Using Social Media Tools for Academic Support and Enrichment in the Classroom

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For over a decade at the University of Minnesota, I have used social media tools in my introductory global history course to improve engagement and final grades. Students and I work as partners in using the tools to engage them more in the class, prepare for exams, and develop these skills for other courses. Our approach is guided by principles of Universal Design for Learning. We remove barriers so all students can access exam preparation resources, and they have options to validate their knowledge gained in addition to traditional exams. Students report satisfaction with usefulness of the resources, and evaluation studies document effectiveness in raising final course grades. This article shares practical steps on how to use no-cost and low-cost social media applications to accomplish these purposes.

Introduction

Many first-year students find the transition to postsecondary education difficult. Several academic and social factors contribute to this difficulty which can lead to students withdrawing from college: (a) unable to meet academic rigor, (b) lack of integration into academic and social dimensions of college, and (c) failing to make connections between what they know with new material encountered in the classroom (Tinto, 1993). Fong, Davis, and Kim (2016) identified motivation, self-regulation, and anxiety as lowering persistence to graduation. They found student engagement was a positive factor for higher academic achievement and persistence. Research indicates some students are reluctant to form study groups: first-generation college, students not living in campus residence halls, students of color, recent immigrants, and others (Pascarella & Terenzini, 2005). In conversation with my history students at the University of Minnesota (UMN), the question is not whether they work a part-time job; rather, it is how many part-time jobs they hold to pay for tuition and textbooks. This places even more pressure on the students to allocate their time among school, work, and personal life.

In addition to the time pressures outside the classroom, many students face learning barriers within the class because of pedagogical choices made by instructors. In the past decade, evaluation studies support two pedagogical approaches to increase academic achievement: (a) Digital instructional strategies enable improved teaching and learning (McNight, *et al.*, 2016), and (b) *Universal Learning Design* (UDL) removes barriers from the environment so all can access course content and have multiple ways to reveal mastery of course learning objectives (Ross & Meyer, 2002).

Based on these findings and my personal experiences as a college history instructor, I re-designed my first-year course to make it more accessible, engaging, and supportive for student academic achievement. Over the past decade, I have gradually introduced the practices described in this article. I embedded learning assistance into my introductory global history course (4 credit hours) rather than relying on students to navigate the campus to locate tutorial help. I could not rely on all students forming study groups on their own to help prepare for exams. Neither would my holding supplemental tutoring appointments serve students with work or other conflicting time obligations. I knew from conversations with my students that they had little discretionary time. However, most of them displayed ease with social media and technology.

Each of my two history courses varied from 30 to 90 students. The maximum number of students during an academic term did not exceed 200. I was assigned undergraduate teaching assistants that could have been assigned to provide traditional tutoring and small study group review sessions. Instead, I directed them to help me with research projects and some of the grade entry. I experimented to see if I could embed academic support for my students without outside help. As a former community college instructor, I know what it is like to have no additional help when teaching five large classes. I thought use of technology could help scale-up academic support for classes with larger enrollment without a significant increase in my time. I did not have extra discretionary time for the students since the other 60% of my work assignment was research and public service projects. End-of-term student evaluations reported high satisfaction ratings with the class experience, and research studies found that students using the social media and technology earned higher grades.

This article contains a sample of no-cost and low-cost options to embed learning assistance in the course and make the class experience more engaging and barrier-free. An overview of my approach is available at my website (http://www.arendale.org/history-course/) and an article written with my colleague (Arendale & Ghere, 2008). More information about UDL is available at http://www.arendale.org/udl-links/. Some of my technology tools are available at http://www.arendale.org/learning-technologies-links/.

Creating Online Exam Review Resources

As stated earlier, I was concerned with providing equal access to exam preparation resources. Early in my career at UMN, I held on-campus exam review sessions at various times of the day or night. Content for the meetings focused on key vocabulary terms and essay questions that might appear on the exams. However, when these sessions were scheduled in a campus classroom, student participation averaged 25%. Of those students who attended, most lived in the campus residence halls. This taught me that online access was needed when and where students wanted to access it. The following are sample course activities that led to increased academic support and engagement: (a) online study guide, (b) audio recordings, (c) online exam review sessions, and (d) crowd-sourced assigned readings. Through periodic formal evaluations, the study guide, audio recordings, and online review sessions contributed to higher course grades for participants (Kenney & Arendale, 2017). (We are preparing additional publications.)

I knew online tools presented an opportunity to enable students to create their own study review materials and share with each other. UMN embraced the *Google App Suite* (Gmail, Drive, Sites, and other apps) and provided them for all staff and students. *Google Sites* enabled them to create an online study guide. The students and I created audio recordings which provided an auditory option so they could listen through a website or access through mobile device apps. While I would help structure these resources, students provided most of the content. This approach is consistent with best practices of UDL that ensured course information is available through a variety of formats. I continued to be available before and after class and through office hours on multiple days at different times. In addition, students could contact me at those times using *Google Video Chat* (now *Hangouts*) in lieu of coming to my office.

Creation of these exam preparation materials was a graded activity. I surveyed students at beginning of the term for their preference of an activity with one course unit. There were eight choices for them to rank order. After sorting through the surveys, I assigned most to their first or second choice. Strict deadlines were established for submission of the assigned task which they completed only once during the academic term.

