technology plans for campus initiatives.	Membership Roles Meeting Minutes	Instructional Technologists; Campus Principals	2019-2024
3.2.10	Maintain and upgrade network printers and copiers as needed.	Inventory	Technology Director	2019-2024

		Work Orders		
3.2.11	Implement and maintain Single Sign on for staff, students and parents	Accounts created	Technology Director Network Administrator	2019-2020

Goal 3: Meet industry standards for technology connectivity, telecommunications, human and hardware resources to support the educational and administrative needs of the district.

Objective 3.3: Install, maintain, enhance or replace as necessary intra-campus and inter-campus network connectivity, including cabling, networking equipment and wireless access.
Budget: \$484,000.00

Strategies:		Evidence:	Person(s) Responsible:	Timeline:
3.3.1	*Install network switches and wireless access points as needed.	Switches, drop and AP's installed	District Technology Director, Network Administrator	2019-2024 ✓
3.3.2	Purchase and install phone system at the new Intermediate School.	Servers and phones configured and installed	District Technology Director, Network Administrator	2023-2024re=
3.3.3	Connect Stadium to the fiber backbone.	Duct Bank installed and fiber connections made	District Technology Director, Network Administrator	2019-2024
3.3.4	*Install network switch, drops and wireless access points in press boxes on both sides of the stadium.	Switches, drop and AP's installed	District Technology Director, Network Administrator	2019-2024
3.3.5	Provide continuous connectivity and monitoring of current 10/100/1000 switches to ensure district connectivity.	Maintenance of System Connectivity Logs	Technology Director, Network Administrator	2019-2024 ✓
3.3.6	Upgrade network devices to support increased traffic growth.	Connectivity Logs Maintenance of System	Technology Director	2019-2024
3.3.7	*Maintain the District Intranet/Internet	Technology Infrastructure	Technology Director	2019-2024
3.3.8	Maintain fiber optic backbone and upgrade to accommodate for growth.	Technology Infrastructure plan	Technology Director	2019-202460
3.3.9	Develop a comprehensive Technology Infrastructure plan to address growth and basic structure for remodel or new construction planning.	Technology Infrastructure Plan Committee Meetings	Technology Director	2019-2024
3.3.10	Develop a minimum standard for servers to support network data and operations.	Technology Infrastructure Plan	Technology Director	2019-2024
3.3.11	Maintain and upgrade DHCP, DNS, Firewall, Remote Access and Content Filters.	Installation of Equipment	Network Administrator	2019-2024 ✓
3.3.12	Maintain latest version of OS on servers with key Active Directory roles to server 2016	Servers in place, roles established and operations confirmed	Network Administrator	2019-2024
3.3.13	Develop a plan of action for creating a technology operations center.	Servers in place Centralized operations	Technology Director	2023-2024

Goal 3: Meet industry standards for technology connectivity, telecommunications, human and hardware resources to support the educational and administrative needs of the district.

Objective 3.4: Provide minimum guidelines and standards for network and classroom infrastructure, hardware purchase, implementation, maintenance and replacement.
Budget: \$0.00

Strategies:		Evidence:	Person(s) Responsible:	Timeline:
3.4.1	Develop guidelines for a standard classroom technology.	Plan written and published	Technology Director	2019-2024
3.4.2	Develop guidelines for standard student technology.	Plan written and published	Technology Director	2019-2024
3.4.3	Develop guidelines for standard administrative and office technology.	Plan written and published	Technology Director	2019-2024
3.4.4	Replace classroom technology every 5 years to ensure technology	Plan written and	Technology Director	2019-2024

	is kept current.	published		
3.4.5	To ensure students have a working device during their Junior High and High School years student devices will be replaced every 4 years. Incoming freshman will receive a new device each year. Every 4 years incoming 7th graders will receive a new device.. Devices that have been in service for 4 years will be placed in carts for student use on elementary and Intermediate campuses. Those devices will be rotated out when they have reached their manufactures end of life.	Plan written and published	Technology Director	2019-2024
3.4.6	Replace Central Office equipment every 5 years to ensure technology is kept current.	Plan written and published	Technology Director	2019-2024
3.4.7	Replace network equipment every 5 years. Replace 20% annually.	Plan written and published	Technology Director	2019-2024
3.4.8	Purchase teacher and student classroom work stations at the Elementary school.	Devices purchased and installed	Technology Director	2019-2020
3.4.9	Purchase teacher and student classroom work stations at the new Junior High school.	Devices purchased and installed	Technology Director	2021-2024
3.4.10	Purchase teacher and student classroom work stations at the High school.	Devices purchased and installed	Technology Director	2024-2023
3.4.11	Continue to upgrade network, video, voice and internet resources to classrooms.	Installation of Equipment Technology Inventory	Network Administrator	2019-2024

