# NORTHWOOD SCHOOL DISTRICT TECHNOLOGY PLAN



SAU #44

Northwood School
511 First New Hampshire Turnpike
Northwood, NH 03261

northwoodschoolnh.org

**Last Revised December 2020**

Contact: Steve Robert, Director of Technology
srobert@northwoodschoolnh.org

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# I. INTRODUCTION

**TECHNOLOGY COMMITTEE MEMBERSHIP**

This Technology Plan was developed by the Northwood School Technology Committee. The Technology Committee is a volunteer committee including members of the school staff, administration, and the Northwood community. The current members are:

Steve Robert, Technology Director
Erin Mawn, Library/Media Specialist
Chelsea Clairmont, Teacher, Grade 3
Amanda Freeman, Teacher, Grade 3
Joanne Ahlberg, Teacher, Grade 4
Adrian Alford, Assistant Principal
Jocelyn Young, Principal
Robert Paine, Special Education Teacher
Ellen Gibson, Teacher, Grade 2
Mike Ling, Curriculum Director
Jeff Long, Teacher, Grade 8

The Technology Committee meets once a month during the school year. The committee communicates with the staff through in-school notices and staff meetings. Communication with parents and other members of the community is through one or more of the school's communication services which include the school website, phone calls, email notifications, text messages, and the Northwood School NH app.

**NORTHWOOD SCHOOL DISTRICT**

Northwood is a rural community located east of Concord in Rockingham County. "About 4,200 persons (as of 2017) are full-time residents and about twice as many have second homes here. Though Northwood is sometimes called a bedroom community, there are more than one hundred small businesses in town, employing from one to twenty-five workers each." (http://northwoodnh.org/)

Northwood School is a K-8 school with a student population of about 340. It is the only K-8 school in the Northwood School District, one of two districts in SAU #44. The district pays tuition for high school students to attend Coe-Brown Northwood Academy. The staff of the school includes:
- 24 full time regular classroom teachers
- 1 Special Education coordinator (SAU Level) with 5 Special Education Case Managers
- 5 full time related arts teachers (Art, Music, Library/Media, Health, Physical Education)
- 8 specialists (school counselors (2), speech and language pathologists (2), reading specialist, nurse, and occupational and physical therapists)
- 2 administrators
- 1 Technology Director
- 1 Curriculum Director
- 1 Facilities Director (+6 custodians)
- 1 Food Service Director (+1 Part time kitchen staff)
- 28 paraprofessionals

- ▪ 3 secretaries (2 full time and 1 part time)

**DISTRICT MISSION STATEMENT**

The mission of Northwood School is to inspire students to be lifelong learners.  As a community we are committed to providing a safe, challenging environment that encourages all students to aspire to excellence.

**TECHNOLOGY VISION STATEMENT**

Technology is a tool to complement and enhance learning, productivity, communication, and accessing information. When using technology, students are involved in critical thinking, problem solving, collaboration, and information processing.  Our goal is to provide classroom, small-group, and student oriented learning opportunities to develop and apply technology skills to learning.

# II. TECHNOLOGY GOALS

1. **The District will align the Northwood School Technology Curriculum with state and national standards.**
   a. Identify and develop a template for technology curriculum that is consistent in format with curriculum documents in other subject areas.
   b. Review and revise Northwood School Technology K-4 Curriculum to align with NH State requirements by the end of the 2022-2023 school year.
   c. Review and revise Northwood School Technology 5-8 Curriculum to align with NH State requirements by the end of the 2022-2023 school year.
   d. The Technology committee will review the curriculum plan each year to make adjustments as needed.

2. **The District will provide professional development for staff on technology topics.**
   a. The District will offer an annual summer technology integration training.
   b. The Technology Director will provide training opportunities frequently throughout the year, including:
      i. Tech Tuesday
      ii. Online Learning
      iii. Individual consultation as needed
   c. The Technology Committee will establish points of contact for staff members to address needs and concerns.
   d. The District will provide professional development opportunities related to trends in education with technology.

3. **The District will establish and implement a schedule of technology instruction and assessment for students.**
   a. At the beginning of each school year, the Technology Director, Technology Integrator, and administration will develop a schedule of regular and dedicated technology instructional time.
   b. After the curriculum is revised, the Technology Committee will identify which staff members will teach each skill.
   c. The Technology Committee will identify resources and strategies to implement and blend

with regular classroom curricula.
  d. After the curriculum is revised the Technology Committee will develop an assessment schedule based on skills and grade levels.

