Crowley ISD

TECHNOLOGY PLAN

2019-2023

Crowley ISD

512 Peach Street
Crowley, TX 76036

817-297- 5251
jerry.allen@crowley.k12.tx.us

TABLE OF CONTENTS

Crowley ISD Technology Plan

Plan Introduction

The Crowley ISD Instructional Technology Plan is focused on student learning merged with technology. The technology is viewed as a means to an end, and not an end unto itself.

The following components are defined as essential to the effective technology integration for the Crowley ISD Long-Range Technology Plan for 2019-2023 by the Technology Advisory Committee:
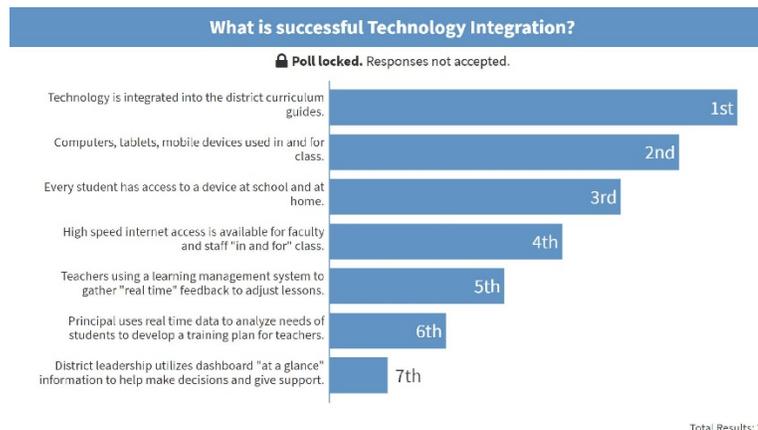
This plan is a result of careful consideration of the current state of technology in Crowley ISD, as well as previous actions taken to begin the evolution of technology integration in our district. It attempts to address curriculum needs of students and personnel in the district and is intended as a guide for all technology purchases so as to maintain our technology-rich school district. The plan addresses where we as a district want to go in the next 4 years, and outlines a coordinated plan to reach that goal. The plan should not be considered a final document. Considering today's rapidly changing technology, any technology plan is a continually changing document, which must be updated at least annually.

Expansion of the infrastructure for new facilities, support within the district, outreach to the community, maintaining the security of technology, fiscal responsibility, teacher competency and leadership, and most importantly student success and achievement, were the basis of the plan.

PURPOSE

Crowley ISD has prepared this Technology Plan to articulate a common vision for technology in the district and identify the strategies that will help with the use of advanced technology. The purpose of the Crowley Independent School District technology program is to create, maintain, and perpetuate an environment in which students, teachers, administrators and the community use technology as a tool for learning. Students need to be able to locate and manage resources for problem solving, work cooperatively on a team, read for information and application, calculate and measure for information and application, and communicate verbally and in writing. Technology is a tool for accomplishing these student needs.

DISTRICT PROFILE

Number of campuses	23 (2019) 24 (2020)
Non-Instructional Facilities	3 (2019) 4 (2021)
Total student enrollment	15,734
Percent economically disadvantaged	68%
Number of campuses with high speed internet that meet current FCC target (1 Gbps /1000 students)	2[1]
Percentage of classrooms with WiFi access	100%
Student/computing device ratio	0.95:1
Teacher/computing device ratio	1:1
CIPA compliance[2] (Yes/No)	Yes
Years included in this Technology plan	2019-2023
Technology expenditure per pupil	$181.26

[1] See Appendix, Item B, FCC E-Rate Modernization Order
[2] See Appendix, Item D, FCC CIPA reference

