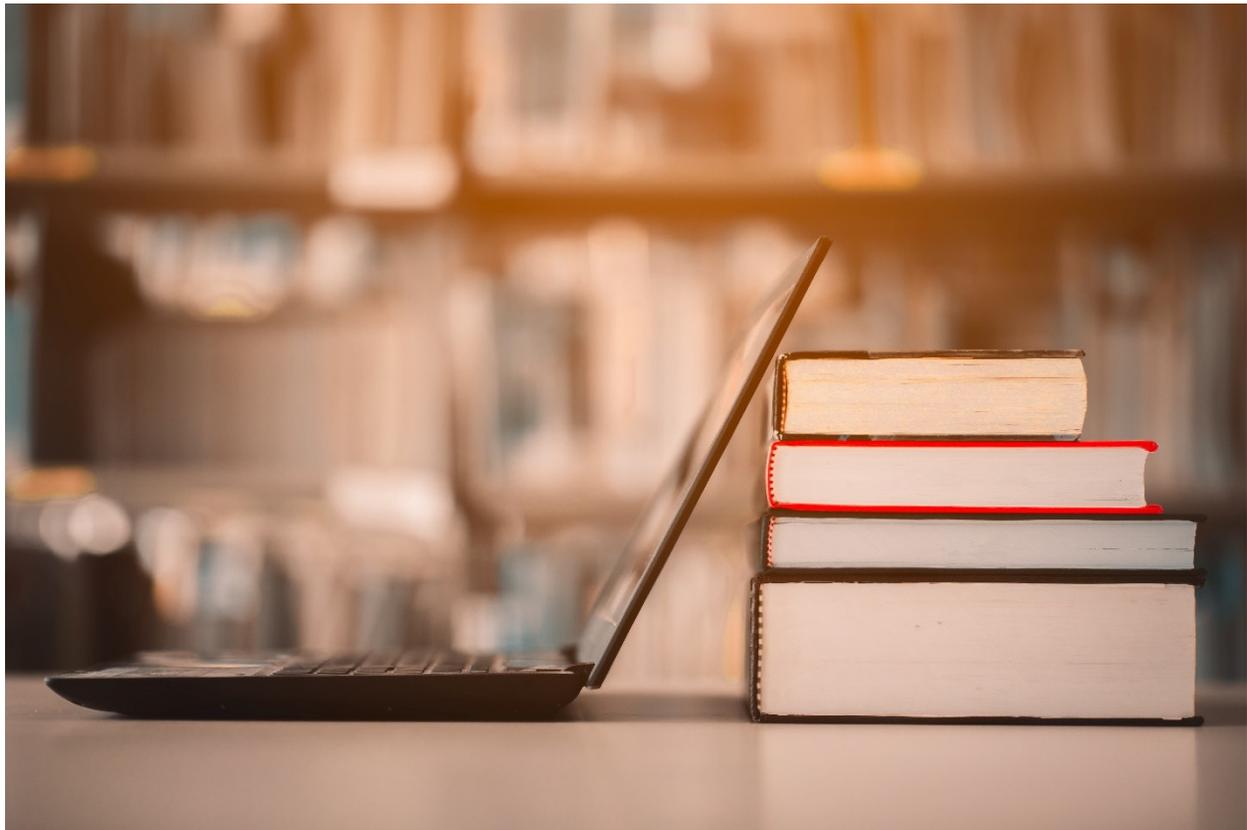# Livingston Independent School District Technology Needs Assessment

Report to Sul Ross State University

Department of Education

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By

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Livingston Independent School District Technology Needs Assessment

INTRODUCTION

Serving approximately four thousand students on seven campuses that cover over three hundred square miles in Polk County, Livingston Independent School District offers a challenging curriculum dedicated to inspiring students for success while preparing them for college and the workforce. The purpose for this Needs Assessment is to identify the current standing of technology within the district by examining areas such as infrastructure, current and future devices used, accessibility, security, and policy through an interview with the Director of Technology for Livingston ISD.

INTERVIEW OF DIRECTOR OF TECHNOLOGY

An interview with Kip Robins, the Director of Technology for LISD, was conducted in a telephonic interview, as well as through email, where we discussed information pertaining to their current and future state of technology. Mr. Robins leads a technology department that oversees all management of district technology, as well as technology training for professional development and security compliance of state and federal policies. The following is the interview questions and answers allowing a determination of the current state of Livingston ISD's technology department.

1. What is your district's current network capacity and state of the physical infrastructure?
2. What types of devices does your existing network support, and what is planned for the future?
3. What are your options for high-speed internet access within your area?
4. What is the best connectivity path for your district?
5. What are the steps for planning your school wireless networks?
6. How should security risks to the network be managed?
7. What factors are considered when selecting devices for the district?
8. How are they rolled out to the schools in your district?
9. How do you recommend schools ensure responsible use of these devices?
10. What are the district's obligations for protecting the privacy of students?