**4. The District will establish a process to identify and budget for technology needs.**
  a. The Technology Committee will identify a needs assessment tool and will determine a schedule of implementation.
  b. The Technology Committee will explore opportunities for grant funding of technology purchases.
  c. The Technology Director with the input of the Technology Committee will develop a budget based on the needs of the district.
  d. The Technology Committee will collect information from staff on technology needs annually in the spring.

# III. BUDGET AND EVALUATION

The table below details the timeline and funding source for each goal. Tools to assess each goal will be identified and progress will be documented by the Technology Committee.

| School Year | Plan to accomplish goal<br>*Progress toward goal will be indicated in color | Budget |
|---|---|---|
| **Goal: The District will align the Northwood School Technology Curriculum with state and national standards.** | | |
| **2021** | a. Develop a template for technology curriculum that is consistent with curriculum documents in other subject areas. | Local budget |
| **2022** | a. Review and revise Northwood School Technology Curriculum to align with NH State requirements K-4 by the end of the 2020-2021 school year.<br>b. The Technology committee will review the curriculum plan each year to make adjustments as needed. | Local budget |
| **2023** | a. Review and revise Northwood School Technology Curriculum to align with NH State requirements 5-8 by the end of the 2021-2022 school year.<br>b. The Technology committee will review the curriculum plan each year to make adjustments as needed. | Local budget |
| | a. The Technology committee will review the curriculum plan each year to make adjustments as needed. | N/A |
| **Goal: The District will provide professional development for staff on technology.** | | |
| **2021** | a. The District will offer a summer technology integration training<br>b. The Technology Director will provide training opportunities as needed.<br>c. The Technology Committee will establish points of contact for staff members to address needs and concerns.<br>d. The District will provide professional development opportunities | Local budget and/or grant funding |

| | related to trends in education with technology. | |
|---|---|---|
| **2022** | a. The District will offer a summer technology integration training.<br>b. The Technology Director will provide training opportunities as needed.<br>c. The District will provide professional development opportunities related to trends in education with technology. | Local budget and/or grant funding |
| **2023** | a. The District will offer a summer technology integration training.<br>b. The Technology Director will provide training opportunities as needed.<br>c. The District will provide professional development opportunities related to trends in education with technology. | Local budget and/or grant funding |

| **Goal: The District will establish and implement a schedule of technology instruction and assessment for students.** | | |
|---|---|---|
| **2021** | a. At the beginning of the school year, the Technology Director, Technology Integrator, and administration will develop a schedule of regular and dedicated technology instructional time.<br>b. After the curriculum is revised, the Technology Committee will identify which staff members will teach each skill.<br>c. After the curriculum is revised the technology committee will develop an assessment schedule based on skills and grade levels. | Local budget |
| **2022** | a. At the beginning of the school year, the Technology Director, Technology Integrator, and administration will develop a schedule of regular and dedicated technology instructional time.<br>b. After the curriculum is revised, the Technology Committee will identify which staff members will teach each skill.<br>c. After the curriculum is revised the Technology Committee will develop an assessment schedule based on skills and grade levels. | Local budget |
| **2023** | a. At the beginning of the school year, the Technology director, Technology Integrator, and administration will develop a schedule of regular and dedicated technology instructional time.<br>b. After the curriculum is revised the Technology Committee will develop an assessment schedule based on skills and grade levels. | Local budget |

| **Goal: The District will establish a process to identify and budget for technology needs.** | | |
|---|---|---|
| **2021** | a. The Technology Committee will identify a needs assessment tool and will determine a schedule of implementation.<br>b. The Technology Committee will explore opportunities for grant funding of technology purchases.<br>c. The Technology Director with the help of the Technology Committee will develop a budget based on the needs of the district.<br>d. The Technology Committee will collect information from staff on technology needs in the spring.. | Local budget |
| **2022** | a. The Technology Director with the help of the Technology Committee | Local |

| | | will develop a budget based on the needs of the district.<br>b.  The Technology Committee will explore opportunities for grant funding of technology purchases.<br>c.  The Technology Committee will collect information from staff on technology needs. | budget |
|---|---|---|---|
| **2023** | a.  The Technology Director with the help of the Technology Committee will develop a budget based on the needs of the district.<br>b.  The Technology Committee will explore opportunities for grant funding of technology purchases.<br>c.  The Technology Committee will collect information from staff on technology needs. | Local budget |

# IV.  PROGRAMS AND POLICIES

## A. Information and CommunicationTechnology Program

Northwood School's technology instruction is based on a blended learning model.  Teachers in classrooms are encouraged to introduce and reinforce technology skills by grade level based on the Technology Program of Instruction plan.  With support, teachers incorporate technology skills into regular academic lessons in order to create an environment where students will  use these skills in the future during similar tasks.

