

Assignment #4:

Designing a Professional Development Experience

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Introduction

The Superintendent of the North Belle School District (NBSD) wants to address the low usage rates of the learning management system (LMS) implemented in fall 2017. The superintendent had charged the technology coordinator to design and implement district-wide professional development to encourage the use of the LMS. Developing the professional development or training series is key to system-wide adoption of the LMS to assist existing teachers in addition to the new teachers in the district. The superintendent charged the technology coordinator to create a task force.

Task Force: “PRO LMS”

The technology coordinator invited a total of 10 members to represent grade groups of K-12, middle school and high school. The members are librarians, instructors, and administrative staff. The mission of the task force is to design a professional development experience to encourage adoption of the LMS to move from paper to electronic instructional processes. The “PRO LMS” task force objectives are to understand the resistance to adoption of the system via a needs assessment survey, establish a training program including a workshop and evaluation of the training. The task force will need to take a comprehensive view to train everyone in the district and decides to apply a systems thinking approach based on Senge’s five disciplines of “personal mastery, mental models, building a shared vision, team learning, and systems thinking (Senge, 2006).” Attempting to build a shared vision across 12 schools with 700 teachers will contribute to the success of the professional development plan.

Professional Development

The North Belle School District will implement a professional development plan that is cyclical and evidence-based. The plan will consist of five phases starting with a needs assessment (Brown & Green, 2016), continuing through the creation of learning objectives, the design of a content delivery process, implementation of the training to the intended audience, followed up by an evaluation of the intervention. As the process is iterative, the data collected at the evaluation phase drives further needs assessments and the rest of the cycle as deemed appropriate.

Keeping in line with a project management approach to system change (Kerzner, 2009), the NBSD superintendent acting as the key stakeholder, authorized the project to increase usage of the new LMS through the formation and authorization of the PRO LMS task force. A formal letter of support of the task force allocates resources to the team such as monies for training materials and protected time for staff. The letter also mentions a voluntary micro-credentialing program for teachers or “champions” who decide to expand their knowledge in LMS content areas (NEA, 2018).

Needs Assessment

The PRO LMS task force’s first mandate is to evaluate the current landscape to determine the underlying cause for the poor implementation of the LMS. In order to achieve this end, the team implemented an online survey consisting of short open-ended questions. A link to the survey can be found here:

https://njcu.co1.qualtrics.com/jfe/form/SV_4VdRzfx4iZRkZ13 The task force distributed the survey anonymously to all faculty and staff employed in the NBSD via email and interoffice mail. Two methods were chosen to ensure everyone had an opportunity to participate regardless of access or familiarity with technology.

The principal of each school made an announcement indicating the need to increase utilization of the LMS, the existence of the PRO LMS task force, the project management approach to adoption, and the need to collect data to meet the needs of the district best. In their communication, the principals mentioned how the use of the LMS is in line with the mission of the district.

Utilizing information gleaned from the survey the PRO LMS task force identified three areas of weakness. They include access, training, and time.

Issues related to access included teachers not knowing their username and password to the system, too few computers for users to access the system, and software not being installed on the existing computers.

Many respondents reported training as a barrier to implementation. Training issues included the lack of on the job aids or user-friendly manuals to assist in the daily use of the system, the inability to attend the rollout training, and a misunderstanding of its use in the day-to-day operations of the district.

Finally, the end users indicated that there was little time available in their schedule to become competent users. Reasons for this included prep periods being used to cover other classes, training offered during the initial roll-out being offered outside of regular business hours, initial training neglected follow-up, and the initial training was provided months before the system going live resulting in a loss of practical knowledge.

Learning Objectives

For the sake of this professional development project, the PRO LMS team decided to address issues related to training and time. The team immediately communicated to the key stakeholder and the director of technology with the

recommendation to a) install additional networked computer stations in each workspace and b) resend log in credentials to all users.