Goal 3: Meet industry standards for technology connectivity, telecommunications, human and hardware resources to support the educational and administrative needs of the district.

Objective 3.5: Establish selection, acquisition, maintenance, updates or replacement procedures for software and electronic resources.

Budget: \$0.00

Strategies:		Evidence:	Person(s) Responsible:	Timeline:
3.5.1	Develop standard software/online resource image for students.	Software Procedure	Technology Director; Chief Academic Officer; Instructional Technologists	2019-2024
3.5.2	Develop a standard software/online resource image for teachers.	Software Procedure	Technology Director; Chief Academic Officer; Instructional Technologists	2019-2024
3.5.3	Develop a standard software/online resource image for administrators and District/Campus office staff.	Software Procedure	Technology Director; Chief Academic Officer; Instructional Technologists	2019-2024
3.5.4	Identifying funding sources to accommodate for online and software resources to support instruction and business of the district.	Software procedure	Technology Director; Chief Academic Officer	2019-2024
3.5.5	Conduct an annual review of software and electronic resources for effectiveness and efficiency in meeting district needs.	Review Assessment Results	Technology Director; Chief Academic Officer	2019-2024

Goal 3: Meet industry standards for technology connectivity, telecommunications, human and hardware resources to support the educational and administrative needs of the district.

Objective 3.6: Implement a district wide Storage Area Network (SAN) and/or backup system.

Budget: \$0.00

Strategies:		Evidence:	Person(s) Responsible:	Timeline:
3.6.1.	Identify a Storage Area Network with multiple chassis to allow for redundancy and hard drive space to accommodate online content.	Selection of SAN and Maintenance of Network Backups	Network Administrator	2019-2020
3.6.2	Purchase a Storage Area Network	Purchase of System	Network Administrator	2020-2021
3.6.2	Develop and publish disaster recovery procedure for	Publication of	Technology Director	2019-2020

	technology resources and equipment.	procedures in district Disaster Recovery Manual		
3.6.3	Test backup/SAN biannually to verify accuracy of data backups	Test Results	Network Administrator	2020-2021
3.6.4	Assess annually to determine a need for additional space due to district growth.	Needs Assessment Results	Technology Director	2021-2023
3.6.5	Continue existing plan to replace and upgrade servers using SANS solution and virtual servers	Installation of Equipment Technology Inventory	Network Administrator	2023-2024

Goal 3: Meet industry standards for technology connectivity, telecommunications, human and hardware resources to support the educational and administrative needs of the district.

Objective 3.7: Implement a district wide power management solution.
Budget: \$75,000.00

Strategies:		Evidence:	Person(s) Responsible:	Timeline:
3.7.1	Assessment of all district facilities to determine power needs and power availability for older facilities to upgrade electrical systems.	Assessment results	Technology Director Network Administrator	2019-2020
3.7.2	Develop district minimum power backup standards for all new and remodeled facilities.	Standard UPS device list	Technology Director Network Administrator	2019-2020
3.7.3	*Purchase and install needed Uninterrupted Power Supply (UPS) at the High School and Junior High.	Purchase and Installation	Technology Director Network Administrator	2020-2021
3.7.4	Upgrade Main Distribution Frame (MDF) at the Junior High School to meet the demands of the district core and servers with existing UPS.	Upgrade Purchase and Installation	Technology Director Network Administrator	2019-2023
3.7.5	Conduct a yearly needs assessment of power maintenance issues within the district to accommodate for growth and UPS/MDF needs.	Needs Assessment	Technology Director Network Administrator	2019-2024
3.7.6	Upgrade electrical capacities to accommodate technology.	Installation to current industry standards	Maintenance and Operations; Technology Director Network Administrator	2019-2024
3.7.7	Replace ups batteries at Elementary	Install to current industry standards	Network Administrator	2019-20210

Goal 3: Meet industry standards for technology connectivity, telecommunications, human and hardware resources to support the educational and administrative needs of the district.

