

Professional Development Experience: Deploying a District-Wide LMS

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Frazier (2012) points out that effective technology professional development programs must be a collaborative endeavor in which needs of staff are assessed in order to effectively execute a plan that realizes the larger vision of the district for technology use. “The technology coordinator must work with teachers and the school or district administration to determine professional development needs and design a program to meet those needs...To develop an effective technology professional development program, the program must be tied to the goals and intentions of the larger plan for technology in the district” (2012, p. 912). As such, professional development sessions that foster such collaboration to meet said goals must be developed, and — as Google Sites is the learning management system (LMS) that is being employed for district use — it can also act as the means through which professional development on use of the LMS itself is provided for teachers. Essentially, teachers will learn how to leverage the LMS as a means through which authentic learning experiences — where students use Google Apps for Education to communicate and collaborate — can be provided. “Google has spent the past decade developing an entire suite of tools that have revolutionized the way in which we use the internet. These tools have made the world a smaller place by giving users a chance to work virtually from anywhere, with anyone, at any time” (Covili, 2012), and teachers will gain firsthand experience as to how this capacity to facilitate collaboration can benefit students by engaging in meta-professional development workshops, where they learn how to use the LMS through workshops provided on the LMS. As “Effective professional development programs focus on the larger goal of improved student learning and performance, rather than on learning technology as a goal in and of itself” (Frazier, 2012, p. 907), teachers will engage in activities where they critically analyze the uses of various features of the technology through activities that are posted on the LMS, rather than a series of monotonous workshops on how to navigate

Google Sites. Through this series of meta-workshops, teachers across the district will learn about how the features of Google Sites can be purposefully and systemically incorporated into existing curricula.

The audience for the professional development series will be heterogeneous groups of teachers across the district, as this is a requirement for all staff members. There are many benefits to this, as “Working with diverse groups and communicating effectively in a variety of ways are a major part of the day-to-day work of a technology coordinator” (2012, p. 405). For instance, there will be some new teachers in attendance. As such, they will still be open to developing new teaching practices, adapting to a continually evolving learning environment with ease. Their enthusiasm may influence the paradigms of other, more experienced teachers in attendance, who tend to be more rigid in their dispositions regarding the nature of the pedagogy. In any case, the professional development must account for potential reluctance to incorporate new strategies into the pedagogy, and the heterogeneous grouping may mitigate any potential issues that arise as a result.

Additionally, technological literacy can be another factor, being that teachers who may be motivated to incorporate technology into their teaching practices might lack the necessary requisite knowledge of technology and technology use, while others who are technologically fluent may not be motivated to apply their expertise. This is why the focus of the workshops will pertain to the efficacy of the features of Google Sites, as opposed to a tutorial on how to navigate it. Indeed, professional development must provide an overview on how to use the LMS, but in order to motivate teachers to integrate technology the value that technology is for teaching and learning must be clear and paths to mastering technical tools must be viewed as achievable. Pairing teachers who are savvy with technology, with teachers who may require more

assistance navigating an LMS and encouragement and support creating digital tools. A needs assessment will be conducted at the first mandatory meetings. The assessment will assess the need for a learning management systems (Corn, 2009). The assessment will create an experience of value for teacher input. The assessment will also capture technology learning that is relevant from the teachers' point of view.

The goal is improved student performance. The focus is not learning technology as a goal (Frazier, 2012). The survey will allow the technology coordinator to create relevant workshops that meet the teachers where they are in terms of their comfort and proficiency creating and integrating technology tools. The goal is to equip every district school with technology that creates opportunities for student collaboration, immediate feedback, and learning activities that are engaging and relevant. Through authentic learning experiences, continuous communication among stakeholders, collaborative team building and real-world simulations that facilitate the application of Common Core skills, the learning experiences of all students will be enhanced. This requires a new level of comfort with technology, related software and applications. The survey identifies comfort level and proficiency. Professional development is directly related to these markers.

The survey design is intentional. The beginning questions determine the degree to which teachers are reluctant to use the LMS. Google Sites specific questions will identify the expected assistance teachers will need with the application. These questions will allow the technology coordinator to determine the balance of professional development related to overview and specific professional development sessions required for teachers and students. Although the training goals are the same for all participants, the workshops are differentiated in terms of the level of support available and the level of time required for completion. "A one-size-fits-all

professional development approach generally does not work in the face of the great diversity of technology readiness and ability” (Wasser, 1996, p. 3).

