District Learning Technology Plan

SY17/18 - 19/20

AOS92 - Kennebec Valley Consolidated Schools

Date Approved by School Committee
Vassalboro: June 20, 2017
Waterville: June 14, 2017
Winslow: May 22, 2017

Plan Authors:
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Earl Coombs - School Board
Paula Vigue - Teacher
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Schools Affected by the Plan:
Vassalboro Community School
George J. Mitchell School
Albert S. Hall School
Waterville Junior High School
Waterville High School
Waterville Alternative School
Winslow Elementary School
Winslow Junior High School
Winslow High School
Mid-Maine Technical Center

Shared Vision for Learning

"To improve academic achievement and to promote respectful and responsible behavior in a safe learning environment."

Every summer, our district holds a leadership retreat and uses this Shared Vision for Learning as a framework for developing school goals. The leadership retreat includes a broad range of participants, including faculty leadership, board members, administration, and the various other departments involved in the daily operations of our schools. Administrators present the goals developed at the retreat to the board annually, and gather relevant performance data throughout the year. The goals are also presented to the building staff for approval and form the basis of the building-level initiatives throughout the year. While the goal setting and evaluation process is on a yearly schedule, the Shared Vision for Learning has formed a common framework that extends throughout many years of work.

Action items and required resources identified during the leadership retreat are used when building budgets and for scheduling professional development. Many of the initiatives we identify and adopt to address specific goals have a technology component, along with a growing number of externally mandated programs. With technology increasingly woven into everything we do, alignment of our technology resources to the goals developed to support our Shared Vision for Learning is critical.

Shared Leadership

District-wide technology committees meet on a regular schedule throughout the school year to provide input into the development of the technology budget, set building-level technology priorities, evaluate policies and practices related to the use of technology in schools, and identify professional development needs. The technology committees are comprised of a broad set of stakeholders including teachers, librarians, technology staff, administration, and school board members. Broad representation and communication among stakeholders is critical for the success of the technology plan, and the district strongly believes that the technology department cannot be the primary driver of the development and implementation of the plan. Throughout the school year new challenges and opportunities arise in all aspects of our schools, and shared leadership provides the best opportunity to identify those challenges and where technology might be best able to assist in the solution.

District Learning Technology Data and Action Plan

The Maine DOE provides a survey instrument from BrightBytes for grade 7-12 students, staff and families based around the CASE framework. The four domains of the CASE model are as follows:

- Classroom - Explore how teachers and students use technology for learning
- Access - Understand the availability of devices and Internet access in school and at home
- Skills - Measure the levels of teacher and student foundational, online, and multimedia skills

- Environment - Support policies, procedures, culture, and professional development and technology needs across the organization

Each domain is scored as Beginning, Emerging, Proficient, Advanced, or Exemplary with the ability to drill down into what they call "Success Indicators." These Success Indicators contribute to the score in each domain and the reports provide comparisons between schools in the district, all of Maine, and even with the broader set of BrightBytes customers.

Our schools follow the same broad trends as the rest of Maine, with Access to technology being scored as Exemplary, Skills scored as Advanced, Environment scored as Proficient, and Classroom scored as Emerging.

Through the BrightBytes data for grades 7-12, we identified three specific Success Indicators in the "emerging" category and decided to make these the focus of our initial efforts. These areas of focus fell under two different domains of the CASE model:

- Classroom Domain
    - Teacher Use of the 4Cs (Using digital tools for Communication, Collaboration, Critical Thinking, and Creativity)
    - Assessment
- Environment Domain
    - Professional Learning

Recently BrightBytes has made their Lower Grade Level assessment available to our district and we plan to utilize this data to better inform our work by drawing from data across more grade levels.

Student Learning & Teacher Practice

Results of the Data

BrightBytes identified "Teachers Use of the 4Cs" and "Assessment" in the classroom as areas that need the most work in grades 7-12. Our average use of technology in the classroom is slightly lower than Maine's state average, but we follow the general trend where students report a significantly higher daily use of technology than teachers think students use.

Implications

Teacher use of the 4Cs is only "emerging", while students show "proficient." This gap is an area that needs additional exploration and in particular we need to identify why ample access, skills, and beliefs about technology isn't translating into classroom practice.

Interventions and Next Steps	Person/Position Responsible	Timeline
Develop more specific and targeted explorations of barriers to the use of the 4Cs	Technology Integration Specialists and Building Technology Leads	Within one year

and technology for assessment.		
Explore both technological and pedagogical solutions to classroom management.	Technology Integration Specialists and Building Technology Leads	Within one year
Peer tutoring for teachers	Technology Integration Specialists and Building Technology Leads	Within two years

Leadership for Learning Through Technology

Results of the Data

The BrightBytes reports suggest a score of "Proficient" in the area of leadership, which falls under the Environment domain of the CASE model. The data points us toward three areas that leadership could focus on to help improve the environment and support 21st Century learning:

- Teacher perceptions about lack of being rewarded for using technology
- Lack of emphasis on technology in classroom observations
- Lack of discussions about technology during department and grade-level meetings.

