

RED LAKE NATION COLLEGE

Technology Plan



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Introduction

The Red Lake Nation College (RLNC) technology plan addresses both the operational and academic/instructional uses, of current and future technology. For the purposes of this plan, academic and instructional technology will be used interchangeably. The organizational technology needs will be implemented by the IT Technician with assistance from the RLNC Administrative team. This document allows continuous update through the Curriculum Committee.

The Curriculum Committee provides guidance and oversight to ensure that all curricula is sound, comprehensive and responsive to the evolving needs of students and the community. Additionally, the committee provides directives outlining campus needs in the areas of infrastructure, hardware, software, and support services. The Curriculum Committee is comprised of faculty members as well as several administrative staff which ensures that the committee works closely with each department throughout the college to understand their current and continuing technology needs.

Goals and Objectives

Technology is essential to RLNC and pervades throughout higher education. RLNC has adopted the view that educational goals must encompass technology. Owing to the importance of technology in RLNC's instructional goals the Curriculum Committee has identified the following goals in separate categories for operations and academics.

Operational Technology goals

1. Review ongoing technology needs on campus and develop replacement cycles for campus technology.

Academic Technology goals

1. Develop technology driven classes that can advance the institutional outcome that students will learn inherent knowledge of the Red Lake Ojibwe language, culture, and history.
2. Prepare students for transition to a four-year college or university by exposing them to coursework and technology from those institutions.

Operational Technology

In 2015 RLNC improved their technology infrastructure and all faculty and staff computers were updated to Dell desktops. The college also purchased new servers, incorporated an enhanced college wide phone system in each office throughout all departments in the college. See “Existing Resources” below for the specific scope of the improvements.

The Curriculum Committee will develop suggested replacement cycles for current technology during spring of 2018, as current technology was purchased with the intention to last longer than 2018.

Existing Resources

- ✓ Two servers that support the college.
 - They are Dell models capable of supporting the 32 lab computers and 53 staff and faculty computers.
- ✓ The college is wired with state of the art, telecommunications networking fiber optic cable lines that were installed within the last 3 years.
 - These lines can handle the latest technology of phone, networking and high speed Internet capability.
- ✓ 1 GB Internet connection through Paul Bunyan Communications, a rarity for rural reservations
- ✓ New Mitel VOIP model phone system that has 45 new phone bases.
- ✓ Aerohive wireless system capable of supporting up to 1,000 users at one time.
 - There is an outdoor wireless access point that supports students using wireless within 500 feet from the building.
- ✓ New HD and networking lines are installed in every classroom and teaching lab.
- ✓ One full-time IT Technician

New Operational Resources

Due to the extensive technology update in 2015, the curriculum committee does not anticipate a need to expand administrative technology usages. Any department that discovers an unexpected lack in their technology goals will address the deficiency in curriculum committee and if approved the governance committee will review with the understanding that funding and budgetary factors will need to be considered, before the decision can be implemented and approved in the President’s office.

Development of a staff intranet is currently being researched and will be implemented during spring 2018 in order to improve staff computer file storage, sharing, and maintenance. A move to Office 365 is currently being researched. If RLNC transitions to Office 365, that will take place in summer 2018.

Mainstreaming the printing and scanning at RLNC will need to be a priority for the 2018-19 AY. This will entail removing personal printers from most offices, ordering and issuing individual desktop scanners, and connecting everyone to one or more of the large Xerox machines. Every office is located within a short distance of one of the three main contracted printers/scanners/copiers. Utilizing these contracted printers more than individual printers in offices will allow for better data tracking and will cut costs.

As of January 1, 2018, our IT Technician will function separately from the Red Lake IT Department. This transition will involve inventorying and tagging all RLNC IT equipment and resources with new ID tags, creating a new ticket system, and developing a training schedule.

Spiceworks will be used for ticket management beginning January 1, 2018. Tickets can be submitted by anyone using this link <https://rlnc.on.spiceworks.com/portal/tickets>. This link will be added to the RLNC website before the first of the year. Tickets will be managed by the IT Technician and supervised by the Director of Library Services and Tribal Archives.

Updating ID tags will take place over the course of the spring 2018 semester. The schedule for this is TBD.

Academic Technology

Technology hardware used during instruction will vary with the learning objects for each class. In order to meet the technology requirements of Red Lake Nation College Academics, the Curriculum Committee will re-assess current technology abilities each December.

Our current academic technology capabilities include:

- ✓ Canvas Learning Management Software and Populi Student Management Software (Summer 2017)
- ✓ Red Lake Nation College Google accounts for all staff and students
- ✓ Classrooms equipped with 42 inch television displays to aid instructors in presentations.
 - These televisions use EZCast software for wireless casting as well as,
 - Direct HDMI wall plug-in for computer-to-television projection.
- ✓ A learning center equipped with ten student computers open for tutoring and research help* whenever the library is open (at least 40 hours/week).
- ✓ One computer lab
 - A 20 station computer lab is accessible to students for homework and scheduled courses
 - All computers at RLNC are connected to a wireless Aerohive network, have Internet access and are furnished with Microsoft Office products and operate on Windows 10.
- ✓ One mobile lab/charging station containing 12 Google Chromebooks.