TECHNOLOGY PLANNING COMMITTEE

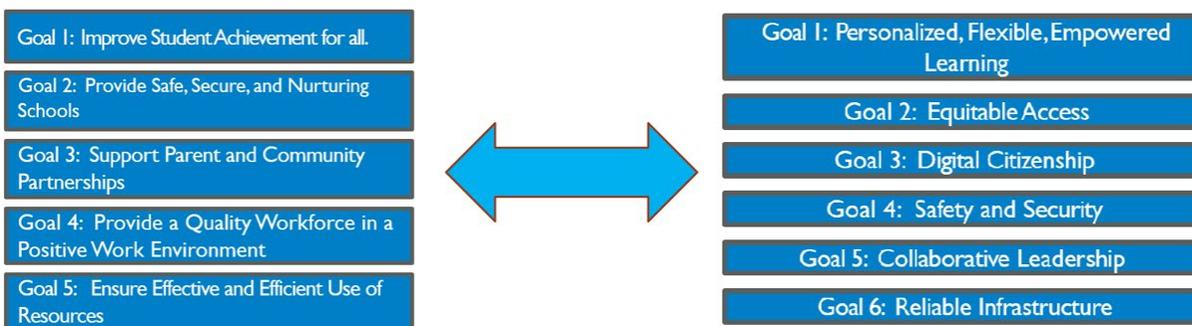|			
Jerry Allen	Executive Director of Technology Services	Jason Holt	Teacher
Nick Keith	Executive Director of Curriculum and Instruction	Deneitra Hunter	Teacher
Stefani Allen	Director of Social and Emotional Learning	Ennis Johnson	Teacher
Lyndsae Benton	Board of Trustees	Tiffany Majors	Teacher
Scott Campbell	Director of Technology	Dubra Watts	Secretary
Janette Whitten	Technology Services	Coral Zayas	Teacher
Bradley Parker	Coordinator of Instructional Technology	Jennifer Camp	Teacher
Michelle Bothel	Instructional Technologist	Ieisha Dawson	Teacher
Adriane Hendee	Instructional Technologist	Catherine Gallon	Teacher
Casey Smith	Instructional Technologist	Yolanda Hill	Teacher
Chris Tims	Instructional Technologist	Dinah Horton	Teacher
Cayla Grossman	Principal	James Ivey	Teacher
Dallas Smith	Asst. Principal	Susan Marshall	Teacher
Sharla Williams	Asst. Principal	Andrea Sayles	Teacher
Karen Bayless	Teacher	Kenisha Turner	Teacher
Bryan Bristow	Teacher	Lauren Webb	Teacher
Tanika Henry	Teacher		

BACKGROUND

This plan is based on information drawn from many sources including:

- A review of district goals and initiatives
- A review of district curriculum guides
- A review of district digital assessment and remediation
- A survey of school site hardware and instructional media
- A survey of students, teachers, administrators, and parents
- Interviews with site and district administrators and representatives from the Crowley ISD community
- Past district's technology plans (Phoenix Plans)
- Collaboration with other school districts
- Ongoing collaboration with the district technology committee

PARAMETERS

This Technology Plan is driven by the curriculum standards and requirements of the Every Student Succeeds Act of 2015[3], FCC's E-Rate modernization order of 2014[4], and TEA's Long Range Plan for Technology 2006-2020, and supports the educational mission and instructional goals of Crowley ISD. Specific attention is given to addressing student standards for technology as defined by the Technology Applications Texas Essential Knowledge and Skills (TEKS), required in the Texas Education Code, Section 28.002. The Technology Applications TEKS found in 19 TAC Chapter 126[5] describe what students should know and be able to do using technology. As a part of the enrichment curriculum, these TEKS are to be used as guidelines for providing instruction. The goal of the Technology Applications TEKS is for students to gain technology-based knowledge and skills and to apply them to all curriculum areas at all grade levels.

CISD
- Goal 1: Improve Student Achievement for all.
- Goal 2: Provide Safe, Secure, and Nurturing Schools
- Goal 3: Support Parent and Community Partnerships
- Goal 4: Provide a Quality Workforce in a Positive Work Environment
- Goal 5: Ensure Effective and Efficient Use of Resources

TEA - Texas Education Agency
- Goal 1: Personalized, Flexible, Empowered Learning
- Goal 2: Equitable Access
- Goal 3: Digital Citizenship
- Goal 4: Safety and Security
- Goal 5: Collaborative Leadership
- Goal 6: Reliable Infrastructure

The plan stresses the importance of ongoing and sustained staff development in the integration of technology into the curriculum for teachers, principals, administrators, and school library media personnel to further the effective use of technology in any and all instructional areas, as well as at home. It also is consistent with the recommendations for LEAs as defined by the Texas Long-Range Plan for Technology in the areas of Teaching and Learning, Educator Preparation and Development, Administration and Support Services, and Infrastructure for Technology, and other state and national standards, such as the Technology Applications Standards for Teachers and Administrators.

