Professional Development for a New Learning Management System

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Setting/Context

This capstone project will take place at Adairsville Middle School in northern Bartow County. Adairsville Middle School is a traditional public school located in a rural area of Northwest Georgia, approximately 60 miles from the cities of Atlanta, Georgia and Chattanooga, Tennessee. Adairsville Middle recently earned a score of 81.4% on the College and Career Readiness Performance Index (CCRPI), an almost 10% increase from the previous year's score. The student body consists of 730 students in grades 6-8. The student population of Adairsville Middle School is predominately white, with a small subgroup of black, Hispanic, and multiracial students. The school is a Title 1 school, with approximately 56% of students being identified as economically disadvantaged.

Adairsville Middle School's administration includes one principal and two assistant principals. The 46 teachers are grouped into teams consisting of 4 teachers each, and each grade level contains two teams of teachers. Each teacher is responsible for one of the core subjects offered – Math, Language Arts, Science, and Social Studies. The faculty also includes connections teachers who teach subjects such as Art, Music, Physical Education, and Chorus. The faculty of Adairsville Middle School is predominately white. Teachers range in age from 26 – 65 years old and 31 teachers hold advanced degrees.

In August 2013, Adairsville Middle School relocated to a new building equipped with ample technology for all students and staff, including laptops, document cameras, new projectors, and fully equipped science labs. Adairsville Middle School was chosen to lead Bartow County in a 1:1 initiative due to our faculty being the first to relocate to a new facility. Using grant money, every student received a MacBook Air laptop in September 2013. Unfortunately, the only training that students received on their new laptops was the little that was

provided to them by their classroom teachers. In the summer of 2016, Bartow County discontinued its use of the learning management system Blackboard, and replaced it with Schoology. This was primarily due to the expense of Blackboard. Most of the teachers at Adairsville Middle School failed to receive adequate training on the new learning management system. While they can navigate it successfully and do basic tasks, most teachers are not aware of all that Schoology has to offer. Dr. Brian Knuchel, principal of Adairsville Middle School, has granted permission to conduct professional development on the use of Schoology for this capstone project.

Problem and Rationale

Teachers become resistant to technology use for a variety of reasons. The way the technology is introduced, improper training, lack of support, and an unwillingness to adapt to change all play a role in teachers' perceptions of technology use in the classroom. Ertmer (1999) provides a list of many barriers that teachers face regarding technology implementation. These can range from personal fears (How will I gain the confidence I need?) to organizational and pedagogical concerns (How do I weave technology into current curricular demands?) to technical and logistical issues (How does this software/program work?) Overbaugh and Lu (2009) discuss the importance of training teachers to use technology effectively. Many teachers struggle with incorporating technology because of lack of training. As a result, a lot of new technology goes unused due to the fact that teachers are unsure of how to best implement it.

Many teachers at Adairsville Middle School have become resistant in regards to the use of technology. This is due in part to impart to improper training. With teachers being exposed to so much new technology each year, many teachers are beginning to resist changes and are not willing to continue learning new programs and software. When Bartow County adopted the new

learning management system, Schoology, only a few teachers at each school were able to attend an optional training that was held over the summer. To support the Adairsville Middle School's technology vision and goals, there is a need for professional development to be offered to teachers for the integration of technology, particularly regarding learning management systems. Cifuentes, Maxwell, and Bulu (2011) note that professional development is necessary because simply using technologies in schools does not positively impact student achievement. Addressing this need will help teachers introduce a blended learning concept into their classroom, and engage in more rigorous and relevant lessons.

The rationale for implementing this capstone project is to ensure that teachers will integrate the learning management system effectively and implement instructional strategies that will promote higher levels of student engagement, collaboration, and technology integration with the 8th grade classrooms at Adairsville Middle School. Watson (2006) states, "Research indicates that the level of a teacher's computer and internet self-efficacy also affects student achievement and self-efficacy" (p. 155). If teachers are not proficient with technology, particularly the use of the new learning management system, they are not only handicapping themselves, but also the students in their classrooms. Educating today's learners requires teachers to be proficient in the use of technology.

<div align="center">**Objectives and Deliverables**</div>

The overall objective for this capstone project is to improve teacher understanding and use of the Learning Management System Schoology. During the Spring 2017 semester, seven 8th grade teachers at Adairsville Middle School will participate in a needs assessment survey about Schoology, and will be asked what types of professional development they would like to see offered in order to better understand Schoology. The second objective for this

capstone project is related to professional development. Throughout the 2017-2018 school year, face-to-face professional development sessions will be offered to eighth-grade teachers during grade level meetings. These sessions will be focused on integrating the specific issues within Schoology that teachers identified in the needs assessment survey. The third objective for this capstone project is to increase the number of teachers implementing the tools within Schoology that were presented throughout the professional development sessions. By the end of 2018, the expectation will be that all eighth-grade teachers at Adairsville Middle School will be using Schoology consistently and effectively within their classrooms.

Table 1.