It is not reasonable to expect classroom teachers at this time to be able to provide all of the instruction needed for students to reach their goals by grade.  For this reason Northwood School has been providing instruction content provided by the part time Technology Integrator (currently the school library media specialist) and the school's Technology Director.   Generally the Technology Integrator provides technology instruction to about 75% of the student population and the Technology Director will pick up the remaining 25%.  .

This by no means is a replacement for regular technology instruction and integration in the classroom.  The supplemental lessons provide instruction for standards that are not easily taught by classroom teachers.

## B. Computer Network Description and Use

Northwood School currently uses a Microsoft TCP/IP Domain controlled network.  This domain controls all local authentication access to resources shared on the local computer network.  Most local programs and storage have been moved to the cloud.  However, we still require local authentication of school computers in order to use most assets in the building.  The main local use of this domain is the management of printer resources.  This system is maintained on site by the school Technology Director.

We also have a Google Domain in the school.  This cloud-based domain provides Internet access and cloud services through Google Apps For Education (GAFE).  Domain users have access to cloud-based storage and shared services provided by Google.  This domain is managed by the school

Technology Director.  All user privileges are managed centrally through a domain administrator account through Google Apps.

Northwood School has a fiber optic Internet access connection that provides all Internet access to staff and students.  The school also has a cable broadband connection provided by the local cable company as a backup connection.  All Internet based traffic flows through a firewall device that also provides filtering of content based on CIPA (Children's Internet Protection Act).

Wireless network access is provided school-wide through a linked access point system.  This system provides a link for wireless devices in most places within Northwood School.  This network is a secured point of access and requires device authentication to use school network resources.  A public "Guest Network" has been provided for visitors of the school to use during public events, meetings, and so forth.  This network is for Internet browsing use only and will not allow access to many protocols such as mail clients, network printing, gaming, and Internet sharing ports.  All of this traffic still goes through our firewall and filtering solution.

Students and staff use the school provided network to create, share, and research content based on the needs of the classroom and school building operating needs.

## C. Applicable Policies and Procedures

Certain policies and procedures guide the operation and instruction of technology at Northwood School.  Links are provided for reference and will be updated as changes occur.

Below are the policy and plan for the state mandated Data protection initiative.
>       Policy #EHAB-Data Governance and Security
>       Northwood School Data Governance Plan

Below are the current computer network policies of the school district.
>       Policy #EHAA-Computer Security, E-Mail and Internet Communication Policy
>       Policy #GBEF-School District Internet Access for Staff
>       Policy #GBEF-R-Acceptable Internet Use Procedures-Staff
>       Policy #JICL-School District Internet Access for Students
>       Policy #JICL-R-Acceptable Technology Use Procedures-Students

Northwood School Copyright and Fair Use Policy:
>       Northwood School copyright and fair use policy (under development)

## D. Connection with Local Community

Northwood School's technology instruction is based on standards developed by both the International Society for Technology in Education as well as the New Hampshire Information and Communication Technology Program.  Standards from both agencies are linked below.  We practice, for the most part, a differential form of technology instruction integration that is mostly focused on regular lessons conducted in the classroom.  On occasion, either the Technology Director or Technology Integrator (currently the library media specialist) will provide blocks of instruction mostly on skill based tasks that can later be used in the classroom instruction.

The school shares its instructional program through information provided on the website, social media, and during events throughout the school year.

E. Other Reference Material
Linked below are information sources used for developing and enhancing technology instruction.

**Northwood School Technology Standards (Under Revision)**

**Northwood School Technology Director Web Page**

**Northwood School Curriculum Director Web Page**

**ISTE Standards for Students**

**ISTE Standards for Teachers**

**ISTE Standards for Education Leaders**

**American Association of School Librarians (AASL)**

**New Hampshire Information and Communications technology Standards (NH ICT)**