Comparison between the desired level of user functionality and current state identified a needs gap. This needs gap drove the development of a curriculum. The curriculum will cover the following areas and associated learning objectives. The learning objectives will include that all attendees will successfully use each of the following LMS functions:

1. Introduction: Participants will create a text or a combination of a text and video personal introduction to the course.
2. Announcements: Participants will create, manage, and schedule announcements for the course.
3. Attendance: Participants will complete the session with knowing how to mark a student's attendance via the LMS. Participants will learn how to create and use the following features as well.
4. Calendar: Participants will communicate important dates for assignments, projects, and other events via the LMS.
5. Collaborations: Participants will be able to generate collaborate projects for learners within the LMS.
6. Conversations: Participants will be able to create conversations for student groups within the LMS.
7. Course Navigation: Participants will be able to create a logical navigation pane for the learners within the LMS.

8. Discussions: Participants will be able to create a and monitor a discussion board within the LMS.
9. Grades: Participants will be able to upload grades from other sources and maintain student grades within the LMS.
10. Quizzes: Participants will be able to create and administer student assessments within the LMS.
11. Rubrics: Participants will be able to create, share, and utilize rubrics as part of assessment of student work within the LMS.

A sample site mimicking the content and general design for the on-line training program can be found here: <https://sites.google.com/view/nbsd-lms-training/home>

Implementation issues fall into three broad categories of access, training, and time. Lochner, Conrad and Graham (2015) use the concerns-based adoption model (CBAM) to further understand users as they go through the following stages: “awareness, informational, personal, management, consequence, collaboration and refocusing (Lochner, Conrad & Graham, 2015).” Time and management of the LMS seem to be the most significant struggles for the end users indicate that there is little time available in their schedule to become competent users. Reasons for this include available training during the initial roll-out is outside of normal business hours, initial training without follow-up, and the initial training was offered months prior to the system going live resulting in a loss of practical knowledge.

Program Design

The PRO LMS task force implemented a training program utilizing understanding by design or universal design for learning (UDL) principles (CAST, 2018). The design

took into account the need to meet the needs of a busy learner resulting in short, focused lessons that are available to the user in an online and asynchronous manner—the LMS the staff needs to master. This microlearning approach is evidence based in the areas of training (ATD, 2018) and adult learning (Kerzner, 2009) and the technology implementation matrix (Florida Center for Instructional Technology, 2018)

In order to encourage learner engagement and to reinforce learned behaviors and practices, the learning management system will host the training modules. An additional bonus to using the LMS is that it has a discussion board functionality allowing for users to communicate with one another covering areas of particular interest. This learning methodology utilizes a community of practice model (Wenger 2002) where users both inexperienced and experienced can learn and share information across the district. It also allows for curation of practical experience that can be referenced by new users as they come into the district.

The learning program consists of small micro lessons to ensure each participant has a grasp on the material (ATD, 2018).

Implementation

The PRO LMS task force will implement the training program in conjunction with the technology coordinator or department depending on the school and rolled out to the user community before the start of the next academic year. The superintendent approved additional professional development time specifically for LMS training by the faculty and staff. The launch of the training program will start with a special meeting with each school and the superintendent where the mission of the district will be discussed as well as the need for the migration to the new system.

A reward or recognition system will be put in place to motivate and reward users for completing the lessons while additional support will be provided to those not completing the modules or engaging with the LMS course. Individuals exhibiting high levels of competency will be identified to serve as product champions. Champions for each school will receive public recognition from the superintendent. Teachers or “champions” who decide to expand their knowledge in LMS content will have the opportunity to earn micro-credentials (NEA, 2018).

The discussion board or community of interest is expected to grow organically over time as users become more familiar with the new system and their perceived expertise. Monitoring of the community will be the job of the technology department with a focus on identifying additional skills gaps. Individuals exhibiting high levels of competency will be identified to serve as product champions. Champions for each school will receive public recognition from the superintendent.

