Case Study - District Technology Planning

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Introduction

This paper will evaluate the Technology Plan that Shaker Heights School District has established for the time period of 2015-2020. This evaluation will be conducted by Jessica Aubley who is an external technology planning consultant hired by The Board of Education. The goal of this evaluation was to provide insights on the current technology plan for Shaker Heights School District. Please note, you will find the plan and technology policy as attachments to this paper.

Introduction of the Plan

Shaker Heights City School District has a vision of being "recognized as a leader in the integration of technology in transforming the teaching-learning process in order to improve student achievement" (Rizzo, 2015 p. 2). It's clear that the school district has done their research and understands the proper use and need for technology. This can be seen in the beliefs section of page 2 of the technology plan. This section identifies multiple items that technology must be including reliable, sustainable, an integral component to teaching and learning, accessible and safe.

Strength:

The vision and beliefs of Shaker Heights are well thought out. It's clear the school district has a vision to incorporate technology and ensure it's sustainable.

Weakness & Recommendations for Improvement:

I thought this section was well done. I did not find any weakness or recommendations for improvement.

Planning Team

Technology Planning Committee Members:

- Jaclyn Abrams - F
- Michael Adams - ST
- Casey Ailiff - ST
- Jason Bednar - F
- Mary Coffey - F
- Carol Dawson - ST
- Pawan Divakarla - C/BR
- Bryan Drost - ST

- Fred Hart - C
- Christopher Hayward - ST
- Erin Herbruck - ST
- Jim Holesovsky - ST
- Lynne Kulich - ST
- Joe Marencik - F
- Claudia McCord - ST
- Adam Mortus - F

- David Shakno - S
- Eric Siler - C/BR
- Mary Strouse - F
- John Sweeney - F
- Cynthia Walker - ST
- Dale Whittington - ST

BR = Business Rep., C = Community Member, F = Faculty, S = Student, ST = Staff

The planning committee members consisted twenty-two people with various roles including business representatives, community members, faculty, students and staff. Each team member was listed with their associated role(s). The breakdown of roles was: 2 business representatives, 3 community members, 7 faculty members, 1 student and 11 staff members. Titles were not provided therefore management, IT staff and other staff could not be identified.

Strength:

The planning team represents all identified stakeholders of the school. The business representatives are helpful since they can provide information on possible technology and cost. The community members are able to provide insight on needs of the community and possible school levies needed to cover additional costs of this plan. The students can help identify where students currently fall in regards to being familiar with technology and access at home. The faculty members provide information on current curriculum and training needs of the faculty. The staff members will be familiar with the current IT infrastructure and provide information on future needs. Overall, the roles selected were idea for creating this plan.

Weakness:

While Shaker Heights Schools did a great job asking those in various roles there are some weaknesses to their selection. Only one student was selected to serve on this committee. It was

also impossible to evaluate if the proper staff and faculty members were selected for the committee.

Recommendations:

The current planning team is inclusive but not balanced. It's suggested that titles be added for each team member, this helps further identify their roles. For instance, there are eleven staff members listed but the list does not identify the department or job function. It would be helpful to know if they are IT staff, administration or another role in the school. The same goes for faculty members. Each department may have different technology needs so a breakdown would allow a better understanding of what departments were represented on the committee. Another recommendation would be to have more than one student on the committee. Having multiple students will allow the committee a better understanding of how comfortable the students are with technology and what the students need to be successful. The opinion of three students would be a better indicator than the opinion of one student. These recommendations would help balance the planning team and allow for more student input.
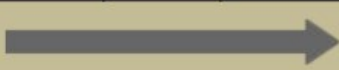
Curriculum Alignment and Instructional Integration

Goal 6: 24x7 Learning Environments of the technology plan was a great example of supporting academic needs. This goal states "research and select a common learning management system to assist teachers in facilitating the delivery of course content and to foster 24x7 learning" (Rizzo, 2015 p. 10). This is a large goal for an institution to tackle and the planning committee did a great job breaking it down into two initiatives.

Technology Initiative 6.1's stated goal is to implement a learning management system (LMS). This goal was broken down into several achievable tasks including selecting a committee that would review recommend and pilot the LMS (2015), developing a professional learning plan

and roll out plan (2015-2016), adoption of the LMS (2016-2017) and training for staff (2016-on). From experience, I can advise these goals are achievable in the time periods listed.

