BEM SIP

JJ Ferrell

George Mason University

Author Note

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Overview

Skage (2016) wrote "our job as teachers is not to 'prepare' kids for something; our job is to help kids learn to prepare themselves for anything" (para. 1). Belmont Ridge Middle School (BEM) is striving to help kids learn to prepare themselves for future success with a vision that sets an expectation for students to make meaningful contributions in the 21st century world. However, despite the growing number of devices available to BEM students, BrightBytes survey data has shown that as of May 2017 only 29% of students are asked to identify and solve authentic problems using technology monthly. Although this statistic has remained stagnant, varying by only a few percentage points since 2015, our teachers note a need to integrate instructional technology as a natural resource and problem-solving process in the context of the core content areas. 29% is on par with the district level result of 28%, but being as the school is above the district in the Standards of Learning one would expect steady growth or a higher response percentage at a minimum.

John Dewey pointed out "If we teach today's students as we taught yesterday's, we rob them of tomorrow" (as cited in Skage, 2016). The same can be said of providing professional development to teachers. During the 2017-2018 school year, offering a personalized professional development model will empower teachers to give our River Hawks the opportunity to move from passive to active users of technology. Providing skills with technology rooted in designing curriculum activities for the content areas to individual teachers will allow them to select the best technological tool for their classroom helping students create and share public products relating to authentic problems and tasks in the real world.

Rationale

Regardless of age or tenure in the classroom, teachers struggle to find time to add one more thing to their already over-filled plates. Last school year, more access to technology and personalized learning (PL) allowed BEM teachers to sustain old teaching practices while doing away with leveled texts, scaffolded worksheets, and differentiated lectures. Now it is time to look at what technology can do to springboard education into the 21st century.

Hall (2010) declared that the problem with technology integration is not selling teachers on technology innovations, but rather getting teachers to understand the need for change in teaching practices (p. 232). Such understanding is apparently already present to some extent at BEM as according to BrightBytes data, 49% of teachers would like professional development in online tools for critical thinking and collaboration, 46% would like to know more about creating multimedia with students, and 32% would like to see more students writing online. Our River Hawk staff has expressed interest in educational technology topics that will help end the dormancy of student production of public products related to real world authentic problems and tasks.

Time and quality of technology training is certainly not a novel concept as "increased professional development to effectively integrate technology" (Hodgson, 2016, p. 46) has been previously identified as a best practice that makes students active users of technology. The problem now becomes how identify and create quality professional development topics that can be integrated into an already demanding job schedule. In retrospect, the need for this increased training focus seems obvious as "technology innovations keep evolving" and quality training is necessary to bring the "complex, social, and highly developmental technology integration" into authentic problems and tasks in each content area (Hall, 2010, p. 247).

Outcomes

At the culmination of the implementation of this school improvement project BEM's River Hawks will benefit with these specific outcomes:

- an increase in teacher professional development participation measured by My Learning Plan (MLP) rosters and hours;

- an increase in teachers empowering students to make meaningful contributions to the world using technology measured by walkthrough data and youtube video uploads;

- an increase in students using technology to identify and solve authentic tasks and share products with the real world measured by a Likert scale and BrightBytes survey data.

Involvement

To this point, the collaborative team on this project has consisted of myself and Principal Hitchman. As a partnership, we developed a professional development model that would bring the successes of personalized learning to the staff and meet our vision at BEM of empowering students to make meaningful contributions to the world by arming teachers with the individual learning tools they need. Once we have selected those tools and compiled them into a playlist for teachers to choose from, we will add the administrative team to our collaborative efforts by training them in the specific project based learning and one to the world technology use they should look for when doing classroom observations and walkthroughs. They will become part of the evaluation team as we look at the walkthrough data on a quarterly basis. The suggestions and feedback they offer will guide us to make adjustments to the plan implementation and add other valuable members to the team. The final members of our collaborative team will join us from the pool of teachers that we see or hear of implementing technology with students as active users. This team, known as our PL Leadership Team, will be our volunteers for presenting at face-to-

face professional development sessions offered on our playlist. They will be invited to share their

expert knowledge and ideas and welcome others into their classrooms to observe. This

opportunity will be communicated as a way for them to share with their colleagues and double

their own professional development hours as instructors during certain playlist courses.

Action Plan

Table 1

BEM SIP action plan.

Objective: Engage teachers in a personalized professional development model that will

increase the percentage of encounters BEM students have that allow them to actively use

technology to make meaningful contributions to the world from 29% to 60% as measured by

the BrightBytes survey data at the conclusion of the 2017-2018 school year.