- This unit can be checked out from the library by instructors and staff.
- ✓ One SMART board (purchased fall 2017, implementation to occur in spring 2018)

*Students are given instruction regarding how to access databases available for free through the Electronic Library for Minnesota (ELM). The Director of Library Services and Tribal Archives is the staff member in charge of instructing on the ethical use of information resources.

Current Instructional Technology Implementations

Not all of RLNC students come to college equipped with necessary skills regarding technology. During the admissions process, students take three placement tests, one of those being a technology test. If a student places below the cut score, they are required to enroll in TECH 0900: Computer Basics during their first semester. Elements of this course include instruction regarding: Windows 10, basic computer and file navigation, email, Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Internet privacy and security, cloud storage, and using the Internet for college research. This class is held in the computer lab and has multiple sections offered every semester as needed.

The TECH 0900 course is taught on a rotating basis by three instructors. These instructors include: the RLNC Director of Library Services and Tribal Archives, the RLNC full-time math instructor, and a librarian at Bemidji State University. All instructors have a Master's Degree and at least 18 graduate technology credits. The instructor from Bemidji State's library is also working on a second Master's in Educational Technology from Minnesota State University. In addition, they all have demonstrated passion for technology and instruction of our students.

First Year Experience (FYEX) is a required course for all students and is taken during a student's first semester. This class is held in the computer lab and has multiple sections offered every semester. The Learning Management System, Canvas, is used daily in class, and students are taught to use Canvas for discussion boards, assignment upload, access to course materials, the gradebook, quizzes, and more. The curriculum includes essential skills needed to be successful including an entire week dedicated to the teaching and learning of the ethical use of information resources. Additionally, this class is held in the large computer lab so that students have constant access to computers and can build familiarity with our existing technology.

Although First Year Experience has an explicit focus on technology and building familiarity with the technology skills needed to be successful, every course offered by RLNC utilizes Canvas for the syllabus and gradebook, and many teachers use it for daily coursework. It is also strongly encouraged that every class that includes a research paper component schedules a workshop with the library in order to ensure students take necessary steps while researching.

The curriculum committee, in cooperation with the Director of Library Services and Tribal Archives, is committed to not only having available technology resources for our students but also ensuring they know how to use them.

Instructional Technology Outcomes

One instructional technology outcome we hope to achieve would be the development and implementation of more technology driven classes that can advance the institutional outcome that, students will learn inherent knowledge of the Red Lake Ojibwe language, culture, and history.

This outcome will be achieved in two ways.

The first is through the creation of a “technology bridge.” RLNC is expanding instructional technology in the near future, to implement a "virtual presence" technology paid for by the \$100K USDA RUS rural development grant. This virtual presence is designed to be a startup grant that will provide hardware for the college as we start our "technology bridge" and connect to the other colleges and universities in Northern MN. This bridge will allow our students at RLNC to be able to take more Ojibwe classes that we do not currently offer.

The USDA RUS grant provided funding for hardware and software to get this initiative started.

A separate \$300K grant from the Bush Foundation provided for the planning and implementation of courses during the 2016-17 Academic Year. Six RLNC students used teleconferencing technology to join a Criminal Justice and Society course taught by Dr. Elizabeth Hagensen, assistant professor of criminal justice at Bemidji State University during the spring 2017 semester. This course offering removed the distance barrier that many of our students struggle with. The equipment necessary for Aazhoogan arrived in Red Lake during the spring 2016 semester and training occurred in summer 2016.

Before more can be done with these virtual presence and distance learning opportunities with other institutions, several foundational steps need to be established. The Curriculum Committee will work with the Director of Assessment and Institutional Effectiveness and the VP of Academic Affairs in order to develop a plan for future implementation. This plan must include oversight of academic rigor at partnering institutions, support services available for students, and faculty credentials. The plan will be completed before more classes are offered through our partnerships.

The second way this outcome will be achieved is by providing courses in the technology field. There is a huge gap regarding Native Americans in the technology industry. By providing more opportunities to experience multiple aspects of the technology field via new survey courses, students are exposed to potential careers in technology. Red Lake Nation College will launch two new technology courses during the 2017-18 Academic Year.

Tech 1200: Fundamentals of Web Design and App Development is designed to be a survey course introducing students to elementary aspects of web design and app development. By

utilizing active learning in the computer lab, students will leave this class having created multiple webpages and mobile apps. This course is only offered in fall with the hope that as interest in the content increases, a student club could be created in order to encourage these skills and activities year-round.

TECH 2100: Digital Storytelling & Preservation will allow for students to get hands-on service learning in digital archives practices inside their own Red Lake Tribal Archives. Material students could help digitize includes oral histories, photographs, film, recorded Ojibwe songs and music, Ojibwe language lessons, as well as paper documents. A small grant of \$650 was awarded to the college by the Beltrami Electric Cooperative Trust, Inc. Operation Round-Up Grant in order to purchase equipment for this course. This course is an introduction to the possibilities of how technology and traditional knowledge can be utilized together.