[3] See Appendix, Item E, ESSA In Texas
[4] See Appendix, Item C, FCC Second E-Rate Modernization Order
[5] See Appendix, Item F, TAC Chapter 126, Technology Applications TEKS

VISION STATEMENT

Technology will exceed enrichment and become infused into the daily educational experience of all students while enhancing the cooperative efforts of the school, home, and community to maximize student opportunity and achievement.

An important factor in determining the successful use of technology in the classroom is the teacher's willingness and ability to appropriately integrate technology into the curriculum, as measured by TTESS evaluations.

To realize this vision:

- Technology will be pervasive in every instructional setting and integrated throughout the curriculum guides.
- Readily available support will be provided to teachers and staff by Technology Services and District Instructional Technologists.
- Teachers and students will be provided with current technologies that make learning interesting, motivating, secure, and relevant.
    - Grades 9 -12 will remain 1:1 with student to device technology
    - All other grades will have carts of student devices as defined by the district and campus individual needs.
- Teachers and staff will be prepared to use the tools of technology to improve the teaching and learning process through ongoing training by Texas Computer Education Association and other integration resources.

MISSION STATEMENT

In support of the Crowley ISD mission:

"Crowley ISD provides our students with excellence in education so that all students achieve their full potential."

"The technology mission is to equip teachers, administrators, and students with the technical skills and secure resources needed to meet and exceed our students' academic goals."

Needs Assessment

ASSESSMENT PROCESS

A comprehensive needs assessment was conducted collaboratively by Technology Services and Curriculum Instruction utilizing on-line teacher, student and parent surveys focusing on the Technology Advisory Committee and TEA Long-Range Technology Plan two categories; 1) Daily Classroom Practices and 2) Management of Schools.

The Technology Advisory Committee has disaggregated the TEA Long-Range Plan for Technology into categories: *Daily Classroom Practices and the Management of Schools.*
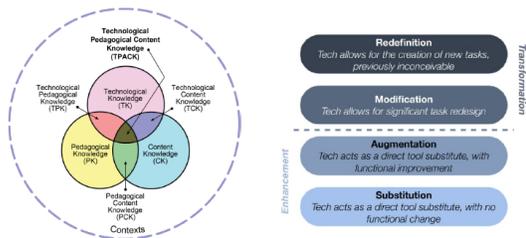
DAILY CLASSROOM PRACTICES

Personalized, Flexible, Empowered Learning
- Student Centered & Adaptive - Authentic Creative
- Reimagined Learning Spaces - Furniture
- Data-Driven Decisions - PD Decisions

Digital Citizenship
- Program Development – Curriculum Guides
- Content Development – Relevant and Accessible
- Rights and Responsibilities –Social Media and Mindfulness

Equitable Access
- One-to-One (1:1) Initiative & Class Sets
- Connectivity – Access "In and For" class
- Usability – On and off-site

MANAGEMENT OF SCHOOLS

Collaborative Leadership
- Strategic Planning – TAC, Curriculum & Technology
- State & Federal Collaboration – IMA & ERATE

Reliable Infrastructure
- Technical Support - Personnel
- Replacement Cycles – Hardware
- Digital Review Cycles – Curriculum and Technology

Safety and Security
- Cybersecurity – Protecting the brand.
- Campus Safety – Security Cameras, Student Searches,
- Data Management & Governance – Passwords

In addition, a current inventory and life cycle refresh schedule was analyzed for funding projection needed to maintain and enhance existing equipment, as well as decommission outdated technology. Items analyzed included: infrastructure, hardware, software, programs, courses, student achievement, technology resources, staff development, and technical support.

Findings from the survey assessments and inventory analysis are as follows.