Tasks	Who's Responsible	By When	Resources Needed	Success Signals
Select professional development activities.	Hitchman and Ferrell	July 1, 2017	• Shared document	Meeting with Dr. Hitchman
Rate professional development activities for re-licensure hours.	Hitchman and Ferrell	July 14, 2017	• Various resources for each activity • shared document	Completed Google planning document
Build an online playlist of professional development activities	Ferrell	August 9, 2017	• Various resources for each activity • Google classroom	Working website of resources
Create accountability criteria and measuring tools for activities.	Ferrell	August 9, 2017	• Google drive tools	Measuring tools
Provide Train the Trainer Sessions to PL Leadership Team and Administrative Team	Ferrell	August 11, 2017	• Meeting Space with devices • Breakfast and Snacks	Feedback throughout as team works through playlist
Provide OTTW and PL round robin sessions for	PL Leadership Team	August 17, 2017	• Meeting spaces with	Exit ticket feedback

introduction to professional development model.			devices and projection systems	
Introduce playlist and instructions to teachers.	Hitchman and Ferrell	August 17, 2017	• Meeting space with projection system	Crowd excitement
Provide guidelines to administrative team on looking for technology integration during walkthroughs.	Hitchman	August 25, 2017	• Meeting space with devices • Walkthrough form	Practice walkthroughs performed as a group to align measurement tool
Create courses in MLP to track teacher participants and hours.	Ferrell	August 17, 2017	• My Learning Plan	Courses approved by administration and personnel and added to course catalog
Survey teachers and students using BrightBytes and YouTube channel for baseline data.	Hitchman and Ferrell	October 31, 2017	• Survey space and devices • BrightBytes survey • Likert Survey • Desktop shortcuts	Survey results
Monitor measuring tools and update MLP.	Ferrell	End of Each Month	• My Learning Plan	Enrollment of participants and accumulation of hours
Perform walkthroughs to witness technology integration in action.	Administrative Team	December 31, 2017	• Walkthrough form	Walkthrough data
Send mid-year survey to teachers and students.	Popa, Hitchman, and Ferrell	January 5, 2018	• Likert Survey	Survey results
Hold an Edcamp (Focus Ferrell session on youtube uploads).	Ferrell and Volunteers	Teacher Work Day (TWD) January 2018	• Coffee and Snacks • Raffle Tickets • Prizes • Post-its • Google spreadsheet	Edcamp attendance and exit ticket

			• Breakout rooms	
Send directions on how to upload student products to youtube.	Ferrell	TWD January 2018	• Youtube handout • Email	Directions and email sent to all staff
Analyze survey, walkthrough and MLP data. Make adjustments to professional development based on analysis and feedback.	Administrative Team and Ferrell	Quarterly	• Meeting space and devices	Constructive feedback and adjustments
Send reminder/update to teachers about playlist opportunities and requirements.	Hitchman and Ferrell	January 31, 2018	• Email	Check MLP at end of February to see uptake of people participating
Perform walkthroughs to witness technology integration in action.	Administrative Team	April 30, 2018	• Walkthrough form	Walkthrough data
Survey teachers and students using BrightBytes and YouTube channel for final data.	Hitchman and Ferrell	April 30, 2018	• Survey space and devices • BrightBytes survey • Likert Survey • Desktop shortcuts	Likert and BrightBytes survey and youtube uploads successful results.

Professional Development

Professional development for this effort will happen in three waves. The first wave will consist of the administrative team and the PL Leadership Team. Professional development for this group will consist of a one day train-the-trainer session where each member will work their way through the playlist for a final check of implementation fidelity and to become experts in at least one set of tools themselves. Trainers will demonstrate their success with at least one set of skills by completing the measuring tool and meeting the accountability criteria contained within that tool. To begin the second wave, the administrative team can be pulled as a subgroup to be trained in what to look for during classroom observations and walkthroughs. They will

demonstrate their cohesiveness in this measure by completing at least five walkthroughs as a group. The final wave will be the personalized learning professional development of all staff at BEM for the 2017-2018 school year with all staff earning at least 12 hours of professional development credit through completion of their choice of tasks on the playlist. With proper selection of professional development activities and accountability requirements met, BEM should see an increase in students using technology to identify and solve authentic tasks and create public products.

Budget

The budget for this project is minimal as most of the resources needed are already existing. Existing resources that will be used with no further capital needed include; meeting spaces with and without projection systems during times that the building will already be designated for occupancy by teachers and staff, one to one devices for teachers provided by the PL initiative established during the 2016-2017 school year, and access to online resources such as Google Classroom, website creators, MLP, and open-source trainings for technology integration in the classroom. Budget items that will require immediate capital include providing breakfast and snacks for the PL Leadership and administrative teams to attend the train-the-trainer session and EdCamp funding to include coffee, snacks, post-it notes, raffle tickets and giveaways. Total estimated budget to fully fund this school improvement effort is not to exceed $100.00. This money will come from the technology resource funds and approved by myself and the bookkeeper, Barbara Plunkett.

