Case Study

Technology Plan Evaluation

Mark Vance Planning for Technology September 30, 2018 This is a review of the technology plan for Bloom-Carroll Local School District. Being your new consultant, I have reviewed and analyzed the current technology plan at its' current state. The current plan was written for 2017 through 2020. Bloom-Carroll Local School District is located in Fairfield County and covers 52 square miles within both Bloom and Greenfield townships, which includes the villages of Lithopolis and Carroll.

The districts current critical component vision statements:

- Infrastructure: Provide adequate wired and wireless connectivity and bandwidth
 throughout the district, which will support instructional efforts and allow for the needs
 of the future.
- 2. Equipment: Ensure equipment is capable of performing all necessary tasks and operations for grade levels and/or specific courses for all students and staff in order to promote success technology integration.
- 3. Student Learning Choices: Implement a plan for advancing student learning, creativity, and innovation in both face-to-face and virtual environments.
- 4. Training/Professional Development: Provide ongoing professional development culture that supports and encourages effective use of technologies and digital resources that enhance student learning.
- 5. Communication: Provide resources and opportunities to effectively communicate the proposed technology vision and bring awareness to the process of technology implementation.

These five main points cover all critical areas needed to implement a well-rounded technology plan. However, one element that needs to be considered is how to incorporate parental involvement into the overall plan. The plan did include a short online 15-question survey for parents but out of almost 2000 families only 281 filled out the survey. This 14% response is

an indication that parents are not adequately represented in the plan. The benefit of technology is that classroom learning can be extended into the home and is no longer restricted to the physical classroom. With all the advancements in technology parents and caregivers can quickly be left behind and not have the skills to support the student when they leave the school. There needs to be a consideration of how to keep these people involved and offer training so they can help support each student at home.

Planning Team

It is necessary to have a well-rounded, diverse planning team in order to accommodate such a large district. The current plan has 12 district employees that make up your planning team. There is very good mix of teachers and administrators in the planning team. The fact that you also included special education on your planning team ensures that technology will be implemented in the special education curriculum. One recommendation I would make is adding parents to the team. Without their input mistakes could be made based on assumptions of what parents want or need. When considering adding parents to the planning team you must consider the uniqueness of each developmental area. Parents from each of the following levels of education should be represented: Elementary, Middle and High School.

Curriculum

In reviewing your Technology Plan there is nothing in the plan that addresses curriculum and the expectation of how the staff is to utilize the technology. You have done a great job at breaking down your recommendations for the following areas: K-2, 3-4, 5-8, and 9-12. Your recommendations are as follows:

- Purchase teacher laptops
- Purchase document cameras

- Upgrade interactive technology (SmartBoards/Projectors)
- Add additional laptop carts to increase ratio of 1 cart per 2 teachers
- Replace ipads
- Replace computer labs with up-to-date desktop devices

These are needed improvements yet you have not indicated how the teachers are to use these upgrades. I am not sure that as the district moves toward increased laptop use that replacing SmartBoards in all rooms is necessary. You have broken down your recommendations by grades but they all seem to be very similar. A better understanding of how the teachers use technology is need before purchasing new items.

The formation of a Technology Integration Specialist position within the IT department is a good start to help the teachers work technology into their curriculum. Is one person going to be able to manage the entire staff and each of their specific needs? I would suggest creating a team of support staff at each building to help with technology integration into each grade levels curriculum. You might want to consider this position as a supplemental position for your teachers. Also the art, music, and physical education classes will need a department chair to help with their respective departments. Even though you have one special education representative on the planning board you do not have any recommendations for special education. Just as you need to include the encore classes in your plan you also need to be specific in the needs of your special education teaches (at all levels) and the challenges they face in their classrooms.