Technology Initiative 6.2's stated goal was to implement Google Apps for Education (GAFE). According to Google's website this is "A suite of productivity tools to help students and teachers interact seamlessly and securely across devices" (G Suite for K12 Institution). This implementation allows teachers access to tools to create class assignments, provides documents for student collaborate and helps students manage their homework due dates. The goals were broken down into achievable tasks including selecting a committee of teachers to serve as "GAFE trailblazers" to piolet the software (2015), roll out the software to each building (2016) and have a full district adoption (2017). The time periods set for this rollout are realistic.

Technology Initiative 6.1
Implement a common learning management system

	2014-15	2015-16	2016-17	2017-18	2018-19
Select a diverse committee to review, recommend, and pilot learning management systems (LMS)		■			
Development of a professional learning plan for the LMS		■	■		
Development of a rollout plan which includes expectations for use		■	■		
Adoption of a LMS by district			■	■	
Continued training for current and new staff			→		

Technology Initiative 6.2
Implementation of Google Apps for Education (GAFE)

	2014-15	2015-16	2016-17	2017-18	2018-19
Convene committee of teachers to serve as GAFE trailblazers		■			
GAFE teacher pilots - volunteer basis throughout district		■			
Building upon 2015-16 pilots, rollout at building level			■		
Full district GAFE adoption				■	

Strength:

The technology plan had a great timeline for implementing the tasks of Goal 6. Each goal was achievable in the time period selected. Since these tasks started early in the technology plan there would have been room to move specific tasks to future years if needed. The tasks also had committees associated with them. This would allow the faculty to have a say in selecting and implementing the technology. Their feedback would be essential in the success of these technologies. Goal 6 is essential to teaching and learning as it's directly related to how student will receive content and complete assignments, therefore, it's critical to ensure this Goal is completed during the assigned time period.

Weakness:

Technology Initiative 6.1 was nicely done but did not include a task to train students on use of the LMS. Its critical students understand how to use the tools of the LMS. Please review the recommendations section below for information on tackling this weakness.

Technology Initiative 6.2 did not include a time period to train current staff, student or planning to train new staff. Without proper training, the implementation of Google Apps is likely to be unsuccessful. The staff and students will not have a clear understanding of how to use this technology.

Recommendations:

Revise Technology Initiative 6.1 to include continued student training. The students should have an online training that they complete yearly that reviews how to use the LMS. It's suggested the school invest in creating this training and programming the LMS to lock the student out of classes until they have completed it. This will ensure they have a general understanding of how the system works before they begin accessing their course content.

Revise Technology Initiative 6.2 to include continued training for staff, students and new staff members. This initiative should be listed similar to the one for 6.1 that refers to ongoing training.

Technology Policy, Leadership and Administration

The technology plan does not list the technology policy of Shaker Heights School District. This plan was available on the website. The Technology Policy was well written and aligns with the 2015-2020 Technology Plan. The policy states "The Superintendent/designee shall develop a plan to address the short- and long-term technology needs and provide for compatibility of resources among school sites, offices and other operations. As a basis for this plan, he/she shall examine and compare the costs and benefits of various resources and shall identify the blend of technologies and level of service necessary to support the instructional program." The policy aligns with the technology plan and ensures there is a constant review of current technology and new needs. This policy has been through multiple revisions with the last one happening in 2015, therefore, it would be a good reference to use for the current technology plan.

Strength:

The policy addresses the budget and review of technology. This allows it to nicely align with the technology plan. It also addresses a user's agreement which must be signed by students to ensure they understand the policy. This agreement would be critical to enforce the school's rules.

Weakness:

I compared this policy to the one used at the community college level and found it to be very similar. I do not see any weaknesses in this policy.

Recommendations:

My recommendation would be to include this policy in the technology plan as a reference. Many of the goals align with statements in this policy, it's critical for the members of the technology planning committee to have it for reference.

I would also recommend creating a task for Initiative 6.1 to create an online training that reviews the school's technology policy, provides students with an online form to complete and educates them on how to use the LMS. Most LMS systems have a feature that will allow the school to lock students out of the courses until this training is completed. This will ensure the school district has an easy way to track if students have signed the policy and has educated students on how to complete homework using the available tools.

