Proposal for Introducing Google Classroom as a District-Wide Learning Management System (LMS)

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Rationale

The purpose of this technology proposal is to assist the Mianus Gorge School District (MGSD) administration and Director of Technology in the adoption of a district-wide Learning Management System (LMS). Currently, the district uses the eSchoolData Student Information System (SIS) to manage student data like household information, schedules, state assessments, attendance, report cards, and the teacher's gradebook. This system, however, does not provide a way for teachers to post course materials or interact with students online.

With the district pushing for a 1:1 student to device ratio, the 2015-2016 school-year had more devices than ever before. Most teachers, with proper planning, can have computers available for all of their classes throughout the school day. Some teachers have begun to randomly adopt different online LMSs on their own in order to interact with their students, share materials, and submit and return assignments (Lonn and Teasley, 2009). At the secondary level, students and teachers in the MGSD have most commonly worked with Edmodo, Moodle, and Schoology since they offer free platforms (Fenton, 2016).

The MGSD has purchased its own Google domain and has access to Google Apps for Education, which is free. One app that can be made available is Google Classroom. Teachers currently need to ask the Technology Department to have it set up. This app is available to all faculty and staff and can serve as a district-wide, free, web-based LMS, but not many know about it or are willing to ask to have it set up. There is still interest by a handful of teachers in using LMSs. If all teachers knew about and used the Google Classroom platform, it would create greater unity in the way the MGSD addresses, supports, and tracks student learning online.

Background Research

Computers and technology have and continue to play important roles in education today. Educators are constantly looking for creative and new ways to incorporate technology into the classroom and student lessons. With the increasing popularity, affordability, and availability of laptop computers, Chromebooks, and WiFi, the ability to integrate this technology into the classroom environment has become easier for many schools.

Technology that was once just used by students for word processing, games, WebQuests, and video has become so much more. To help manage student progress with online content, the first LMS available was FirstClass in 1990 (David, 2013). This idea evolved over time to become an open-source platform with the release of Moodle in 2002 and then cloud-based with Eucalyptus in 2008 (Sharma, n.d.).

A LMS can provide a wide variety of features. Common components in educational LMSs include document management, assignment posting and submission, grading, access across multiple devices, remote participation, announcements, and a calendar. These platforms can also provide a medium for student/teacher communication such as a parallel email system. LMSs have become quite popular in recent years due to the maturity and ease of use of these components.

Studies have shown an increase in the use of LMS services, especially in the higher education sector, but little research is available bout the adoption or success of LMSs in a K-12 setting (De Smet, Bourgonjon, De Wever, Schellens, & Valcke, 2012). Pynoo et al. (2011) found that the encouragement of higher administrators was the most important motivator for the acceptance for a particular LMS. Presentation of useful features also encouraged teachers but to a lesser extent.

Policy Consideration

Rather than have teachers adopt LMSs at random, this proposal recommends the adoption of a single, common platform that all faculty and students access daily. A single platform will reduce the workload on the district Technology Department by eliminating redundancy, eliminating the time-consuming approval process for disparate platforms, and reduce usage guidelines to a single integrated set of protocols. Conveniently, Google Classroom is already approved and meets the privacy guidelines for students, employees, and parents.

By moving to a district-wide LMS, the MGSD will be able to move forward with meeting identified necessary standards. A LMS can help students and teachers to more easily "use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others" (International Society for Technology in Education, 2007). A district-wide LMS can also support the MGSD in improving areas noted as deficient on its January through June 2016 BrightBytes Clarity survey, in which 53% of teachers reported having never posted materials online and 64% having never posted homework online. According to Richardson (2012), student outcomes can increase when assignments and content are posted online. This allows students to access material and learn at their own pace.

Current State of the Field

LMSs have gained popularity over the years and the list of available platforms is long and growing. One of the biggest challenges can be deciding on which LMS to adopt as features and capabilities vary between platforms. Google Classroom, for example, is easy to use, especially for those familiar with other Google apps. Many Google apps, such as Docs, Forms, Sheets, Slides, Calendar, Gmail, Drive are already integrated into Classroom. Google Classroom offers a mobile app. Document management is streamlined and all teacher and student submitted documents are preserved. All class-related documents are contained within Google Classroom and the teacher no longer needs to receive emails to obtain student work. Teachers and students can easily write comments back and forth to one another and even engage in online discussions with classmates all within Google Classroom. This coming fall, parents too, will be able to have access to Classroom. We anticipate that parent involvement will be helpful and supportive toward student success.

Google Classroom does lack some features found in other LMSs. Currently, there is no testing module, meaning one must use Google Forms for this purpose. Another issue is when a student shares a document, the teacher becomes the owner; the only way a student can see feedback on a Google Doc, for example, is for that teacher to make edits and then return the assignment. With this "ownership" confusion, teachers must be cautious to make sure documents shared with students are "view only" and that students make a copy for themselves, or they could easily start changing and editing the teacher's original. Despite these issues, workarounds exist making Google Classroom a feasible enhancement to the everyday classroom experience. Google also frequently asks for educator feedback so they can continue to make improvements.

Description

The MGSD Technology Department can register all teachers for Google Classroom, rather than wait for volunteers. The Director of Professional Development can then create a Study Group of teachers and administrators who already have experience with Google Classroom or would like to start using it with their students or department colleagues. After a couple of months of use, the LMS can be showcased at a department or faculty meeting. Administration and the Technology Department can then encourage the use of Google Classroom, provide professional development for additional faculty and staff to start using it, and provide support and assistance throughout the year. Eventually, it should become policy that all teachers will use Google Classroom.

Assessment Plan

Assessment of the adoption and success of Google Classroom can include multiple levels. This process can consist of surveys to faculty and staff who have spent at least half of the year engaged with the LMS. These surveys would be based on the work of De Smet et al. (2012) who looked at experience, perceived ease of use, perceived usefulness, and internal support. Pynoo et al. (2011) used acceptance, performance expectancy, effort expectancy, social influence, facilitating conditions, and observed and final use as indicators. To assess the impact on students, they can also be surveyed about their experience with Google Classroom. Grades can be compared before and after use, or between different grade levels in the future. Additionally, a new BrightBytes Clarity survey can be administered to faculty, staff, and students to see if there have been any improvements.

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