CURRENT INSTRUCTIONAL TECHNOLOGY INVENTORY

Currently all classrooms have a minimum technology standard established in 2013 and expanded in 2015 for _Daily Instructional Practices._

Instructional Technology:
This consist of the following:
- Teacher Laptop – Dell E6420, E6430, E6440
- Projectors with sound – Epson projector with wall mounted speakers
- Document Camera – Epson DC6, DC7
- Learning Management System – Blackboard
- Student Devices
    - 8-12 Dell Windows Laptop 3150
    - 3- 8 Dell and Lenovo Chromebooks
    - K-5 iPads (360 per campus)
    - Computer Lab environments (48 Computers per lab)
    - Library Computers (12-15 Computers per Library)
    - Mobile internet access via Library checkout (100 per 9th Grade Campuses)
- Curriculum Software:
    - iReady assessment
    - iStation remediation and assessment
    - Achieve 3000; Dreambox; Blackboard LMS
    - Compass Learning for 8th Grade remediation and 9-12 credit recovery

INFRASTRUCTURE AND SECURITY

Currently the infrastructure and security utilized in the _Management of Schools_ consists of the following:

Infrastructure Environment:
The classrooms are supported with an infrastructure environment consisting of the following:
- Access Points: 1,494
- Physical Servers: 20
- Virtual Servers: 65
- Storage: 60Tb
- ISP Bandwidth: 2Gb
- Switches: 90
- CIPA Compliance Devices: 2
- Chromebooks (Students): 3,072
- Dell Windows laptops (Students): 5,615
- iPads (Students): 5,040
- PC's (Faculty, Computer Lab, Library): 4,660

Telecommunications Services:

Currently, all faculty, staff, and students have access to the internet through direct connections as well as wireless access points in each classroom.   Five campuses (Dallas Park, N. Crowley 9th, Crowley 9th, Crowley Learning Center, and Jackie Carden) have private fiber connections. All other campuses are interconnected through leased connections via Charter or AT&T.

- Phone Systems: 26
- Physical Phones: 2,100
- Wireless Data:
    o AT&T iPads, laptops, district hot spots: 37
    o T-Mobile Student Hot Spots: 200
- Wireless Phones:
    o T-Mobile: 60

Security

Safety and Security:

Currently all campuses have a monitoring and surveillance system that campus administration and Safety and Security Services have access to view.   Video is saved for a predetermined length of time and accessible through the Safety and Security Services Department.

Cyber Security:

Technology has become an integral part of our daily personal and professional lives and as such, having a Cybersecurity Plan that includes Assessment, Policies and Controls, Education and Training is needed for organizational and personal protection. In the simplest of terms, Cybersecurity refers to a set of techniques used to protect the integrity of networks, programs and data from attack, damage or unauthorized access. Understanding the importance of computer security and individual responsibilities and accountability for computer security are paramount to achieving organization security goal and safeguarding district resources. Having the necessary training on how to protect the interest of the organization and our stakeholder's information is imperative to all individuals, and especially those individuals that operate within the realm of personally identifiable information (PII) and organization financial interest. The following are completed annually:

- Audits
- Policies
- Training
- Deployment of hardware

Technology Advisory Disaggregated Data

TEACHER/FACULTY SURVEY RESULTS

- Teachers want carts but parents want individual personal devices
- Not enough devices and/or don't operate properly

Faculty Technology Status Statements:

With regards to daily classroom practices, teachers value their laptop, projector with sound, student devices, and document cameras over other technology items.
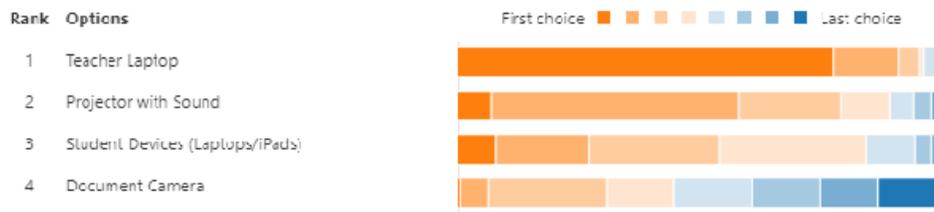
Faculty Known Inventory Issues:

- Projectors: count of 690 of the 1250 are over 4 or more years old.
- Document cameras are a campus expense and not all campus budgets can make this accommodation.
- Faculty laptops (purchased in 2013) 1,139 of the 1,367 are out of warranty.

Faculty Solution Statements:

Faculty laptops, Projectors, Student Devices and Document Camera are the most desired instructional technology items. **These 4 items are a top priority with regards to funding for the 2019 – 2020 school year and should be addressed through attrition and life cycle replacement, if funding available**. All other items requested would need to be addressed through the digital review process prior to purchasing.