Technology Infrastructure Management and Support

Goal 2: Staffing is dedicated to ensuring there is proper support and management of the technology. This goal states "Create a comprehensive Information Technology department that provides customer service and online/job-embedded professional learning for staff in order to support 21st century learning" (Rizzo, 2015 p. 6). This goal is broken into several achievable tasks including conducting an IT/HR assessment (2015), reviewing the assessment and redefining IT department job descriptions (2015), defining protocols and conducting assessments and reviews of IT supervisor and employee performance (2015-2016), create a comprehensive department of technical and data services (2015-2016) and review of IT workspace and facilities for equity, accessibility and appropriate size (2017). Each of these tasks would be achievable in the respected time frames associated to them. The Planning Team left a year at the end of the plan with no tasks which is beneficial to more back specific tasks if needed.
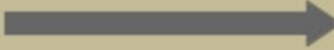
Technology Initiative 2.1
Information Technology department structure and facilities

	2014-15	2015-16	2016-17	2017-18	2018-19
Conduct an IT/HR departmental assessment		▓			
Using input from assessment, review and redefine IT department job descriptions		▓			
Develop and define protocols for conducting regular assessment and review of IT supervisor performance		▓			
Develop and define protocols for conducting regular assessment and review of employee performance		▓	▓		
Create a comprehensive department encompassing technical and data services		▓	▓		
Review IT department workspace and facilities for equity, accessibility, and appropriate size				▓	

Goal 5: Technology Professional Learning aligns with Goal 2. This goal focuses on providing staff with skills needed to integrate technology into teaching and learning (Rizzo, 2015 p. 8). This goal is broken down into several initiatives including HR creating new roles for technology support (Technology Initiative 5.1), providing technology professional development to staff (Technology Initiative 5.2), creating foundations of skills for all elementary students (Technology Initiative 5.3) and extending learning opportunities to parents and members of the community (Technology Initiative 5.6).

Technology Initiative 5.1
Provide human resources that will assist in technology professional learning throughout the district

	2014-15	2015-16	2016-17	2017-18	2018-19
Working with Director of Professional Learning, select a data collection instrument to gauge the level of technology integration K-12 and needs for technology learning		▨			
Review and redefine the role of building technology team members as being focused on technology integration		▨	▨		
Review options for creating one or more district technology coach role(s).			▨		

Technology Initiative 5.2
Provide technology professional learning to (all) staff tied to curriculum and instruction (job function)

	2014-15	2015-16	2016-17	2017-18	2018-19
Establish a technology professional learning team		▨			
Develop a tiered system of technology professional learning that is differentiated and supports district goals		▨	▨		
Enhance and expand new teacher orientation to include more time and more opportunities for technology professional learning			▨		

Technology Initiative 5.3
Create a foundation of basic computer skills for elementary students

	2014-15	2015-16	2016-17	2017-18	2018-19
Assess current technology instruction provided to students		▨			
Form a team to define basic, necessary computer skills (e.g. keyboarding, mouse skills, file management)			▨		
Review and/or develop an elementary computer skills curriculum			▨	▨	
Monitor of student growth and adjust curriculum accordingly				▨ →	→

Technology Initiative 5.6 Extend technology learning opportunities to parents and community members					
	2014-15	2015-16	2016-17	2017-18	2018-19
Perform survey to determine technology accessibility in homes throughout Shaker Heights		▓			
Engage community members to gather input on technology training needs and develop programming		▓			
Define staffing and facilities availability to support more open opportunities for technology use in district buildings			▓	▓	
Work with district community outreach personnel to promote, schedule, and facilitate community access to technology training			▓ →	▓	▓

Strength:

Goals 5 and 2 are nicely aligned. The Human Resource department plays an important role in ensuring these goals are met. The tasks they are to complete are very reasonable for the time periods that have been assigned.

Goal 2 focuses on the training of all users. I appreciate that they are taking professional development further than just the staff. Providing training to parents is brilliant, this will allow the parents to be able to assist students if they are completing their assignments outside of class time (Technology Initiative 5.6). Technology Initiative 5.3 which states "create a foundation of basic computer skills for elementary students" has nicely defined tasks and aligns nicely with the districts goal of "transforming the teaching-learning process in order to improve student achievement" (Rizzo, 2015 p. 2).