Project Objectives and Deliverables

Project Objectives	Deliverables
By the end of the 2017-2018 school year, 8th grade teachers will show improvement in their understanding and use of the learning management system Schoology.	• Create an online needs assessment survey to find out what professional development teachers want regarding Schoology.
During the 2017-2018 school year, face-to-face professional development sessions on integrating specific tools within Schoology will be offered during grade level meetings in order to meet the goal of increased understanding of the use of Schoology.	• Develop content to be delivered at each professional development session held during grade level meetings. • Interactive notes with information, screencasts, helpful links, etc. posted to a Schoology page for eighth-grade teachers.
By the end of the 2017-2018 school year, the eighth-grade teachers will implement at least one Schoology strategy or tool presented during the professional development sessions to demonstrate their increased understanding of Schoology.	• A survey of the effectiveness of the Schoology training and teachers' attitudes toward the use of the new learning management system.

Project Description

This project will begin with eighth grade teachers completing a needs assessment survey in order to better understand areas of weakness concerning the new learning management system. Throughout the project, trainings will be held to address these areas of weakness, and to introduce new tips, tricks, and techniques involving Schoology. These trainings will be offered in face-to-face sessions four times throughout the 2017-2018 school year. The NETS-C standards will guide the direction of the implementation of this project.

This project will begin with the distribution of an online needs assessment survey to determine what teachers would like to learn about Schoology, to assess their current level of comfort and familiarity with Schoology, and their overall attitude about implementing Schoology in their classroom. This needs assessment survey will determine the overall focus of the trainings offered to teachers throughout the 2017-2018 school year. By focusing on the specific items in which teachers feel they need the most instruction, hopefully teachers' attitudes toward the implementation of Schoology in their classrooms will be more positive.

During this project, four face-to-face training sessions will take place. Content will be delivered to 8th grade teachers based on the results of the needs assessment survey. These one hour sessions will introduce a new tip, trick, or application that teachers would like to see in action. Additionally, interactive notes will be posted to the AMS eighth-grade teacher page on Schoology. These interactive notes will include tutorials, screencasts, and links to online resources that cover the topic being presented at that session. Because these notes will be posted to the eighth-grade AMS Schoology page, teachers and administrators can access these resources whenever needed.

In between the four scheduled trainings, I will observe and assist teachers with implementing Schoology within their classrooms. Through this, hopefully teachers will continue using our new learning management system in different ways than they have in the past. After the final training session, teachers will choose one of the topics presented to implement in their classrooms. A follow-up survey will be given to determine the effectiveness of the training, their overall attitude toward the use of Schoology, and to give participants an opportunity to ask questions or give suggestions for further trainings that might be needed.

Table 2.

Project Activities Alignment

Project Item/Activity	Project Objectives	Deliverable
- Develop needs assessment survey - Familiarize myself with Schoology - Research specific instructional strategies	By the end of the 2017-2018 school year, 8th grade teachers will show improvement in their understanding and use of the learning management system Schoology. Create a needs assessment survey for teachers to complete prior to designing the professional development sessions for Schoology.	- Needs Assessment Survey - Surveys after each PD session
- Analyze results from the needs assessment surveys - Prepare presentation for PD sessions - Prepare materials and survey for PD sessions - Create interactive notes to post to Schoology group - Host four one-hour PD sessions	During the 2017-2018 school year, face-to-face professional development sessions on integrating specific tools within Schoology will be offered during grade level meetings in order to meet the goal of increased understanding of the use of Schoology.	- Interactive notes posted to Schoology - Handouts and materials for PD sessions - Four one-hour meetings

• Provide support to participants when needed • Create sample lesson plans on how to integrate instructional strategies using Schoology and prepare to model them	• By the end of the 2017-2018 school year, the eighth-grade teachers will implement at least one Schoology strategy or tool presented during the professional development sessions to demonstrate their increased understanding of Schoology.	• Sample lesson plans incorporating the use of Schoology. • Post-surveys

PSC Standards

The first objective of this capstone project addresses standard *5.1 Needs Assessment.* The standard addresses the need for technology coaches to conduct needs assessments to determine strengths and weaknesses to inform the content and delivery of technology-based professional learning programs. By conducting a needs assessment survey at the beginning of the capstone project, instruction can be tailored to the needs that the 8th grade teachers would like to see addressed within this project. This objective also aligns with NETS-C Standard 4, *Professional Development & Program Evaluation*. This standard addressed conducting needs assessments to inform the content and delivery of technology-related professional learning.

The second objective is associated with standard *5.2 Professional Learning*. Face-to-face and online components will be implemented throughout the capstone project. The design and delivery of content will promote best practices in teaching, learning, and assessment. Additionally, this objective aligns with NETS-C Standard 2, *Teaching, Learning, & Assessments*. The purpose of this capstone is to assist teachers in using technology effectively to provide rigorous, relevant, and engaging learning experiences for all students in their classrooms.