The results from the professional development substantiate the findings of Ersoy who conducted a study on teacher reluctance to use technology. Ersoy (2015) states that when presented with interactive whiteboards for the first time, they were resistant, because “...they had a system they were used to...Giving up a system for another system, they see it as a burden...they were successful the way it was for years...they thought they will fail when they changed it” (p. 10). One of the general items, presented in the survey, posits a statement saying that technology improves overall instruction. Many teachers responded in the negative to this, indicating that they feel as though the methods they have been using for years cannot be improved upon. They simply do not see the utility of it. When presented with items, which ask them to rate their confidence in learning and using new technologies, they responded in the negative, as well. Additionally, when completing the written responses, at the end of the survey, teachers responded that the LMS made simple tasks very difficult. This is largely due to the teachers’ unfamiliarity with the interface. As such, we have decided that it would be prudent to develop a professional development series, which provides remediation for teachers at beginner, intermediate, and advanced levels of technology proficiency. Though all of our professional development sessions focus on how to implement use of technology, in such ways that align to our goals and objectives, (communication and collaboration amongst all stakeholders and authentic learning experiences) basic tutorial videos on how to use the technology are also available. The professional development series can be viewed [here](#).

Our Professional Development (PD) series is designed to promote a systemic approach that aligns to Universal Design for Learning (UDL) principles. “UDL provides a blueprint for

creating instructional goals, methods, materials, and assessments that work for everyone” (National Center for UDL, 2016), and it validates all learning styles, and provides specific guidelines to enhance the learning environment. For this reason, our PD targets various learner variabilities regarding technological capabilities, and provides broadened means for maximized learning through different modalities, ie: goals, methods, materials and assessments. Our series will emphasize a small group setting, provide visual aids, hands-on manipulation, and extend with ongoing one-to-one support. Our PD methods will be adjusted based on monitoring each teacher’s individual progress. Implementing the UDL format within our PD series encourages teachers to remove potential caveats in order to develop personal mastery using Google sites for different purposes within their classroom as they see fit.

While indicated deadlines must be met by all participants, the asynchronous nature of the learning experience allows teachers to allocate the appropriate amount of time to each learning activity. Teachers who are highly proficient would be able to complete the course without much guidance or time devotion while those must learn a number of basic skills would naturally spend more time becoming proficient. The struggling teachers would also have access to support through a variety of means, including uploaded instructional videos, live webinars, scheduled one-on-one support, and constant email communication. “The technology coordinator must be prepared to help teachers step outside their comfort zone, take risks, explore new tools and resources, and learn new ways of providing a caring and effective learning environment for students” (Frazier, 2012, p. 850). Teachers would also be encouraged to aid their colleagues whenever possible, lessening the burden on the coordinator.

Staff Professional Development Series Training

Goal: To provide all teachers within the district with a mandated professional development series that allows them to establish a paperless academic environment by implementing Google Sites as a learning management system. Using technology, teachers will provide students with authentic feedback, assessments, and collaborative academic experiences in preparation for learning 21st century skills and exercising digital citizenship.

Phase 1 – Needs Assessment & Introduction

September 1, 2019 (9:00am – 10:00am)

Learning Target: To stress the value of the integration of technology and identify the various levels of proficiency amongst the teachers. To introduce the process of creating a Google account and the foundation of operating Google Sites.

Phase one of the professional development series will be conducted on the first district professional development day in September. All teaching staff will be required to attend the training at identified media centers throughout the district. Teachers must bring their laptops in order to access a Google Sites webpage, which will include a calendar feature that includes future dates and deadlines for other professional development sessions. All directions for tutorials, webinars, assignments, and discussions will be uploaded to the site. The following topics will be discussed:

- Mission, vision, objectives and goals
- Creation of a Google site
- Needs assessment (Google Form) conducted

- Foundation of creating a Google Site
- Scheduling independent work and identifying individual topics
- Question and answer session

Phase 2 – Independent Practice

Completion date - September 30, 2019

Learning Target: *Teachers will use Google sites as a learning management system to facilitate learning by completing various modules that emphasize the advantages of using Google Apps for Education. Teachers will work collaboratively and provide their colleagues with descriptive feedback that allows them to improve the quality of their Google sites.*

Phase two of the professional development series will be conducted independently as the teachers will view webinars, videos, read articles, and participate in discussions in exploration of the advanced features and advantages of using Google sites. If needed, additional support will be provided through email, peer collaboration, or individual help sessions.

- Module I: Enhancing classroom best practices (Feedback)
- Module II: Collaboration amongst students
- Module III: Effective use of technology for communicating with parents
- Module IV: Formative and summative assessments
- Enabling Google Sites to be accessible by all stakeholders
- Collegial feedback on peer Google Site – (Three colleague minimum)
- Implementation of one recommendation given by colleagues

Phase 3 – Assessment of Program

October 17, 2019 (9:00am – 10:00am)

Learning Target: Teachers will share collaborative experiences using Google sites as a learning management system to establish a paperless classroom. Teachers will also assess the professional development series.

