



RSU #74

RSU #74 Technology Department 5-Year Plan 2023-2028

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Mission Statement & Vision

District's Mission Statement:

The school community of RSU #74 will work together to raise the aspirations of all students by providing them with lifelong learning skills so that they may become self-sufficient contributing members of society.

Educational Technology Vision:

The school community of RSU #74 will develop the capacity to integrate technology as a tool for effective learning, communicating, and problem-solving to be successful lifelong learners and contributing members of society.

Background

In today's world, technology is in almost every task that needs to be completed. Planning for what the district needs for the next 5 years comes down to two components. The first is the physical IT needs of an organization (i.e. servers, networking equipment, computers for staff, antivirus, etc).. The second is technology integration in the classrooms. This is a harder one to measure, but is no less important than the IT equipment and software.

In this document we will go over the current state of the two components and the goals that will need to be kept in mind while planning for the next 5 years.

Where are we?

Information Technology (IT) Status:

Networking:

Each building has had its wireless access points and network switches upgraded within the last 6 years. Typically network equipment such as switches, wireless access points, etc should be replaced every 8-10 years. Wireless access points may need to be upgraded sooner if a newer wireless protocol is released and required by new computers. Carrabec Community School and Carrabec High School also have several servers in part due to their size. The number of network devices means that they need more servers to handle all the network usages that are needed such as DHCP, DNS, etc. Due to both the Community School and High School having server rooms, we also house services that are needed district wide such as the Library Servers, Imaging servers, etc in those buildings. Carrabec Community School also has a server for file storage for the Superintendent's Office. We have marked half of these servers to be upgraded with servers that were purchased this past summer with COVID money.

User Devices:

Staff Devices:

Staff devices are currently determined based on the role that they are hired for, and need. The basic breakdown is as follows:

Staff with a Teaching Contract have been assigned a HP 15" Windows Laptop

Classroom teachers are also assigned a Chromebook (purchased from COVID funds to help with remote learning)

Ed Techs have been assigned a Chromebook

Bus Drivers have been assigned an iPad for them to fill out their daily paperwork needed for the bus checklists.

Maintenance Staff have been assigned a HP 15" Windows Laptop in order to be able to use the building HVAC software.

Office Staff have been assigned a HP 15" Windows Laptop

Student Devices:

Student devices are assigned based on grade level. The current grade break -down for laptop assignment is:

K-5 currently has one laptop for every student (1:1) with the CTL Chromebooks that were purchased three years ago at the start of the pandemic. The 1:1 Chromebooks were added to grades K-2 due to the pandemic and have worked well for the teachers over a shared laptop cart. The replacement plan is to replace these in the summer of 23-24.

6-8 currently has Chromebooks that were purchased through the State's MLTI program. They are almost exactly like the Chromebooks that the other grades have, but were purchased in different years. The State determines the upgrade timetable for these devices and covers most if not all the cost for replacements.

9-12 currently has laptops that were purchased in the fall of 2020. Using a grant we have purchased new Chromebooks for this grade level this summer, but unfortunately they did not arrive until after school had started. The plan is to switch to the new devices for 9-12 before the 23-24 school year.

Classroom Technology

In addition to these devices we also provide classrooms with spare Chromebooks so that if a student's device is not functioning properly or a student forgot their laptop at home they can still participate in any lessons that the teacher has planned for that class.

In classrooms we have moved from mounted projectors with separate interactive whiteboards to Interactive tv whiteboards called Promethean Boards. These boards are superior to a mounted projector due to its better image quality, sound, ease of use and there are no parts that need regular replacing. These were purchased using funds from the pandemic in the fall of 2020 and have a 10 year lifespan.

Technology Integration Status:

Technology integration is a hard one to say “here is where we stand”, like you see with the physical devices above. When we were starting the pandemic we had a large number of integration training since students might be remotely in a class so we needed to ensure that students had access to their materials. This greatly increased the amount of technology integration that happened in the district, but more in a substitution or augmentation form of integration rather than a transformation form of integration. Transformational integration includes elements of communication, collaboration, critical thinking, and creativity, which can help to enhance the students’ learning and understanding of a topic.