STUDENT/ PARENT SURVEY RESULTS

- Majority use their device to check grades
- Technology is being used daily in the classroom
- Students would prefer a district issued device
- Parents would like technology utilized in classrooms
- Parents would prefer a district issued device

Student Technology Status Statements (Elementary):
64% of the Elementary teachers surveyed utilize the student devices on a daily basis.

● Daily	48
● Weekly	9
● Monthly	3
● Testing only	0
● Yearly	0
● Never	0
● Other	7
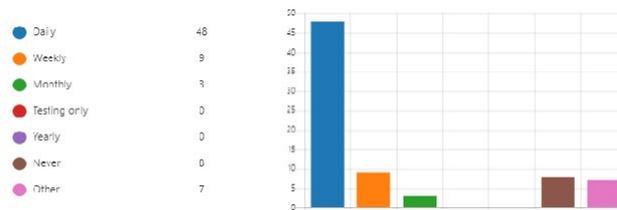
84.3% of parents would like to see Technology utilized at least weekly for coursework.
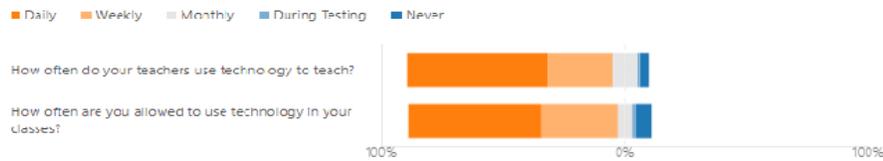

Student Known inventory Issues (Elementary):

- There are currently 360 or more mobile devices per campus at the elementary and intermediate level.
  - Most of these are iPad mini that are 1st generation.
- KG classes begin iReady for Math (iPad specs will not support iReady)
- 3rd Grade adds iReady for Reading (iPad specs will not support iReady)
  - iStation and DreamBox are also utilized for remediation and assessment. (iPad specs will not support these programs)
- Campus labs have maximum of 48 computers for the entire campus

Student Solution Statements (Elementary):

The majority of teachers and parents want instructional technology to be utilized in the classroom on a daily basis. Student devices at the elementary level need to be upgraded to assist with district assessment, remediation, and screening needs. **This should be a focus of the 2019 – 2020 budgeting process, per funding availability, to insure these needs are met.**

Student Technology Status Statements (Secondary):

Fifty-eight percent (58%) of students in grades 7 – 12 say their teacher uses Technology daily, and fifty-five percent (55%) say they are allowed to use technology in class.

Eighty-eight percent (88%) of parents prefer that the district issue a laptop to their student.

|	
● Bring My Own	68
● District Issued	487

Student Known Inventory Issues (Secondary):

• Student 1:1 devices in the secondary campuses, middle schools and high schools, are out of warranty as of May of 2018.
• Students don't bring laptop, or it is not charged.
• Faculty do not have an expectation that the students will complete work through district supported learning management system.
• 1:1 vs Cart (Teachers preference vs. Parent/Student preference)
    • Side note: Chromebooks have been issued in "class sets" in existing 5th, 6th, and 7th grades.

Student Technology Solution Statements (Secondary):

The majority of students are allowed to utilize their technology daily in class, and their teachers utilize the district technology resources daily. The majority of parents want the district to issue their child a computer for coursework. **As the budget allows, increase the number of student laptops to be able to create class sets in the middle schools, while also creating a lending library for students to be able to check them out for overnight or extended project-based period.**

PROFESSIONAL DEVELOPMENT

Professional learning experiences must respond to teacher's interests, needs, and classroom settings.
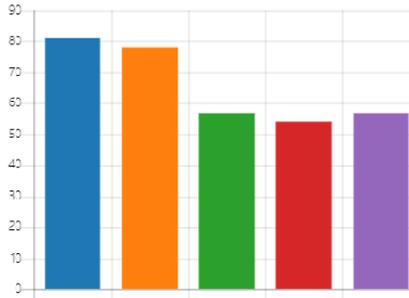

- We need to use all the tools available to us – embracing 21 Century curriculum.
- I feel comfortable experimenting with new technology.
- I like new technology, but need more direction on how to utilize in my classroom.
- Technology helps me collaborate with other professionals.
- Technology helps students collaborate with each other.

