Technology Needs Assessment and Strategic Plan for Sul Ross State University

Background

Sul Ross State University (SRSU) is a public institution of higher education with campuses in Alpine, Del Rio, Eagle Pass, and Uvalde, Texas. SRSU takes pride in being an HSI, and as such, it makes great efforts to ensure that its students succeed academically by providing them with smaller classes, qualified instructors, and relevant, hands-on learning opportunities (Miller-Ray & Online Learning Strategic Planning Subcommittee Members, 2021). There is a wide variety of undergraduate and graduate courses available at SRSU, which is a member of the Texas State University System. Several degree and certificate programs can be completed entirely online at Sul Ross State University. On-site and remote learning options are provided. All degree programs at SRSU are designed to accommodate students who either cannot attend classes on campus due to personal or professional obligations (Miller-Ray & Online Learning Strategic Planning Subcommittee Members, 2021). The goal of the university's online courses across all platforms is to provide students with a high-quality education and a supportive learning environment. SRSU has been offering distance education for over 20 years, and it has a well-deserved reputation for providing successful educational opportunities for distance learners.

# Vision for Online Learning

Through its various online degree programs, Sul Ross State University is dedicated to provide education that is both accessible and of excellent quality. The teaching and support personnel at the university are committed to ensuring that each student is successful in the academic path that they have selected. The online programs offered by Sul Ross State University can provide you with the opportunity to develop your profession or pursue higher education, both of which can help you reach the goals that you have set for yourself. All students at Sul Ross State University will have access to high-quality online learning opportunities, which will be made possible by the university's adoption of cutting-edge

technologies, effective pedagogical techniques, and innovative course design (Miller-Ray & Online Learning Strategic Planning Subcommittee Members, 2021).

## **Purpose**

This document intends to evaluate the technological requirements of Sul Ross State University and offer a strategic plan to handle important issues including infrastructure, security and safety, cost, and digital learning goals. These suggestions can help the university improve its technology capabilities and guarantee a positive learning environment for students.

## Risk Assessment

## Strengths

At Sul Ross State University in Alpine, Texas, there are about nine people who work in the office of information technology. On the sites of Rio Grande College (RGC), there are about four people who work in information technology. They help all people at the university, including students, instructors, and staff, with their information technology needs. Each school gets 10 gigabytes per second (10 gbps) from the university's network, and each classroom, office, and room have a capacity of 1 gigabit (Davis & Fuentes, 2023). The current network infrastructure can handle 1800 desktop and laptop computers, 200 network switches, and 100 Wi-Fi antennas (Davis & Fuentes, 2023). They also use strict security steps to keep internet threats from getting into the university's data and network (Davis & Fuentes, 2023). Also, faculty, office staff, and students can use a number of different tools, which makes it easier to use technology in different ways.

## Weaknesses

The main problems OIT faces are budgetary, personnel, and equipment-related. Due to cost and a constrained budget, the networking equipment is roughly ten to twelve years old (Davis & Fuentes, 2023). They are only able to provide a maximum of fifty laptops to members of the professors and staff each semester due to the limited number of workers and the considerable amount of programming that

needs to be done (Davis & Fuentes, 2023). As per assistive technology for people who are disabled, OIT reviews each case on a case-by-case basis and implement what is required (Davis & Fuentes, 2023).

Goal - Improve Resources Available to Support Student Success

## Digital Learning:

**Objective**: To provide a robust digital learning environment that supports student engagement, collaboration, and effective learning outcomes.

#### Actions:

- Assess the current state of digital learning tools and platforms.
- Identify gaps and areas for improvement.
- Invest in state-of-the-art learning management systems and educational technologies.
- Provide training and support to faculty and staff for integrating technology into teaching practices (Sul Ross State University, 2022).
- Monitor the effectiveness of digital learning initiatives through student feedback, assessment data, and faculty evaluations.
- Collaborate with faculty and students to understand their digital learning needs and preferences.
- Maintain technology support and instructional design staff and equipment to maximize the distance education experience for students and faculty (Sul Ross State University, 2022).

## Infrastructure:

**Objective**: To ensure a reliable and scalable technology infrastructure that meets the evolving needs of the university community.

#### Actions:

- Conduct a comprehensive assessment of the existing infrastructure, including network, servers,
   and hardware.
- Identify areas of improvement, such as network speed, bandwidth, and coverage.
- Upgrade infrastructure components to support increased demand for digital resources and services.
- Implement a scalable cloud-based infrastructure to support future growth and flexibility.
- Regularly monitor network performance, conduct security audits, and address any issues promptly.
- Ensure every room and digital space meets the standards for the Americans with Disabilities Act
   Standards for Accessible Design (Sul Ross State University, 2022).
- Develop and implement a maintenance schedule for all building s (Sul Ross State University,
   2022).

## Security and Safety:

**Objective**: To enhance the security and safety of the university's technology systems, data, and users.

## Actions:

- Conduct a thorough security assessment to identify vulnerabilities and risks.
- Develop and implement a robust cybersecurity policy and framework.
- Invest in advanced security technologies, such as firewalls, intrusion detection systems, and antivirus software.
- Provide ongoing training and awareness programs for faculty, staff, and students on cybersecurity best practices.

• Establish a dedicated security team to monitor and respond to security incidents effectively.

# **Cost Management:**

**Objective**: To optimize technology spending while maximizing the value and impact of investments.

## Actions:

 Conduct a comprehensive review of technology-related expenses, including hardware, software licenses, maintenance, and support contracts.

- Identify opportunities for cost savings through vendor negotiations, consolidation, and standardization.
- Prioritize technology investments based on their alignment with the university's strategic goals.
- Implement a regular review process to assess the cost-effectiveness of technology initiatives
   (Sul Ross State University, 2022).
- Establish a technology governance committee to oversee budgeting and decision-making processes.

<u>Monitoring</u>: Regular monitoring and evaluation will be crucial to ensure the successful implementation of the strategic plan.

## Key monitoring strategies include:

- Collecting and analyzing data on student satisfaction, learning outcomes, and engagement with digital learning technologies.
- Conducting annual technology audits to assess infrastructure performance, security measures,
   and cost-effectiveness.

- Regularly reviewing incident reports, security logs, and response times to identify areas for improvement.
- Engaging in continuous feedback loops with faculty, staff, and students to gather insights and address emerging needs.

# **Resources**

- Davis, A., & Fuentes, J. (2023, June). Sul Ross State University Chief Information Officer Interview. personal.
- Miller-Ray, J., & Online Learning Strategic Planning Subcommittee Members. (2021). Online Learning Strategic Plan. Alpine; Sul Ross State University.
- Sul Ross State University. (2022, April 5). Strategic Plan 2022-2027: Our Student-Centric Focus (Draft). Alpine; Sul Ross State University.