Staff are more likely to try new technology implementation since the pandemic, but keeping up with all the different technology tools and methods can be daunting. Starting after Christmas break we will begin making technology integration fliers with different technology tools and how they can be used in the classroom. We also have an open invitation to staff that they can schedule a time with any of the technology staff to come in and help with technology integration.

Staff in grades 5-8 also have access to the MLTI Integration Specialist through the State of Maine. This program is called the MLTI Ambassadors. Martha Thibodeau recently took over our region and we hope to have Martha come in often as a lot of staff know Martha and have worked with her in the past.

This is not to say that we do not have teachers doing transformational technology integration. Unfortunately we do not know of all the great things that happen in teacher’s classrooms. This spring we will send out a technology survey to the teachers asking about the current technology that we provide to them and the students, how they use the technology, and how often in their classroom. We will use this data to get a better understanding of what we are doing in the classroom and how we can best help them moving forward.

Goals & Objectives

The following are goals and objectives that we have used since 2014 in our planning and implementation of technology for RSU #74

**(due to the pandemic some aspects were put on hold the last few years but will begin to be implemented again in the 22-23 school year)*

Goals Overview

- Goal #1 - The RSU # 74 community will provide leadership, commitment and expertise in the use of technology.
- Goal #2 - The RSU # 74 community will continue to integrate technology into teaching and learning to provide ways through which students can demonstrate achievement of Maine's Learning Results, and the community can further their education.
- Goal #3 - The RSU # 74 community will continue to train and assist all staff to effectively integrate technology into learning, teaching, evaluation, and management responsibilities.
- Goal #4 - The RSU # 74 community is dedicated to the continual support and maintenance of an effective, modern network of computers and peripheral equipment in order to provide regular equitable access of technology to all students and staff.

Objectives

Goal #1 - The RSU # 74 community will provide leadership, commitment and expertise in the use of technology.

- Support a well trained tech team to oversee the technology program with at least the staffing of: IT Manager & two Technicians
- Support a technology committee
- Maintain effective lines of communication concerning technology information sent home through ParentSquare and access to ParentVUE.
- Pursue all funding resources

Goal #2 - The RSU # 74 community will continue to integrate technology into teaching and learning to provide ways through which students can demonstrate achievement of Maine's Learning Results, and the community can further their education.

- Ensure student proficiency in district technology skills and digital citizenship
- Provide support for the MLTI (Maine Learning Technology Initiative) program
- Continue integrating technology into the teaching and learning in all classrooms
- Continue to self assess and establish technology goals as they relate to teaching and learning

Goal #3 - The RSU # 74 community will continue to train and assist all staff to effectively integrate technology into learning, teaching, evaluation, and management responsibilities.

- Develop staff who are proficient in curriculum integration
- Develop staff who will use technology in their evaluation and management responsibilities

Goal #4 - The RSU # 74 community is dedicated to the continual support and maintenance of an effective, modern network of computers and peripheral equipment in order to provide regular equitable access of technology to all students and staff.

- Evaluate and upgrade infrastructure where needed
- Support the role of a technician
- Increase computer to student ratio
- Include all types of beneficial technology to enable universal access to curriculum by all students

The Next Five Years

IT Technology

The key to the next five years for technology replacement, whether that be networking equipment, staff/student laptops, etc will be by creating an up to date replacement plan. Three years ago we purchased laptops using district funds for 5-12 (minus MLTI 7-8) with a three year lease. This was planned to happen every three years for this group of students. We were going to work in staff, networking, and other grades, each year after but with the pandemic, all of these items were purchased using grant funds and so this plan was never added to the budget.