The majority of our teachers realize the need to use all the tools that the district has available for collaboration with other professionals and our students, as well as feel comfortable experimenting with new technology.   However, there is a significant need for training in how to utilize technology in the classroom.

The Instructional Technology Department will continue to work with faculty through the following topics that the CISD Teachers have expressed interest in:

Google Suite	46
Microsoft Office 365	121
Google Classroom	28
Blackboard LMS	18
Dreambox	41
i-Ready	42
Naviance	6
Skyward	128
TEKS Resources Systems	44
Discovery Education Video	29
Other	44
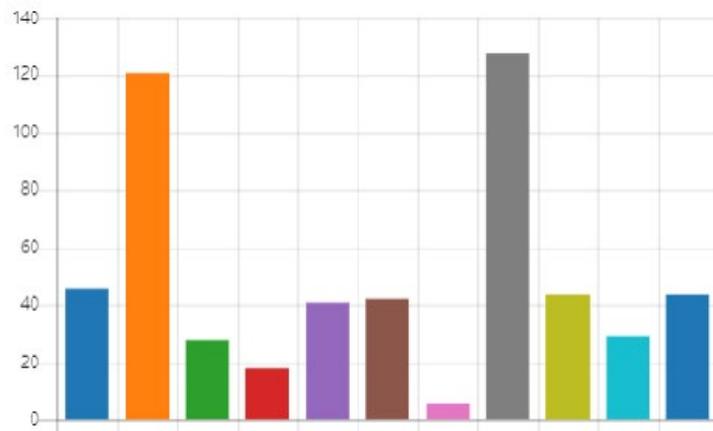
- Productivity Software
  - Skyward (Advanced)
  - MicroSoft Office
  - Google Suite
- Classroom Assessment with Technology
  - Dreambox
  - I-Ready
  - Achieve 3000

- Digital Collaboration
  - Blackboard
  - Google Classroom
  - MicroSoft One Note
- Technology setup and troubleshooting
- Lesson planning with Technology
  - TEKS Resource Systems

Summary

HISTORICAL

In March of 2013, the Crowley ISD School Board established a Minimum Technology Standard that includes the following:

- Teacher Laptop
- Projector with Sound
- Document Camera
- 1:1 Student Devices for 7-12 Grades with iPads
- Development of Instructional Technology Department

In June of 2015, the Crowley ISD School Board continued to support the 1:1 student device initiative by investing further in our faculty and students by approving the following:

- Dell Student 11" laptops for 7-12
- Dell Certified Educator Staff development
- Moving the iPads to the PreK – 6 Grades
- Apple Innovative Educator program

RECOMMENDATION

In May of 2019, the Technology Advisory Committee has suggested a new course of action to meet the needs of our students and teachers. The recommendation is the following:

- Reinvest in the Minimum Technology Standard for instruction.
    - Student Devices:
        - All High School students will remain at 1:1 ratio
        - All 9th Grade students will receive new Chromebook
        - Middle School will not be 1:1 with student devices;
            - All middle schools will have one cart of 30 Chromebooks for every 2 core teachers
            - "Lending Library" will be created at each campus for student and staff check out for home use and campus testing.
        - Elementary Schools will have one cart of 30 Chromebooks for every 2 core teachers
            - "Lending Library" will be created at each campus for student and staff check out for home use and campus testing.
            - All existing non-useable iPads will be sold to vendor or exiting Senior students to offset cost of new projectors and document cameras
    - Faculty Devices:
        - Update/upgrade teacher laptop with Dell E7470
            - All existing teacher laptops will be sold to vendor or exiting Senior students to offset cost of new projectors and document cameras
        - Update classroom projector with sound
        - Update classroom document camera

BUDGET

Year 1 of 4 Annual Lease Payment		
BUDGET ITEM	COST	FUNDING SOURCES
Chromebooks for grades 9 – 12; and carts for 7-8	$262,095	Local funds
Chromebook for grades PreK – 6	$374,962	Local funds
Carts	$34,320	Local funds
Teacher Laptops	$309,500	Local funds
Total Annual Payment (Y1)	**$980,877**	Local funds