Phase three of the professional development series will be conducted in identified media centers throughout the district during the second district professional development day, which is usually held on Columbus Day. Randomly selected teachers will be asked to share their Google sites and discuss the advantages and disadvantages that they experienced using the site. All staff members will complete a Google form survey to collect data on their experiences.

- Mission, vision, objectives and goals
- Successes of using Google sites as a learning management system
- Question and answer session
- Future goals and continued learning
- Completion of evaluation survey (Google Form)

Assessment

The professional development series will be assessed before, during and after the series has been completed. The goals and expectations of the series will be documented during the pre-assessment survey. The instructors will conduct formative assessments throughout the sessions through questioning and discussion techniques as well as examining artifacts that are uploaded into a digital portfolio to assess whether or not the professional development series is meeting

the teachers' expectations. Instructors and school administrators will collaboratively communicate the formative assessments conducted through email and weekly professional learning communities. Once the series is complete, teacher surveys will be conducted to assess initial reactions to the professional development series. School administrators and instructors will meet to examine the digital portfolios and assignments completed and during the professional development series.

Formative assessments of the skills/knowledge gained through professional development sessions must be an ongoing process to assure the implementation of Google sites with fidelity. District content supervisors and school administrators will review teacher lesson plans for evidence of planning and preparation of the implementation of Google classroom skills throughout all content areas. Focused walkthroughs and observations will be conducted throughout the year using a rubric to evaluate the level of implementation of Google classroom tools. "These frequent, short, unscheduled visits [walk throughs] can foster focused, reflective and collaborative adult learning" (Ginsberg, Murphy, 2002).

All stakeholders will be surveyed throughout the year make evaluations of the professional development series. Examples of those surveys are linked below.

Teacher Survey

<https://docs.google.com/a/jcboe.org/forms/d/1vo2pifipyMR0g39XPbUaWHX6DI7DuTO6n3gpf-g-2xnY/edit>

Student Survey

<https://docs.google.com/forms/d/1unLwpSj5q4A2dmTpa2l67Pzq0LkTn0OHXUhStxF7kgI/viewform>

Parent Survey

[https://docs.google.com/forms/d/13OSC5SIqq1eyo_S-Tu7aq7-](https://docs.google.com/forms/d/13OSC5SIqq1eyo_S-Tu7aq7-ZerL2wglfz_AmFDvB4DY/viewform)

[ZerL2wglfz_AmFDvB4DY/viewform](https://docs.google.com/forms/d/13OSC5SIqq1eyo_S-Tu7aq7-ZerL2wglfz_AmFDvB4DY/viewform)

Effective professional development should always begin with the end in mind and should align with student learning outcomes (Kreider & Bouffard, 2006). The assessment and evaluation of the professional development design process is an important component as it can “...provide information on the effectiveness of specific professional development offerings, it can help professional development facilitators improve their offerings, and it can help inform professional development consumers in selecting appropriate trainings to improve their program’s performance” (Mullins, Lepicki, Glandon, 2010).

According to Guskey (2002), the following five levels of data should be collected and analyzed during the evaluation:

- Level 1 - Participants’ reactions, measures the participants’ initial satisfaction with the experience, which can help improve the design and delivery of programs or activities in valid ways (Guskey, 2014).
- Level 2 - Participants’ learning, measures the knowledge and skills the participants gained, which must be aligned with specific learning goals outlined before activities begin (Guskey, 2014).
- Level 3 - Organization support and change, is crucial because lack of organization support and resistance to change can sabotage any professional development effort (Guskey, 2014).

- Level 4 - Participants use of new knowledge and skills integration must be measured at several different time intervals since implementation is often gradual and uneven (Guskey, 2014).
- Level 5 – Student learning outcomes is about a program's overall impact, which can guide improvements in all aspects of professional development, including program design, implementation, and follow-up (Guskey, 2014).