We are now at a point where we need to implement a long term plan for technology replacement. The plan is to purchase a grade level group of laptops every three years, one grade level group at a time, except MLTI grades which will be covered by the State. This will mean that every three years the laptops will be switched out within a grade level group. The years that there are less devices to purchase would rotate from purchasing network equipment and servers, so that those are replaced every 6 years.

Overview of Replacement Plan:

2023-24		
Grades K-5	275 Students	\$500 per device
Need Total	\$137,500.00	
Difference from what is currently in the technology budget	\$59,058.00	To be added to the Technology Budget for the 23-24 School Year
2024-25		
Staff	150 Staff	\$915 per device
Need Total	\$137,250.00	
Difference from 23-24	-\$250.00	
2025-26		
Grades 9-12	220 Students	\$500 per device
	\$25,000	Switch/Access Points & Server upgrades Off set each round
Need Total	\$135,000.00	
Difference from 23-24	-\$2,500.00	

The plan would be reevaluated each year with the grade levels that will be replaced and budgeted accordingly. This plan will allow most if not all technology device components to have a schedule for replacement while not causing large budget changes each year that could threaten the support of the technology program. (Goal IV)

This could also be implemented using leases for each grade level group being purchased which would be no increase to the budget in the 23-24 school year , but would increase for the two years after (about \$20,000 in 24-25 and \$45,000 in 25-26). This plan would cost thousands of dollars more in interest rate costs then the outright purchase plan above.

The other component that is needed is the support for the current technology staff that are in the technology department. With the ever increasing use of technology both in classrooms and in the everyday for other departments, the need for support has only increased. Without the two IT Technicians we would not be able to help staff and students as timely as we are able to now. This support directly helps the teachers and students with their assignments and lessons. (Goal I)

Technology Integration

With technology integration is it best to have multiple paths to help the staff be able to access professional development and support for implementation.

To help with integration I went to a training in October and hope to implement a few ideas. The first is to create a digital technology tool flier for ideas of integration with tools that are at the teachers' disposal. This will have started this winter and will continue with changes as needed. The second is a series of Self Guided PD. This would give teachers tasks that they need to do in the classroom (with guidance from resources listed on the PD or from one of the technology staff). Once the activity is completed and reviewed by the IT Manager they would get contact hours. This would give teachers more incentive to try new ideas and integration in their classroom as they would be able to get contact hours not only while building the lesson, but also while trying out the lesson with their students.. (Goal II & III)

In the past we asked teachers to fill out a survey in the spring that asked how the current technology was working for them and also how they were integrating technology into their classrooms. Since the pandemic we have paused this practice but plan to continue again with this in the spring of 2022. This data will be used to help plan for future technology purchases and needed professional development. (Goal II)

Staff in grades 5-8 also have access to the MLTI Integration Specialist through the State of Maine. This program is called the MLTI Ambassadors and it has been funded through 2024. Martha Thibodeau recently took over our region and we hope to have Martha come in often as a lot of staff know Martha and have worked with her in the past. We are currently working with Martha on the best way that we have included her in our Professional Development. (Goal II & III)

To see how well technology integration is integrated into the classroom we will utilize the [ISTE standards for students](#). These are national standards that most schools use for their technology integration assessments. (Goal II)

Summary

Right now we are doing very well with the technology that we have in the classrooms and with all the staff. Part of the reason that we have all this technology is from the grants that we received because of the pandemic. For next year and beyond we will need to figure out a long term plan for replacing our technology so that we can support our teachers and students. Plans for upgrades will get staff input and budgetary considerations each year to ensure that technology purchases are what is best for the district.

Although we can always do more with technology integration, we have a great staff that is using the technology in their classrooms on a regular basis. We do need to work on more support for the teachers with integrating the technology more, but we have plans to help start this process. We will continue each year to survey the staff to see how things are going and to see what can be improved upon.

Without the support of all the staff, students, families and community we would not be where we are today. We are grateful for their support which leads to our combined success.