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Practicum in STEM Leadership

Leadership Proposal

Due: February 13, 2019

Proposal Summary

In considering the Professional Development Project, I reflected on the district goals that my school has been given, with the following having stood out:

Supporting schools to participate in increased personalization and customization of the learning process through the integration of digital platforms or other instructional technology.

As a department, we discussed using the fall and spring terms of this year to research and implement technology applications and platforms that would support individual student learning beyond the science classroom, which was one of the reasons I had enrolled in the Coding, Robotics, and 1:1 Devices Endeavor class. With this said, I intend on taking the learning from that course to promote and show my colleagues about different options they have to create flipped classroom videos, screen-recorded content guides for students, and so on. This is intended primarily for the science department teachers, seeing as my principal does not see the possibility of coordinating anything beyond our department¹. The potential audience then will be instructors of Earth Science, Living Environment (Biology), Chemistry, and Physics, alongside associated electives (e.g. AP Chemistry).

In our own conversations as a department about this goal, we have noted the need for supplemental, at-home students that miss class often due to tardiness or absences, so the implementation of these systems are mostly targeted to those students, though they will be made available for all those enrolled in science courses (student body ~ 4,300). We already intend on having Google Classroom in 90% of classrooms by this June, so these systems would ideally integrate directly alongside that platform as well. Ideally, the system could also serve as a substitute for certain review activities we currently do in class, leaving more time for activities that introduce new concepts and general instruction during the school day and practice for homework on these platforms.

¹ As a disclaimer, my school staffs over 250 teachers supporting over 4,300 students across three different staggered schedules in terms of start and end times. It's already going to require an extra building permit and other logistical matters just to have the PD in the building and then educators will have to volunteer their own time outside of school hours for this. I'm not saying I'll be baking a bunch of cookies and cupcakes to bribe people to attend.....but I probably will :-/

As mentioned, the logistical difficulty currently makes it tough to say when it will be held beyond saying it has to happen afterschool, per my department's Assistance Principal, provided we can get building permits. Since teachers will need to be convinced to attend without pay outside of school hours, I don't want to do anything beyond 30 minutes. I've done other conference PDs that ran anywhere from 10 minutes to an hour, so I've no concern over making something work. Across that half-hour, I intend on introducing several platforms and tools that can be used, perhaps allowing a few minutes for teachers to try out a platform on their own with their laptops (e.g. screen-recording activity). Ideally, with my emphasizing that we need to do this anyway as part of the school and district goals, I hope to see my colleagues using the systems introduced in their own classrooms, and then, during the fall term's chancellor's days and such, redo the PD school-wide, since the principal encourages instructors to run our own PDs then (it was just bad timing that said days don't take place in the spring). These same chancellor's days could also be used to follow-up with those that attended the first PD within my department. I imagine by the time I finally finish the Coding, Robotics, and 1:1 devices course (based on what I've been told by the instructors), there will be a myriad of additional tools I'll learn about after this first PD takes place. As such, I'd like to have a pseudo-advanced technology PD that introduces those new systems and lets me track progress with those in attendance beyond the everyday, "hey, feel free to email me if you need me to troubleshoot something with _____ on your computer." I mean, I do that already as a certified Google Educator with teaching others to use Classroom.

With all this in mind, my PD is (tentatively) titled *Reaching Students Beyond the Classroom: Tech Tools for the 21st Century Educator*.