DATA REVIEW

This section of the Needs Assessment for Livingston ISD is based upon information gathered within the interview process and an analysis of the Comprehensive Needs Assessment Data Documentation on the district website. LISD is in the process of integrating new technologies to provide higher level learning environments where all areas of technology are continually being evaluated and upgraded. Since the COVID-19 pandemic, Livingston ISD is developing a comprehensive plan to implement technological systems and processes to maximize teaching and learning, professional practices, support for administrative and operational functions, as well as infrastructure, and provide seamless learning opportunities for Pre-K – 12. The current infrastructure supports the district's 1:1 initiative for all grade levels with a need for wireless infrastructure improvements that will allow for Chromebook use on all campuses. Professional development opportunities for blended classroom instruction, project-based

learning, Google Education, and iPads/tablets are sufficiently addressed and offered at multiple times throughout the school year. For emerging technologies, the district maintains a group of Tech Integration Teachers on each campus for mentorship and assistance for all staff.

DIGITAL LEARNING

Digital learning has become a major focus after Covid-19, and beginning in 2021, Livingston ISD is making improvements for the enhancement of learning for staff and students where educators have the power to decide what technologies they would like to integrate in their classrooms, while the technology department provides their educators the capabilities. Educators integrate technology TEKS for appropriate grade-level lessons throughout the school year, which includes the us e of project-based learning and the initiative Uniting the 4C's.

ASSISTIVE TECHNOLOGIES

For each content area there are assistive technologies in place for student support, such as text to speech, as well as modification based on student needs according to student documentation. According to the Assistive Technology Industry Association, "Assistive technology is any item, equipment, or system that is used to increase, maintain, or improve the functional capabilities of persons with disabilities", (ATIA, 2022). LISD is continually striving for equitable learning for all students.

INFRASTRUCTURE

Although I believe there is a solid infrastructure in place for Livingston ISD, the district is continually looking for improvements as technology is consistently evolving and being integrated into education. LISD is a 1:1 district providing Chromebooks to all students. Educators are being provided wireless devices with docking stations for improved classroom functions and teaching capabilities. Elementary teachers are using tablets for higher learning opportunities with their students. LISD and the community have collaborated to create the LivCom Lions Wi-Fi initiative that provides high speed internet for students in the community.

SECURITY

As stated in the interview, security is always an issue of, "it's not if, but when", leaving opportunity for continuous improvement in this area. Through district firewalls, servers outside of the United States, such as servers in Russia and China, are blocked from usage. To this point, Livingston ISD has been successful in avoiding unauthorized intrusions. As mentioned in the interview, another school was attacked with ransomware involving student data, costing the district approximately 3 million dollars. Security plays an integral role in the district's technology, leaving a need for upgraded protection.

POLICY

Livingston ISD's policies are stated within the faculty and student handbooks, as well as on the district website. Policies are followed strictly and addressed on an individual basis. Failing to adhere to these policies can lead to severe reprimands, possibly leading to legal punishments. The district adheres to all state and federal laws.

RESOURCE IDENTIFICATION and USAGE

Through the use of TEKS Resource Systems and data reports from STAAR, PBMAS, AYP, TAIS and Lead4ward, the district can measure student performance and align curriculum. Educators individually use open resources within their classrooms for higher learning. Professional development is needed for the implementation of educational technologies for yielding higher instructional strategies across curriculum.

SUPPORT SERVICES

Livingston ISD has a strong support service for assistance and mentorship of educators with emerging educational technologies in their classrooms. The district has upwards of 30 teachers actively participating in this mentorship program that assists with campus trainings and professional development.

STRENGTHS

Livingston ISD provides 1:1 accessibility for educators and students through a reconfigured and expanded budget. The district has built strong relationships with vendors for lower costs when purchasing educational technologies and internet having multiple paths of connectivity for outage preventions. Livingston has built healthy connections with outside companies for constant and consistent monitorization of bandwidth as well. Educators are provided options for technology and worked closely with by the technology and curriculum departments for choosing classroom technology, allowing for higher learning. Their security in closely monitored for student data safety and restrictions are placed on outside servers with potential threats for a more secured network.

WEAKNESSES

Although Livingston has a 10-gig connection, their firewall only allows use for half of this. For a district in a rural area, there is a deficiency in internet providers as Livingston has access to two local providers. A key weakness is their bandwidth struggles as student testing for STAAR exams is now cut in half with state testing now being 100% online and interactive. With the evolution of technology comes emerging threats in security. With technology being integrated into classrooms, some educators may have negative attitudes towards integration.

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