Objective 3.8: Implement district wide security measures.
Budget: \$0.00

Strategies:		Evidence:	Person(s) Responsible:	Timeline:
3.8.1	Develop a district-wide video surveillance security installation plan.	Plan approved by School Board	Technology Director Superintendent	2019-2024
3.8.2	Expand video surveillance system in outdoor athletic areas.	Server and cameras installed and configured	Technology Director	2019-2024
3.8.3	*Install video surveillance system at new Intermediate school.	Cameras installed and connected to existing servers	Technology Director	2019-2024
3.8.4	Expand video surveillance system at Junior High.	Cameras installed and connected to existing servers	Technology Director	2019-2024
3.8.5	Upgrade video surveillance system at High School.	Cameras installed and connected to existing servers	Technology Director	2019-2020
3.8.6	Upgrade video surveillance system at Elementary.	Cameras installed and connected to existing servers	Technology Director	2020-2024
3.8.7	Allow access to IP security camera data to city and county law enforcement as needed.	Fiber in place VPN created Access provided	Technology Director	2019-2024
3.8.8	Maintain and update Anti-Virus Software.	Software installation and in use	Technology Director	2019-2024

3.8.9	Maintain window security system using Active Directory and Organizational Units down to classroom level.	All OU's in place. Google Active Directory Sync pulling from updated information.	Technology Director	2019-2024
-------	--	---	---------------------	-----------

Goal 4: Provide access to communication and collaboration resource tools to support district operations, campus operations, student achievement and parent connections.

Objective 4.1: Provide systems to support the acquisition, transmittal and analysis of student performance data to support instructional improvement.

Budget: \$24,750.00

Strategies:		Evidence:	Person(s) Responsible:	Timeline:
4.1.1	*Provide access to OnData Point for all Administrators to track overall district student data for accountability.	Administrator login and data usage reports	Technology Director; Chief Academic Officer	2019-2024
4.1.2	Provide access to Aware for administrators and teachers for student data review, benchmark assessments, common assessments, IEP documentation and other documentation associated with student achievement.	Aware Service Contract Usage Reports Student Data Analysis Reports	Technology Director; Chief Academic Officer	2019-2024
4.1.3	Maintain access to NWEA MAP assessments for baseline data, middle of the year tracking and end of the year mastery of grade level content, alignment for college and career readiness and STAAR projection measures. Incorporate scores into Eduphoria	Maintenance of Systems Online Access Student Data Reports	Chief Academic Officer; Technology Director	2019-2024
4.1.4	Maintain access to an online gradebook for tracking student attendance and grading.	Maintenance of Systems Online Accessibility	Technology Director	2019-2024
4.1.5	Maintain at home user access to textbooks, grades, lesson plans, documents, student support materials and progress monitoring and support systems for students, teachers, and staff.	Online Access Maintenance of Systems	Technology Director	2019-2024
4.1.6	Maintain the Google Domain.	GAFE	Technology Director	2019-2024
4.1.7	Maintain the use of TEKS Resources system for curriculum alignment, delivery and instructional collaboration.	Maintenance of Systems Online Accessibility	Chief Academic Officer; Technology Director	2019-2024
4.1.8	Implement the use of Office 365 to support online use of Office Applications in the cloud environment.	Maintenance of Systems Use of Office 365	Chief Academic Officer; Technology Director	2019-2024

Goal 4: Provide access to communication and collaboration resource tools to support district operations, campus operations, student achievement and parent connections.

Objective 4.2: Expand communication with parents and community partners through technology to increase student performance, community engagement and school to home communications.