Implications

Regular participation by a broad set of school leadership in the technology planning and implementation process is an area needing improvement. While the technology committees are comprised of a broad set of stakeholders including teachers, librarians, technology staff, administration, and school board members, it has been challenging for most to regularly participate in the meetings and many of the discussions around the table would benefit from a broader representation of stakeholders, and more quickly flow out into the discussions and practices at the building level.

Interventions and Next Steps	**Person/Position Responsible**	**Timeline**
Broaden regular participation in technology leadership and planning, including more students and community members, and have more cross communication between technology and curriculum teams.	Superintendent and Technology Director	Immediate

Have department, building and district leadership model technology use, and set appropriate expectations for staff.	Building Administrators	Within one year
Develop a system to publicly recognize and reward teachers who effectively utilize technology to transform student learning in their classrooms.	Building Administrators	Within two years

Professional Learning

Results of the Data

BrightBytes data highlighted Professional Learning as one of our three Success Indicators in the emerging category. Surveys such as BrightBytes allow us to identify areas of interest for professional development, yet the low number of hours devoted to school-sponsored professional development follows the general state-wide trend. This trend shows that a majority of staff participate in only between one and eight hours a year in school-sponsored professional development, and only a minority participate in non-school-sponsored professional development.

Implications

Improving Professional Learning is a critical step toward improving classroom practices with technology, and specifically Teacher use of the 4Cs and utilizing technology for assessments. District and building leadership sets priorities and holds the keys to available time for school-sponsored professional development during workshop days, which our own surveys of teachers show is the preferred time for professional development activities. Competition for this time is fierce, so creative models for professional development need to be explored. For example, a model that seems to work exceptionally well at the elementary grades is to provide after school study groups focussed on a particular topic that is grade specific.

Interventions and Next Steps	**Person/Position Responsible**	**Timeline**
Identify technology components within existing inservice day plans.	Building Administrators	Immediate
Help teachers identify classroom technology resources that can be applied to specific units.	Technology Integration Specialists and Building Technology Leads	Immediate

Develop an instrument to allow teachers to reflect on their own use of the 4Cs, and utilize that information to pair reluctant and confident teachers.	Technology Integration Specialists and Building Technology Leads	Over the next year
Work with a group of interested teachers to develop a small, blended learning pilot program in each school.	Technology Integration Specialists and Building Technology Leads	Within two years

Learning-Focused Access

Results of the Data

BrightBytes surveys were only offered in grades 7-12 which have been the traditional participants of the Maine Department of Education's Learning Through Technology Initiative. This program has funded resources such as student and teacher devices, wireless networking equipment, and professional development. As expected given the focus on the grade levels that participated in BrightBytes, access to technology for learning scored as exemplary. Missing from our existing BrightBytes survey data are the lower grades, and our own data shows that the student to computer ratios are lower in those grade levels. In grades 6-12, student to computer ratios are at or close to one student per device, while the lower grade levels are closer to three students per device. Other classroom technology such as projectors, document cameras, and wireless access is fairly uniform throughout all classrooms K-12.

Implications

Funding to maintain, replace, and expand our technology is a constant challenge. The introduction of Chromebooks in recent years has helped due to their low purchase and maintenance costs, but aging infrastructure such as our wireless networks are a critical part of this access. Expanding learner-focused technology with a goal of no more than two students per devices at the lower grade levels will require infrastructure improvements to handle the increased density of devices. Additionally, as more local and state initiatives such as MEA testing require the use of technology, maintaining adequate access will become even more important.

Interventions and Next Steps	**Person/Position Responsible**	**Timeline**
Advocate at the community level to nurture budgetary support for maintaining and upgrading existing technology	Technology Director	Immediate

Continue and strengthen our partnerships with organizations like the Maine Learning through Technology Team and NetworkMaine.	Technology Director	Immediate
Upgrade wireless networking and other infrastructure to support a higher density of devices and increase reliability.	Technology Department	Within the next budget cycle
Expand fleet of student devices in the lower grade levels.	Technology Department	Within the next two budget cycles.

Responsible Use

The adopted K-12 technology curriculum incorporates multiple domains beyond just technology operations and concepts, including digital citizenship and online safety. This curriculum guides not only the dedicated technology classes in the lower grade levels, but is also embedded within the classrooms of all disciplines. Buildings enforce age appropriate rules and procedures for the responsible use of technology, and School board policy (IJNDB) also addresses expectations for the responsible use of computers and internet safety.

AOS92 utilizes a variety of resources which are geared toward the appropriate grade bands. Examples include:
K-3 NetSmartz, Common Sense Media, Digital Passport, locally developed resources
4-6 NetSmartz, Common Sense Media, Digital Passport, locally developed resources
7-8 School-wide Assembly, locally developed resources
9-12 NetSmartz, locally developed resources

Certifications

By signing below, the superintendent is acknowledging the following:

- The district has completed one Technology Access Survey per school in the district
- The information submitted in the Technology Access Survey is accurate
- The Learning Technology Plan has been approved by the SAU's school committee
- The district is committing to work the plan (recognizing that plans do evolve over time)

SAU MEDMS ID # & Name

Superintendent Email

Superintendent Signature

Date