



# Technology Plan

Houghton Lake Community Schools: plan years 2018 - 2021

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# Description of District

Houghton Lake Community Schools is a rural district located in Roscommon County in the Lower Peninsula of Michigan and surrounds the state's largest inland lake. The district covers 550 square miles and is comprised of 12 townships. HLCS serves approximately 1300 students in pre-kindergarten through twelfth grade and alternative education. It consists of 4 buildings, Collins Elementary, Houghton Lake Middle School, Houghton Lake High School and Alternative Education.

## District Mission Statement

All students in the Houghton Lake Community Schools will show annual academic progress leading to readiness for career, college and community.

## Keys to Success

Houghton Lake Community Schools will be a destination district recognized for its quality programming and performance. HLCS has been recognized for the following academic awards:

- Collins Elementary and Houghton Lake Middle School received a score of A from The Mackinac Center report card.
- Houghton Lake High School was awarded a Silver Medal by the U.S. News and World Report as one of the best high schools in the nation. HLCS is a Blueprint District thorough MI Excel.

## School Legal Entity

Houghton Lake Community Schools is an equal opportunity employer who will not discriminate based on gender/sex, race, religion, color, age, national origin, disability, height, weight or any other status covered by federal, state or local law in providing instructional opportunities, programs, services, job placement assistance, employment or in policies governing student conduct and attendance.

## Demographics

HLCS	
<b>Number of Students</b>	1258
<b>Number of Teachers</b>	93
<b>Number of Administrators</b>	6
<b>Houghton Lake High School</b>	8-12
<b>Houghton Lake Middle School</b>	4-7
<b>Collins Elementary</b>	PK-3
<b>Alternative Education</b>	9-12
<b>Free and Reduced Lunch</b>	82%
<b>Growth Status</b>	stable

# Curriculum Integration

## Instructional Technology Standards

Houghton Lake Community Schools will use a Technology Board of individuals to guide the use of technology. The purpose of this board is to implement current research and best practice models for the use of technology within the district. The goal is to efficiently utilize software, applications and software to assist the curriculum in the education of students.

The district will use the Curriculum Process to monitor the implementation to the following standards:

- Michigan Education Technology Standards (METS):
  - Provide communication and professional development to the grade-based expectations with staff
- International Society for Technology in Education Standards
  - ISTE Standards for students
  - ISTE Standards for teachers
  - ISTE Standards for administrators

## Teachers current access to technology

Desktops & Laptops. Access in buildings through wired & wireless connections. Remote access available as needed.

## Students current access to technology

Desktops & Chromebooks in classrooms, labs and Google accounts.

## Goals and plan for using technology to improve teaching and learning

Mentor relationships (train the trainer) to improve training of technology

Professional development (grade-level meetings, building-wide, district meetings, peer observation) to model the use of technology into the curriculum

Strategies for use of technology integration into curriculum:

- E-Mail – provides effective communication between students and teachers.
- Google Apps – accounts monitored by IT technical support.
- On-Line Research – a tool for students and staff for access to research information.
- Video Conferencing – interactive sessions with other students, schools or outside instructors.
- Distance Learning – provide additional education beyond current curriculum.

## Goals and plan for how students will acquire technology skills

Desktops & Chromebooks

## Goals and plan for Internet Safety

Primary Internet connection is provided by Merit. Barracuda Internet firewalls are installed at each building to limit access from outside.

# Professional Development

## Summary of current teacher and administrators technology proficiency and needs for professional development

- Chromebooks
- Desktop
- Projector
- Document Camera
- MOBI Write device
- Smartboard
- Enhanced Whiteboard (Dymo)
- Voice enhancement technology
- Scanner
- Printer

Technology survey completed March 2018 showing teachers and administrators have varied levels of competency and training needs on above technology.

## Goals and implementation plan for teacher and administrator professional development

Professional development is an ongoing need for all district teachers and administrators.