Future Instructional considerations

The curriculum committee, in cooperation with the Business Office, will review and develop a feasibility plan consisting of the practicality of including a laptop as part of a FT student's required equipment and deducted from their financial aid in their first year for the 2018-19 academic year. In the feasibility plan the technology committee will be encouraged to keep the cost under \$350 per student with goals of helping the student's performance. Most likely, Chromebooks will be purchased in order to emphasize the ease in which students can utilize the Google Suite available to them with their student Gmail accounts. Canvas also has the ability to integrate Google Suite into courses. This plan will be created during spring 2018.

A 12 computer mobile lab was purchased in fall 2017. This mobile lab is comprised of a 12 Chromebooks and a mobile charging station. This can be used for assessment at community and continuing education events as well as an additional resource for classroom instruction.

Training

The USDA RUS grant includes mandatory trainings for faculty using the virtual presence. The faculty will then instruct the students in proper usage and expectations which will also be clearly outlined in course syllabuses. The IT Technician will schedule, plan, and facilitate these trainings.

The RLNC IT Technician will complete two certifications/year in order to maintain knowledge in the field and to improve upon current skills.

The following is the projected timeline for certifications for the next three semesters.

Spring 2018: CompTIA Security+
Fall 2018: CompTIA Network+

Spring 2019: Microsoft Certification

Additionally, the RLNC IT Technician, VP of Academic Affairs, Director of Library Services and Tribal Archives, and at least one faculty member will attend the InstructureCon conference in July 2018. These staff will also attend webinars throughout the year to continue building skills using the LMS, Canvas.

Maintenance

We have standard three-year warranties on all RLNC technology. Until January 2018, RLNC's outsourced IT department handles software and hardware maintenance issues including helping RLNC with warranty issues. RLNC's IT Technician is a transfer from the Red Lake IT Department and will take over work with the warranties and maintenance.

Our blanket college policy includes all technology in RLNC's building. For the insurance, we are covered under the Tribe's blanket policy for \$11.4M for the entire college building and contents. The Tribe pays this as part of our Indirect Costs we pay them.

Costs and Funding

Red Lake Nation College looks for grant funding on an ongoing basis. The Aazhoogan technology bridge is a grant-funded initiative by the USDA RUS grant and the Bush Foundation grant. The National Endowment for the Humanities regularly posts funding opportunities for such projects which RLNC will apply for.

Assessment

Operational technology effectiveness will be determined by the discussions and suggested improvements made during the Curriculum Committee suggested replacement cycles.

The development of a computer placement test was integrated into the current placement tests for admitted students. The placement test will help with assessment and student success. The test would allow us to focus on the students who need the most help to be at a college level regarding use of technology. This should increase grades and decrease withdrawal and failure rates for the college.

In order to gauge the success of the institutional outcome for students to have inherent knowledge of the Red Lake Ojibwe language, culture, and history assessment tools will need to be developed at the same time the service learning opportunities are developed. TECH 2100 will be a pilot class for developing this type of cultural assessment. Examples of assessment tools for the service learning opportunity can include: number of students participating, number of hours spent digitizing archival material, number of training hours received by students, and surveys for

the students that will ask about interest in participating, barriers in participation, and specific interests for future technology courses.

Anticipated Timeline

Action	Target Date	Progress/Status	Implementation
Cultural Digitization Projects & Assessment of Service Learning	Spring 2018	Begin in TECH 2100 in Spring 2018	Director of Library Services and Tribal Archives
Purchase and implement of new Learning Management Software	Spring 2019	Canvas and Populi were implemented in Fall 2017	VP of Academic Affairs
Purchase a mobile lab	Fall 2017	Completed	VP of Academic Affairs, IT Technician
Develop Computer Placement Test	Summer 2017	Completed and Implemented Summer 2017	ITECH 100 instructors
Update computer Operating System to Windows 10	Summer 2016	Completed Spring 2018	RLNC IT Technician
Develop Implementation Plan for Distance Learning and Virtual Presence classes with partnering institutions	Spring-Summer 2018	In progress	Curriculum Committee, Director of Assessment & Institutional Effectiveness, VP of Academic Affairs
Finalize separation from Red Lake Tribal IT Department	Spring 2018	In progress	VP of Academic Affairs, Director of Library Services & Tribal Archives, IT Technician

USDA RUS Grant “Technology Bridge”	August 2016	In Progress	President, Director of Assessment & Institutional Effectiveness, VP of Academic Affairs
Bush Foundation Grant & Classes from BSU	August 2016	In Progress	President, Director of Assessment & Institutional Effectiveness, VP of Academic Affairs
Implement staff intranet	Spring 2018	In progress	IT Technician
New website	Summer 2018	In progress	ITh Technician, Director of Library Services & Tribal Archives, VP of Academic Affairs
Replacement cycles updated	December 2017	Incomplete-Will add to Committee Work Plan for 2018-19	RLNC Curriculum Committee
Student Laptops	Spring 2018	Looking for funding	Business Office