Finally, the third objective correlates to standard *6.1 Continuous Learning*. Teachers

will be implementing at least one instructional strategy and will provide feedback on the impact

that the use of Schoology has had in terms of engaging students. Teachers will demonstrate

growth in their knowledge and skills regarding Schoology and apply them to improve their

professional practice. This objective also aligns with NETS-C Standard 4c. Results from post-

surveys will be evaluated to determine the effectiveness on improving teacher skills and

increasing student learning.

Table 3.
Project Objectives and Standards

Project Objectives	Standard
By the end of the 2017-2018 school year, 8th grade teachers will show improvement in their understanding and use of the learning management system Schoology. Create a needs assessment survey for teachers to complete prior to designing the professional development sessions for Schoology.	• *Standard 5.1 Needs Assessment* Candidates conduct needs assessments to determine school-wide, faculty, grade-level, and subject area strengths and weaknesses to inform the content and delivery of technology-based professional learning programs. • *NETS-C Standard 4 Professional Development* Conducts needs assessments to inform the content and delivery of technology-related professional learning programs that result in a positive impact on student learning.
During the 2017-2018 school year, face-to-face professional development sessions on integrating specific tools within Schoology will be offered during grade level meetings.	• *Standard 5.2 Professional Learning* Candidates develop and implement technology-based professional learning that aligns to state and national professional learning standards, integrates technology to support face-to-face and online components, models principles of adult learning, and promotes best practices in teaching, learning, and assessment. • *NETS-C Standard 2 Teaching, Learning, & Assessments* Assist teachers in using technology effectively for assessing student learning, differentiating instruction, and providing rigorous, relevant,

	and engaging learning experiences for all students.
By the end of the 2017-2018 school year, the eighth-grade teachers will implement at least one Schoology strategy or tool presented during the professional development sessions.	• *Standard 6.1 Continuous Learning* Candidates demonstrate continual growth in knowledge and skills of current and emerging technologies and apply them to improve personal productivity and professional practice. • *NETS-C Standard 4 Program Evaluation* Evaluate results of professional learning programs to determine the effectiveness on deepening teacher content knowledge, improving teacher pedagogical skills and/or increasing student learning.

Evaluation Plan

A. Narrative

To evaluate what 8th grade teachers need more training on regarding the use of Schoology, results from a needs assessment survey will be evaluated to determine what should be addressed throughout the professional development sessions. Results from surveys given after each training session will help guide the planning for the remaining professional development sessions by taking into consideration the suggestions provided by the participants. Once all professional development sessions have been completed, teachers will be asked to implement one tool or strategy that was addressed throughout the professional development trainings. A survey will be conducted to evaluate teachers' perceptions of the professional development, if they felt it was effective, and to determine if additional trainings may be necessary. The results of the surveys will help determine if future professional development sessions are necessary in order for teachers to feel comfortable with the use of Schoology. The

information gathered will be used to note areas of strength or weaknesses which can then be

addressed prior to assisting other grade levels with the implementation of Schoology.

B. Timeline

Table 4.

Project Timeline

Time Frame	Description of Activity	Anticipated Number of Hours
May - June 2017	- Develop online recruitment survey - Develop needs assessment survey - Familiarize myself with Schoology - Research specific instructional strategies	20 hours
July 2017	- Create and distribute needs assessment survey - Analyze results from the needs assessment surveys - Prepare presentation for first PD session	12 hours
August 2017	- Prepare materials and survey for first PD session - Create interactive notes to post to Schoology group - Host first one-hour PD session	10 hours
September - October 2017	- Provide support to participants when needed - Prepare presentation for second PD session - Prepare materials and survey for second PD Session - Create interactive notes to post to Schoology group - Host second one-hour PD session	11 hours
November 2017	Create handouts with information about instructional strategies to provide to the participants	4 hours
December 2017	Create sample lesson plans on how to integrate instructional strategies using Schoology and prepare to model them	10 hours

January – February 2018	• Provide support to participants when needed • Prepare presentation for third PD session • Prepare materials and survey for third PD Session • Create interactive notes to post to Schoology group • Host third one- hour PD session	11 hours
March 2018	• Develop Post-Survey questions	2 hours
April 2018	• Provide support to participants when needed • Prepare presentation for fourth PD session • Prepare materials and survey for fourth PD Session • Create interactive notes to post to Schoology group • Host fourth one-hour PD session	11 hours
May 2018	• Conduct post-survey • Evaluate results	9 hours

C. Resources

There are several resources that will be needed in order to complete this capstone. As these resources are already available or free to access, there will no cost involved in the implementation of this project.

Table 5.
Resources

Resource	How it will be secured
1. Permission to conduct capstone project	Permission has been granted through administration
2. MacBook Airs and Internet Access	All teachers are issued MacBook Air laptops and the wireless internet strength is sufficient.
3. Surveys	Surveys will be conducted through Google surveys.
4. Handouts and Sample Lesson Plans	Microsoft Word will be used to create handouts and lesson plans
5. Interactive Notes	Interactive notes will be created using Piktochart.

6. Presentations for PD Sessions	Presentations will be created using Microsoft PowerPoint or Prezi, and Schoology.

References

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