Policy, Leadership and Administration

Number three of the critical component vision statement states, "Implement a plan for advancing student learning, creativity, and innovation in both face-to-face and virtual

environments". The technology plan addresses this by creating a district-wide "Technology Resource Review Committee" to assess and recommend instructional resources. The plan has done a great job by using administrators and teachers that have practical knowledge related to the integration of technology. It is imperative that subscriptions to online programs be reviewed to ensure that they will function properly and align with district curriculum. I would suggest that along with aligning these software programs the teachers get specific training on how to integrate them into classroom lessons. The students also need to have access to these programs on laptops and ipads. Grade level meetings should include time, on a monthly basis, to work on technology integration. These guidelines will help ensure all students and staff members have access to a consistent set of functional resources.

Infrastructure Management and Support

The Technology Plan for BCLS has specific goals for improving the infrastructure: "Create an environment district-wide that will support online learning, virtual classrooms, and a variety of hardware and software resources to increase student engagement and learning". This is the strongest aspect of the technology plan. The improvement of the wireless systems, HVAC systems, servers, access points, bandwidth and switches have all been considered and addressed. This is crucial in ensuring that all new technology is supported to run smoothly. Another important element that this plan addresses properly is the need for the district to move into a cloud-based system. Currently the staff is using a virtual private network (VPN) that the students are unable to access. When the cloud based-based network is integrated all staff and students will be able to access it when not on school grounds. This will greatly improve use of technology into the learning environment of the staff and students. It will also reduce the strain on the districts servers. The plan also ensures that the wireless systems in place are improved and monitored as will as the wired systems. This is very

important and including it is an excellent example of forward thinking and vision. True technology integration can only occur when all learners have access to the necessary tools in the classroom.

Budget and Planning

As indicated in the in the technology plan you have estimated the cost associated with the improvements needed in the Bloom-Carroll Local School District. The costs are as follows:

- **>** 2018-\$307,000
- > 2019-\$366,000
- > 2020-\$269,000

The only information about the budget and planning for the improvements is as follows: "Funding of this plan is contingent on available allocations as determined by the District Superintendent, District Treasurer, and Bloom-Carroll Board of Education. This plan does not imply guaranteed funding" This is concerning because the plan calls for some very large expenditures but does not outline how and when the upgrades will be done. There needs to be a specific section covering the budget and planning. I suggest that a team is formed to write out a specific plan that is added to the existing document. Included in the plan should be any partnerships with local, state, and federal agencies as well as any grant opportunities. In regards to grant opportunities you should consider forming a grant research & writing team that would apply for technology grants. With such extensive technological goals there must be a plan in place to financially support it. At this time this should be the next step to ensure that this technology plan can move forward. If the financial end is not in place there is no way to know how implement these necessary changes and improvements.

Proposed Recommendations

After reviewing the Bloom-Carroll Local School District Plan I am very impressed with the forward thinking of the plan. The team has done an excellent job in considering all the different elements that are needed to ensure technology is incorporated into student learning. The following are my recommendations for improving your Technology plan as you move toward meeting your technology goals.

- Address including parents on the technology team. Elementary, Middle and High School need to be represented equally.
- The 15-question parent survey needs to be filled out by a minimum of 80% of
 district families with similar percentages in elementary, middle and high school.
 This data needs to be analyzed and possible changes might need to be made to
 this technology plan based on the results.
- Review the need for IWB in all classrooms. Laptop use might replace the need of these boards. Create a survey for staff to help with this decision.
- Clarify how teachers are going to use the new technology. What exactly do the
 teacher need and want and be specific for each grade level. Understand that the
 same technology is not needed at all grade levels.
- Plan for more support for the new position (Technology Support Specialist)
 Consider creating building teams that work with the TSS
- Address the specific needs of Art, Music, PE, and Special Education (be specific)
- Budget- Create an itemized budget and time line for executing the technology
 plan. This should include what monies come in and future projections. Consider
 creating a grant writing team.

Thank you for allowing me to be apart of your innovative technology plan. The plan is very thorough and with a few additions will advance Bloom-Carroll Local School District into the $21^{\rm st}$ century. Your students and staff will benefit greatly from the implementation of this plan and I look forward to watching it evolve. Continue to look and plan for the future so that your students will thrive as $21^{\rm st}$ century learners.