Evaluation Plan

Table 2

BEM SIP evaluation plan.

Evaluation questions	Why is this question important?	What information will you need to answer the question?	When and how will you collect this information?	How will you analyze this information?
Are teachers participating in personalized professional development?	It is crucial that teachers participate in the professional development offered in order to learn techniques to help students make meaningful contributions to the world.	MLP for participation tracking.	I will monitor measuring tools monthly and update MLP to reflect their results in one location.	Use excel spreadsheet to track participants and hours each month. Create line plot to show growth over time.
Are teachers grasping the content of the professional development offered by the playlist?	It is essential that teachers understand the content they engage with so that they will integrate these tools in their lessons.	Accountability criteria and measuring tools for each activity.	I will determine accountability criteria and create a Google Form as measuring tools for each activity on the playlist and monitor these forms monthly for teacher progress.	Use excel spreadsheet to track participants meeting and not meeting accountability criteria by each activity. Analyze data to see if adjustments need to be made to activities on playlist of Google Forms.
Are teachers using the content they learn in the classroom as part of their lesson plans?	Teachers must be using their new knowledge of tools in the classroom for students to benefit and be offered more opportunities to be collaborators and contributors in the real world.	Classroom observations.	The administrative team will include this as a look for in their walkthrough observations. This data will be collected on a daily basis through a random sampling of	Data will be analyzed with all other walkthrough data. Data can be disaggregated by teacher, subject, date, etc. Use this data to target sub-groups or individual teachers for

			classroom walkthroughs.	targeted instruction of materials.
Are students using the content teachers have integrated to solve authentic tasks and create public products?	It is imperative that BEM upholds its vision of students making meaningful contributions to the world and to do this students must be exposed to opportunities where they can integrate technology to solve authentic problems and create public products.	Likert and BrightBytes survey data.	This information will be collected electronically at the beginning, middle, and end of the school year.	Using BrightBytes survey data as a performance measure, did we succeed in raising our response to at least 60% of students identifying and solving authentic tasks and creating public products? If so, project was a success. If no, decide what went wrong and ways we can improve for the 2018-2019 school year.

Consequence Analysis

Of course, all endeavors in school improvement have their limitations. Christensen and

Horn reviewed the literature on best practices for outlining the uses of technology for the

purposes of a PL environment (as cited in Hodgson, 2016, p. 40). Findings revealed that

technology implemented into existing pedagogical practices did not increase 21st century skills.

Without changes to a project based learning model, Christensen and Horn professed, "schools

have crammed the computers into the existing teaching and classroom models. Teachers have

implemented computers in the most common-sense way, to sustain their existing practices and

pedagogies rather than displace them" (as cited in Hodgson, 2016, p. 42). With a subjective

measure like walkthrough data, it will be hard to know if teachers are truly moving toward a more project based learning approach with technology integration. The amount of time an administrator spends doing a walkthrough, an average of ten minutes in a classroom during instruction, is not nearly long enough to always see students being active users of technology as it is not practical for them to be active users during 100% of the lesson time every class period. Although my action plan includes a training session where all administrators can come to a consensus on what to look for, we cannot control what part of the lesson they will actually see when they walk into a classroom. If, by mid-year, we are not seeing the administrative walkthrough to be an effective measure for seeing technology integration with 21st century skills in mind, we may consider a new form for peer observation and protocol for evaluating those peer observations.

The final measure of success for this school improvement project is survey data. Survey data is only as trustworthy as the subjects who take the survey. Although adults may be able to answer honestly, not always will middle school students take the time to accurately complete a survey unless there is something to be gained by doing so. The Likert scale and BrightBytes survey are the two biggest pieces of data that will help to draw inferences about the effectiveness of this project. Considering the source of the survey data, middle school students responses are limited in the fact that they can never be completely trustworthy from all respondents. It is also important to note that BrightBytes is a service provided by the district. It is always a possibility that funding could shift or change and this survey no longer be made available to BEM. With that in mind, I have put the Likert survey in my action plan to still have a means of obtaining baseline and final data results.

Attewell pointed out that, "not all uses of computers have equivalent educational benefits" (as cited in Becker, 2006, p. 3). Although PL has given us access to devices that differentiate instruction, teachers at BEM are not offering the opportunity for students to use technology to identify and solve authentic problems unlocking these cognitive tools for 21st century tasks. For our school to be wholly devoted to 21st century learning, we must become cognizant of the new digital use divide, the disparity between students who use technology to create, design, build, explore, and collaborate and those who use technology only to consume media passively (DOE, 2017, p. 20). Upon full implementation of personalized professional development, BEM should see a substantial increase in students becoming active users of technology in the classroom environment. This would align the real with the school ideal of empowering all students to make meaningful contributions to the world using technology.

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