Five Levels of Professional Development Evaluation (based on Guskey, 2000)

Evaluation Level	What are the questions addressed?	How will information be gathered?	What is measured or addressed?	How will information be used?
Participants Reactions	Was time spent productively? Will the material be of use? Was the leader knowledgeable and helpful? Was the training differentiated to address various learning styles?	Questionnaires will be administered to conclude each session.	Initial satisfaction with the professional development experience.	To enhance the design and delivery of the program.
Participants Learning	Did participants gain the knowledge and skills the workshop was intended to promote?	Demonstrations Participant reflections Participant Portfolios	Newly acquired knowledge and skills of participants	To enhance program content, format, and overall organization
Organization Support and Change	Was implementation advocated, facilitated, and supported? Were problems adequately and	Questionnaires District and school records Participant portfolios	Organization's advocacy, support, accommodation, and recognition	To document and enhance organization support where necessary To influence future

	efficiently addressed? Were successes recognized and shared?	Interviews conducted with participants and other stakeholders		workshops
Participants Use of New Knowledge and Skills	Did participants effectively apply new knowledge and skills?	Questionnaires Interviews conducted with participants and other stakeholders Participant portfolios Participant lesson plans Walk through observations Videos and audio tapes	Degree and quality of implementation	To document and improve the implementation of program content
Student Learning Outcomes	Did it impact student performance or achievement? Are students more confident as learners? Did student attendance improve?	Student records School records Questionnaires Structured interviews with stakeholders Participant portfolios	Students' performance and achievement Students Dispositions Students' skills and behaviors	To focus and enhance all aspects of program design, implementation, and follow-up To demonstrate the the cumulative affect of professional development

Observation/Walk Through Assessment Rubric (based on the Technology Integration

Matrix TIM, 2013)

	Entry 1	Adoption 2	Adaptation 3	Infusion 4	Transformation 5
Active	Google Classroom tools used to passively send information.	Google Classroom tools are used for procedural tasks.	Google Classroom tools are used moderately as a conventional tool with some choice and exploration.	Google Classroom tools are used often for exploratory purposes.	Google Classroom tools are used innovatively and extensively.
Collaborative	Google Classroom tools used individually.	Google Classroom tools are used for collaboration as instructed by teacher.	Google Classroom tools are used for collaboration with some choice and exploration.	Google Classroom tools are used often for collaboration with some choice and exploration.	Students collaborate with peers in ways using Google Classroom tools in ways that would otherwise be impossible
Constructive	Teacher delivers information to students using Google Classroom tools. Students don't actively engage with the LMS	Google Classroom tools are used with teacher direction for the purposes of building knowledge.	Google Classroom tools used with minimal teacher directions for the purposes of building knowledge.	Google Classroom tools are used often with choice and exploration for the purposes of building knowledge.	Google Classroom tools are used extensively and innovatively to for the purposes of building knowledge.
Authentic	Google Classroom tools are used in ways	Students use Google Classroom tools in	Students use Google Classroom tools with	Students choose to use Google Classroom	Students use Google Classroom tools in innovative

	unrelated to classroom instruction.	teacher guided activities with meaningful context.	minimal teacher direction in activities with some exploration.	tools often in meaningful activities with real life applications.	ways for higher level learning activities in a global context that may not have been possible without the use of technology.
Goal Directed	Google Classroom tools are used by the teacher to give directions and monitor student progress.	Google Classroom tools are used by the teacher and students to plan and monitor teacher guided activities.	Google Classroom tools are used by students with some choice to plan and monitor teacher guided learning activities.	Google Classroom tools are used by students with some choice to monitor student oriented learning activities.	Google Classroom tools are used extensively by students to plan and monitor higher level learning activities that may not have been possible without the use of technology.

Professional Development Resources

Resource	Description
Google Apps: An Alternative to Learning Management System http://www.iosrjournals.org/iosr-jbm/papers/met-3ncbs/Vailshali%20Pardeshi%20Introduction%20to%20technology%20in%20learning%20today.pdf	Google sites as a and LMS affords students unlimited access to all content from a single location. Google Apps provide opportunities to build an entire LMS using free tools. Such tools facilitate collaboration, communication and creation among all stakeholders in the learning community.
Apps as a Free LMS Community https://wiobyne.com/use-google-sites-for-	Google Apps allows one to integrate varied document types and resources that allow for content creation and access. Google Sites,

<p>educators-to-build-your-own-digital-learning-hub/</p> <p>Google Sites as a Digital Learning Hub, Templates and Tutorials</p> <p>https://sites.google.com/site/textsandtools/tech-tutorials/google-sites</p>	<p>integrates these to create a one stop location for content across the curriculum. Use Google Apps as your LMS. Collaboratively build an online resource.</p>
<p>Google Sites - Digital Learning Hub</p> <p>https://www.youtube.com/watch?v=Q1Tk8eSFJuE&feature=youtu.be</p>	<p>Basic video introduction to Google Sites.</p>
<p>Google Sites Resources</p> <p>https://www.controltachieve.com/p/resources-google-sites.html</p>	<p>Creative Commons Google Sites Training video and slideshow.</p>

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