Year 2 Annual Lease Payment		
BUDGET ITEM	COST	FUNDING SOURCES
Previous year Payment	$980,877	Local funds
Chromebook for grade 9	$68,750	Local funds
Chromebook Replacement/Repairs	$27,000	Local funds
Teacher Laptops (replacement/repairs)	$46,425	Local funds
Total Annual Payment (Y2)	**$1,123,052**	Local funds

Year 3 Annual Lease Payment		
BUDGET ITEM	COST	FUNDING SOURCES
Previous year Payment	$1,123,052	Local funds
Chromebook for grade 9	$68,750	Local funds
Chromebook Replacement/Repairs	$27,000	Local funds
Teacher Laptops (replacement/repairs)	$46,425	Local funds
Total Annual Payment (Y3)	**$1,265,227**	Local funds

Year 4 Annual Lease Payment		
BUDGET ITEM	COST	FUNDING SOURCES
Previous year Payment	$1,265,227	Local funds
Chromebook for grade 9	$68,750	Local funds
Chromebook Replacement/Repairs	$27,000	Local funds
Teacher Laptops (replacement/repairs)	$46,425	Local funds
Total Annual Payment (Y4)	**$1,407,402**	Local funds

The budget figures above were derived from the request for quotes sent to qualified vendors utilizing the following rubric.

Price of eligible service/product	25
Reputation of vendor and of vendor's service/product	15
Quality of vendor's service/product	15
Service/product meets school needs	15
Past relationship with vendor	15
Total long term cost to the district	15
Total Points	100

All vendor quotes were evaluated for effectively supporting district goals by the following individuals:

- o Jerry Allen, Executive Director of Technology Services
- o Nicholas Keith, Executive Director of Curriculum Instruction
- o Nadia Powers, Director of Purchasing
- o Scott Campbell, Director of Technology
- o Bradley Parker, Coordinator of Instructional Technology

EVALUATION

Evaluation Process:

Evaluation of the Technology Plan will be a systematic ongoing process. Each strategy will be evaluated using the methods shown in the goals, objectives, and strategies above, and will be documented for evaluation and review. All aspects of the plan will be evaluated and updated once each year in November, after which, updates to the plan will be made and presented to the local school board in December.

The Technology Advisory Committee will be responsible for the ongoing evaluation of this plan. The intention of the evaluation will be to make decisions on the impact that technology has on the learning process for all students.

Crowley ISDs survey results for each campus will be used to help Crowley ISD assess its progress toward meeting the goals of this Technology plan, and will also serve as the report template for the Technology plan. Crowley ISD will leverage the existing resources as long as the model is relevant and continues to align with instructional needs of the district.

Evaluation Method:

- Surveys of the staff, students, and parents are conducted at least once yearly with regard to their use of technology.

- Informal interviews conducted as needed by the campus Technology Advisory Committee representatives.

- Records of staff member participation in technology training monitored by sign-in sheets and teacher professional development records; recorded through Eduphoria.

- Integration of training into the classroom as measured by lesson plans and number and type of technology and distance learning projects.

- Monitoring and documentation of community access to technology resources and information on the campuses and on the web site.

- Monitoring and documentation of community involvement; Parent U, Cultural Events.

- Yearly inventory of hardware and software.

- Support and maintenance of technology as documented by technical support records.

APPENDIX

Item A: Education Technology planning links at TEA
https://tea.texas.gov/technology/

Item B: FCC E-Rate Modernization Order (contains short- and long-term internet connectivity targets
https://www.fcc.gov/general/summary-e-rate-modernization-order

Item C: FCC Second E-Rate Modernization Order
https://www.fcc.gov/general/summary-second-e-rate-modernization-order

Item D: FCC CIPA reference
https://www.fcc.gov/consumers/guides/childrens-internet-protection-act

Item E: ESSA In Texas - consolidated state plan, submitted Sep 25, 2017
https://tea.texas.gov/About_TEA/Laws_and_Rules/ESSA/Every_Student_Succeeds_Act/

Item F: TAC Chapter 126 - Technology Applications TEKS, Adopted 2011
http://ritter.tea.state.tx.us/rules/tac/chapter126/index.html

Item G: Faculty Survey Results
Faculty Survey Results

Item H: Student Survey Results
Student Survey Results

Item I: Parent Survey Results
Parent Survey Results