The need for technology-literate staff is important to Houghton Lake Community Schools and we will work to create teams of teachers who are familiar with the technology employed at HLCS. Using a train-the-trainer model, the district will send staff to workshops where they will learn the skills to efficiently employ the technology within the school environment. These trainers, the staff attending the workshop, will report back to the district to further train the other staff members during district meetings. Surveys will be used to determine how best to tailor professional development opportunities for the staff. The overall goal of professional development is to change and support the way the teacher teaches and students learn. Professional development must be geared toward true integration of technology. Just introducing the basic skills of a program is not enough. Effective professional development will introduce the students and staff on techniques that will merge technology with the curricula in a manner that improves the learning environment. The expected outcome of such programs are technology rich classroom lessons and resources. Likewise, technologically proficient students will develop from such trainings. Professional development will be offered, and utilized, throughout the district staff.

## Short Term District Technology Goals

- Full implementation of Illuminate
- Identify Notification System
- Technology in Classrooms
  - Utilizes all existing technology
  - Provide professional development on existing technology

## Long Term District Technology Goals

- Improve technology for all students, teachers and staff
- Integrate technology into curriculum
- Increase the use of technology-rich lessons in classrooms
- Train and support staff on the use of technology
- Utilize technology to improve communication with the school board and community
- Annual February review and revise our technology plan goals
- Improve district wide wireless capabilities
- Create a policy for allowing community members to have appropriate access to technology resources
- Maintain a level of certified and qualified technical personnel necessary to manage the network and its component parts at an optimal level and to meet the requirements of the technology plan
- Prepare budget for connectivity to new building, if 2018 bond is approved

# Appendix

## Existing hardware, Internet access, electronic learning, technical support and asset management

Host File Servers – running VMware & Microsoft Windows Server 2008 R2 Standard and Server 2008 Standard.

Workstations – Intel i5, 8GB Ram, 120GB SSD Windows 7, purchased in 2017 with 6 year replacement warranty.

Chromebooks – Lenovo N22 w/Google Management License, purchased in 2017 with 4 year replacement warranty.

Netgear Ready NAS - storage

Barracuda Firewalls at each building

HP ProCurve Switch 10/100 Ethernet switched ports for all classrooms

802.11 N Wireless connectivity throughout school buildings

Software Applications: Illuminate Student Information, Microsoft Office, Gmail cloud based email Google

Chromebook Applications

Approved Web applications:

Telephones: IPitomy PBX

On site technology staff contracted through Next IT (2017-2018)

Collins Elementary School:

- PreK – 4 student computers per classroom, 5 iPads, 1 printer
- K-2<sup>nd</sup> grade – 4 student computers per classroom, 30 Chromebooks per grade level, Epic, Kahoot, Zearn
- 3<sup>rd</sup> grade – 85 iPads

Middle School

- 4<sup>th</sup> & 5<sup>th</sup> grade – IXL, 1:1, Math Games
- 4<sup>th</sup> – 7<sup>th</sup> grade – testing on chromebooks
- 6<sup>th</sup> – 7<sup>th</sup> grade – chromebooks
- Chromebooks - carts with somewhat enough classrooms. Maybe we are 3.5:1.
- Tech being taught is in Gulick's classroom. Birgy - Google docs. Emails are being used in Gulick's classroom. 4-5th grade students are using Google docs. Using different websites

High School

- 8<sup>th</sup> grade – Google Suite

- Subject areas have their own. Canvas, Google Classroom, OW, MVU, 1:1 except in math. Science - vernier software. STEM - lots of new stuff. SE - NWEA. Illuminate testing.

#### Community Education

- Alpha II, OW, 1 to 1 Chromebooks, MEL.org, MSTEP, Illuminate, PSAT 9/10, projectors, document cameras. (Wants: buzzer system, intercom system, fire drill, lockdown, tornado panel)

#### Milestones

2017 Deploy 688 workstations & 240 Chromebooks for teachers, staff and students

2017 Convert to Illuminate Student Information software for state reporting

2018 Deploy WiFi access points throughout buildings

#### Miscellaneous Documents

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