Budget: \$35,500.00

Strategies:		Evidence:	Person(s) Responsible:	Timeline:
4.2.1	Provide access to student instructional and classroom data to parents. (i.e. Parent Portal; Assessment Management System; Teacher Webpages).	Online Access Parent usage reports Teacher websites	Chief Academic Officer; Technology Director	2019-2024
4.2.2	Identify an online Learning Management System to support online curricula, student to teacher communication, and parent connections using a single sign on environment.	Review and Purchase of a Learning Management System	Chief Academic Officer; Technology Director	2019-2024
4.2.3	Implement an online Learning Management System to support online curricula, student to teacher communications, grading, online assessments, syllabus and course outline and parent connections using a single sign on environment, ClassLink.	K-12 implementation of the LMS portal	Chief Academic Officer; Technology Director	2019-2024

4.2.4	Maintain use of social media (Facebook, Twitter) to promote district events, student achievement of maintain communications with district community.	Social Media Postings	Technology Director	2019-2024
4.2.5	*Increase use of automated communication systems to inform parents of events and student needs. K-12 Alerts and Text messaging.	Programs in use	Technology Director	2019-2024
4.2.6	Increase the use of electronic communication to increase efficiency and effectiveness and decrease expenditures for paper.	Cloud Based Documents	Technology Director	2019-2024

Goal 4: Provide access to communication and collaboration resource tools to support district operations, campus operations, student achievement and parent connections.

Objective 4.3: Provide services and maintenance to support communication for human resources, business operations, strategic planning and employee collaboration district wide.

Budget: \$328,200.00

Strategies:		Evidence:	Person(s) Responsible:	Timeline:
4.3.1	Maintain the use of Strive for online access and record keeping of employee appraisal records.	Online Access Maintenance of Systems	Chief Academic Officer; Technology Director	2019-2024
4.3.2	*Continue the use and maintenance of Frontline for employment applications.	Online Access Maintenance of Systems	Technology Director; Human Resources Manager	2019-2024
4.3.3	*Continue the use of Frontline to report employee absences.	Online Access Maintenance of Systems	Technology Director; Business Office Manager	2019-2024
4.3.4	Continue the use of Eduphoria for tracking Maintenance Work Orders	Online Access Maintenance of Systems	Technology Director; Operations Manager	2019-2024
4.3.5	Continue the use of Eduphoria Help Desk for tracking technology training and equipment work orders.	Online Access Maintenance of Systems	Technology Director	2019-2024
4.3.6	Continue the use of Employee Access to support payroll, leave banks and benefits information.	Online Access Maintenance of Systems	Technology Director; Business Office Manager	2019-2024
4.3.7	*Maintain the use of Test Hound to manage State Testing Activities and Inventory.	Online Access Maintenance of Systems	Chief Academic Officer; Technology Director	2019-2024
4.3.8	Maintain Google Domain.	GAFE	Technology Director	2019-2024
4.3.9	Maintain Eduphoria HelpDesk software to maintain inventory and technology resources.	Online Access Maintenance of Systems Inventory	Technology Director	2019-2024
4.3.10	Continue to update inventory into tracking databases from fixed asset data.	Software installed and used	Technology Director	2019-2024
4.3.11	*Maintain the use of Tech4Learning to manage campus and district improvement planning.	Maintenance of Systems Online Access	Chief Academic Officer	2019-2024
4.3.12	*Maintain the use of TxEIS for student student information system and financial accounting.	Maintenance of Systems Online Access	Technology Director; Business Office Manager	2019-2024
4.3.13	Develop a plan for digital archiving of district and campus records.	District Clerk	Technology Director Records Manager	2019-2024
4.3.14	*Maintain the use of TimeClock and Time Manager to support the business office.	Online Access Maintenance of Systems	Technology Director; Business Office Manager	2019-2024
4.3.15	Provide unified messaging for faculty and staff. (i.e. voice mail, email connectivity).	Maintenance of Systems	Technology Director	2019-2024
4.3.16	*Provide POS and nutritional management software to support the Food Service.	Maintenance of System Online Access	Food Service Director Technology Director	2019-2024
4.3.17.	*Maintain Board Book and Survey Monkey to support community outreach for the school board.	Maintenance of System Online Access	Technology Director	2019-2024