Weakness:

I believe Goal 5 is nicely written and there are no issues with completing the tasks. Goal 2 has been nicely defined but Technology Initiative 5.6 needs reviewed. The timeline on these tasks is the weakness. The plan calls for a survey to determine technology accessibility in homes in 2015, also during this time period, the plan calls for engaging community members to gather on training needs. It would be difficult to identify needs if accessibility has not been determined. While there may be a need for basic computer training, it's not as impactful if there is no access to computers.

Recommendations:

I would recommend revising the timeline for Technology Initiative 5.6. In 2015, the group could survey the community to gather data about technology accessibility in homes, in 2016 they could determine technology needs of the community, develop the training, define who will facilitate it and define availability to support more open opportunities for technology use in district buildings. This would put the goal on target for providing outreach to the community in 2017 and on.

The planned professional development in Technology Initiative 5.2 is good but there is no mention of an ongoing plan to provide professional development to teachers. The last task of this plan stops in 2016. It's assumed that technology will continue to evolve and new teachers will be hired. A task of reviewing and updating technology trainings and facilitating these trainings should be added. This will ensure longevity of this goal.

Budget and Planning

Goal 3: Budget is identified as creating "a process for purchasing technology that aligns expenditures with District strategic plan goals" (Rizzo, 2015 p. 7). This plan has one Technology Initiative (3.1) which focused on being good stewards of taxpayers funds finding alternative funding sources. There are multiple tasks associated with this initiative including locating external sources such as grants (2015-2016), establishing relationships with funding source

representatives to communicate needs (2015-on), developing a technology priority list (2015-on) and establishing a plan to use external funding (2015).

Technology Initiative 3.1 Process to support good stewardship of taxpayer and alternative funding sources						
	2014-15	2015-16	2016-17	2017-18	2018-19	
Assess the use of external funding sources (e.g. grants, donations, foundations) and develop processes to support the use of these funds		▓	▓			
Establish relationships with funding source representatives in order to communicate the district's most immediate needs		▓	▓	▓	▓ →	
Develop technology priority list in order to assist in directing funds toward the most needed items		▓	▓	▓	▓ →	
Establish a plan for the use of external funding sources that considers total cost of ownership and sustainability		▓				

Strength:

The tasks associated with Technology Initiative 3.1 will allow the school district to locate funds to purchase new technology. The plan on establishing relationships with funding source representatives will help with future needs.

Weakness:

The technology plan does not detail who will be responsible for grant writing or working with the foundations. From experience, I know this is a very large task. Without someone who has grant writing experience and the time to build these relationships it will be difficult to achieve.

Recommendations:

Revise Goal 3 to include an Initiative to hire or train a specific staff member to handle the grant writing and work with foundations to establish relationships. This person could also play an active role in creating and maintaining the priority list and directing funds for the most needed

items. Without someone dedicated to these items it's likely there will not be a sustainable budget to purchase new technology.

Recommendations for Moving Forward

I believe the Technology Plan that Shaker Heights School District created was well done. I have placed recommendations for each area of the plan as it was addressed. I have several additional recommendations which are detailed below.

1. Consider the use of 1 to 1 technology. With the implementation of the LMS and G Suite, Shaker Heights School District is in a great position to for this form of learning.

2. Detail specifically what department or person will be responsible of the budgeting, grant writing and foundation relationships. This was mentioned in the plan but I wanted to state it again as it's critical for future funding needs.

3. Add a goal of a yearly review of the technology that is being used for teaching and learning. Technology is constantly evolving and there are many free tools instructors could be trained on. There are multiple free tools that are designed with specific subject data that will allow teachers to present the materials they teach in an interactive way.

4. Add a timeline of when the Planning Committee will meet to review the goals they have set and make adjustments if necessary. A five-year plan is great since it allows for a long planning period but technology needs are always changing so it's important this plan be re-evaluated yearly to ensure it meets the needs of the teaching and learning.

By adding the recommendations contained in this document, Shaker Heights School District will be in a great position to start planning their 2020-2025 Technology Plan and remain a leader "in the integration of technology in transforming the teaching-learning process in order to improve student achievement" (Rizzo, 2015 p. 2).

References

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