Evaluation

Program evaluations utilize the Ohio ABLE professional Development Evaluation Framework (Mullins, Lepicki & Glandon, 2010). The framework evaluates four levels of a training session. Level 1 is the satisfaction level and seeks to determine the immediate reaction of the trainee to professional development. Level 2 addresses issues of learning and knowledge acquisition with formal assessments of knowledge and behavior measuring competence. Level 3 addresses changes in on the job behavior and looks at the training in a broader scope. Failure to advance from Level 2 to Level 3 could represent a failure in the training module or identify procedural or cultural barriers within an organization. As an example, the inability to utilize a grade book functionality within

a learning management system may not be the result of knowledge or ability on the part of the teacher but may be due to a lack of syncing between the LMS and a student information system. The final level, Level 4, measures the impact the training has on the organization at a systems level and reports outcomes regarding organizational level metrics. Figure 1 diagrams the evaluation framework.

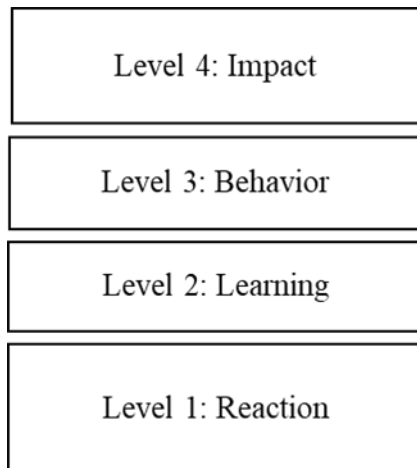


Figure 1. The Ohio ABLE professional development evaluation framework

The PRO LMS task force will collect evidence of trainee satisfaction and behavior, levels 1 and 3, through a survey created in Qualtrics and administered through the schools LMS training. The link to the survey can be found here:

https://njcu.co1.qualtrics.com/jfe/form/SV_bwNf1972R0loL53

Measurement of Level 2 learning takes place through the use of assessments built into the individual training modules. Individual progress is tracked in the LMS grade book. Increased LMS adoption rates and classroom integration indicate training success at Level 4.

Conclusion

A team led by the technology coordinator took a systems approach to address the issue of low LMS adoption in the NBSD. The iterative and evidence-based process involved a comprehensive assessment of the faculty and staff to determine the root causes of the problem followed by the development and delivery of a curriculum tailored to the specific needs of the learners. Asynchronously delivering the curriculum through the LMS provides a convenient and practical solution to the complex problem.

References

- ATD. (2018). *Micro-learning: Bite-sized content*. Alexandria, VA: Association for Talent Development.
- Brown, A., & Green, T. D. (2016). *The essentials of instructional design: Connecting fundamental principles with process and practice*. New York, NY: Routledge
- CAST: About Universal Design for Learning. (2018, October 15). Retrieved from <http://www.cast.org/our-work/about-udl.html#.XAxtn2hKg2x>
- Florida Center for Instructional Technology. (2018). *Technology Integration Matrix*. Retrieved from <https://fcit.usf.edu/matrix/>
- Kerzner, H. (2009). *Project management*. Hoboken, NJ: Wiley.
- Lochner, B., Conrad, R.M., & Graham, E. (2015). Secondary Teachers' Concerns in Adopting Learning Management Systems: A U.S. Perspective. *TechTrends: Linking Research & Practice to Improve Learning*, 59(5), 62–70.
<https://draweb.njcu.edu:2078/10.1007/s11528-015-0892-4>
- Mullins, D., Lepicki, T. & Glandon, A. (2010). A Professional Development Evaluation Framework for the Ohio Able System. (2010). Retrieved from Blackboard
- NEA. (2018). Micro-credential guidance. Retrieved from <http://www.nea.org/home/microcredentials.html>
- Senge, P. (2006). *The Fifth Discipline: The art & practice of the learning organization*. New York, NY: Random House.
- Wenger, E., McDermott, R. A., & Snyder, W. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Harvard Business Press.