Proposed Budget

	2019	2020	2021	2022	2023	5 Year Total
Objective 1.2	\$248,991	\$248,991	\$298,991	\$258,991	\$258,991	\$1,314,955
Objective 1.3	\$120,100	\$120,200	\$120,300	\$120,400	\$120,500	\$601,500
Objective 1.4	\$408,000	\$408,000	\$463,000	\$408,000	\$463,000	\$2,150,000
Goal 1 - Total	\$777,091	\$777,091	\$882,291	\$787,391	\$842,491	\$4,066,455
Objective 2.2	10,000	10,000	10,000	10,000	10,000	50,000
Goal 2 - Total	10,000	10,000	10,000	10,000	10,000	50,000
Objective 3.1	0.00	0.00	37,000	87,000	\$142,000	266,000.00
Objective 3.2	16,300	16,300	16,300	16,300	16,300	81,500.00
Objective 3.3	137,400	65,400	78,400	137,400	65,400	484,000.00
Objective 3.4*	00.00	0.000	0.000	0.000	0.000	0.000
Objective 3.6	\$0.00	\$0.00	\$30,000.00	\$0.00	\$0.00	\$30,000.00
Objective 3.7	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$15,000.00	\$75,000.00
Objective 3.8	\$22,542.00	\$12,542.00	\$12,542.00	\$12,542.00	\$12,542.00	72,710.00
Goal 3 - Total	\$206,242	\$124,242	\$204,242	\$283,242	\$266,242	\$1,009,210
Objective 4.1	\$4,950.00	\$4,950.00	\$4,950.00	\$4,950.00	\$4,950.00	\$24,750.00
Objective 4.2	\$7100	\$7100	\$7100	\$7100	\$7100	\$35,500.00
Objective 4.3	\$65,640.00	\$65,640.00	\$65,640.00	\$65,640.00	\$65,640.00	\$328,200.00
Goal 4 - Total	\$77690	\$77,690	\$77,690	\$77,690	\$77,690	\$388,450
Plan Total	\$1,056,023	\$974,123	\$1,159,223	\$1,143,323	\$1,181,423	\$5,514,115

*Items in this objective accounted for within another objective.

Obsolescence and Replacement Guidelines

The district recommends a five-year obsolescence cycle in order to ensure technology is kept current. Under this plan, a computer that has been in use for a period of at least five years should be replaced with newer technology. To fulfill this plan, the district will replace 20% of the district's equipment every year.

For purposes of network management and inventory control, computers that reach the four-year milestone may be considered obsolete. Such equipment may no longer be considered a supported network device, and repairs are not considered economically feasible.

To ensure students have a working device during their Junior High and High School years, student devices will be replaced every 4 years. Incoming freshman will receive a new device each year. Every 4 years incoming 7th graders will receive a new device. Devices that have been in service for 4 years will be placed in carts for student use on elementary and Intermediate campuses. Those devices will be rotated out when they have reached their manufacturer's support end of life date.

The Technology department recognizes that, though a product may be considered obsolete; there are situations and/or circumstances where it continues to be a viable instructional solution.

Replacement Schedules

The Navarro ISD Replacement Schedule is based on a 5 year rotation schedule by site or function. The order of the schedule is currently based on age of devices and need. In the event circumstances change, the order of the replacement schedule is subject to change, yet budgeted items as described within the plan are based on the schedule as listed.

2019-2020 Budget Year

- Elementary Campus Student and Classroom Devices
 - Student Use Carts for Classrooms as described within the plan
 - Classroom Projection Systems
 - Campus Computer Labs
 - Campus Library Devices

2020-2021 Budget Year

- Junior High Campus Student and Classroom Devices*
 - Student Use devices in common planning areas
 - Classroom Projection systems
 - Campus Computer Labs
 - Campus Library Devices

2021-2022 Budget Year

- High School Campus Student and Classroom Devices*
 - Student Use devices in common planning areas
 - Classroom Projection Systems
 - Campus Computer Labs
 - Campus Library Devices

2022-2023

- Intermediate Campus Student and Classroom Devices
 - Student Use Carts for Classrooms as described within the plan
 - Classroom Projection Systems
 - Campus ComputerLabs
 - Campus Library Devices

2023-2024

- Teacher and Staff Devices

*excludes student 1:1 project as this year a planned purchase based on the 1:1 schedule.