Online Study Guide. An online study guide was created through a *Google Sites* website (http://myworldhistory.org). To make it easier for students to remember the location, the website address was rented for $10 annually from a web hosting service. I also provided links to it through the online Moodle course management system (CMS). I structured the website with separate web pages for each unit covered by the exam. My role was providing a list of potential exam vocabulary words, long-response essay questions, and space for a multi-paragraph overview of the unit. This pattern was repeated for each unit. Major exams included material from three or four units. Students were uncertain which items would appear on the exam since I selected from the large number of vocabulary words and essay questions contained on the website. Except for unit one in the course which served as an example of the assignment expectation, the rest of the website was erased before the academic term began.

Learning how to post items and edit the website was difficult for most students. Therefore, I took this responsibility which required a few minutes of my time to review their Word format document submitted through the CMS and then post to the website. I was responsible for quality control. My role was to correct minor errors while submissions with major errors were returned to the student to revise and resubmit within 48 hours. A matrix of the assignments with their due dates was posted through the CMS, and late submissions earned a zero grade. Few students failed to complete their task on-time. In addition to impacting their individual grade, peer pressure in the class helped maintain high standards and timeliness. The students counted on each other to create the guide.

Audio Recordings. The human voice provides another modality to communicate information other than a website or handout. Short audio recordings of 20 minutes provide opportunity for students to teach one another about critical course content. It gives me as the course instructor a place to explain course material or strategies for exams and clarify the nuances and complexity of the potential essay questions. Students could listen to the audio recordings when they wanted. The easiest way to create these recordings is to record student and instructor messages through a digital audio recorder or a laptop computer. Those files can be exported for use elsewhere such as uploading to the CMS.

However, I chose a more complicated approach to provide these audio recordings for my students. As the following paragraphs show, my approach required ex-

tensive collaboration with the students. Some students were sophisticated in their use of technologies and would welcome the opportunity to help either voluntarily or by receiving extra credit. I also turned to them when dealing with technical issues. It is much quicker to ask them rather than search the Internet or purchase more learning technology books.

Some students talked with me before or after class and fewer met me during office hours. However, many arranged their classes in consecutive order with a quick departure to work or home. With a large campus like UMN, students quickly move between classrooms across campus or arrive just as class begins. My solution was to create an *audio podcast*. The benefits of this approach is that recordings can be listened to through mobile devices. They can be automatically downloaded when waiting for a bus, driving, working out at the gym, or walking on campus. Students report that podcasts of five to fifteen minutes are most likely to be used. More general information about podcasting is available on my website, http://z.umn.edu/podcasting .

The podcast the students and I created is called *Then and Now*. Previous episodes (240+) are available at the podcast website (http://thenandnow.org) or can be subscribed to through an app for Apple or Android mobile devices (http://www.arendale.org/david-arendale-my-podcasts/) or downloaded for free at *iTunes* software for laptops and desktop computers (http://itunes.com). Over the past decade, our podcast has included the following basic parts: a student provides a short overview of the unit, and I talk about the potential essay questions and provide insight into what I am looking for in the responses without providing a summary of the desired answer. Some years I also included the following parts contributed by students: study tips they found useful, tips for use of technology used by students, and selecting music from a copyright-free website and creating a short introduction. For music selected, it could be any type as long as the lyrics did not disparage individuals or groups and contained no swear words. In addition, the copyright-free music must come from a website that permits use on podcasts.

Recording Online Exam Review Sessions. I previously conducted in-person exam review sessions. While participating students reported satisfaction with the experience, a small percentage of students attended because of other time commitments. As a result, I began using the school-provided web conferencing software (WebEx). Free and low-cost options are *Vokle* (www.crunchbase.com/organization/vokle), *Uvlog* (http://uvlog.com), and *Livestream* (http://livestream.com). After I provided a short overview for each unit, students could interact with me by asking questions posted to the WebEx text chat box. These sessions were recorded and links to them placed on the CMS; I also sent an email to all students with a direct web link. The CMS web logs revealed high utilization.

Crowd-sourced Course Readings. Years ago, I abandoned a traditional history textbook. In its place, I selected articles from online journals through our UMN library related to each course unit. In addition, I included articles written by prior students in the class. This provided additional motivation to the students since they are not only writing short papers for me, but they are also writing potential readings for future students in the course. This writing assignment is a short research paper of seven-pages double-spaced on a history topic students select. After grading, I obtain permission from students to select the best for posting to the *Historpedia* website (http://historpedia.org). This is our version of *Wikipedia*. The website is constructed and hosted through the *Google Sites* account provided to me as described earlier. I set the viewing authorization so anyone on the Internet can read the articles. I know others are reading them since I receive notifications from the *Turnitin* plagiarism online database that a few students at other colleges copy and paste sections from these papers. In the future, I will edit the best ones and combine them into a free eBook distributed through Amazon, iBook, and similar places.

Supplemental Learning Opportunities through Digital Storytelling

As described earlier, one of the principles of UDL is to provide alternative means for students to demonstrate mastery of course learning objectives other than traditional pencil-and-paper exams. In addition, many of the students have already acquired competency with learning technologies through secondary (or primary) school or personal experience. Course engagement is much higher when students create their own learning experiences. As a result, I incorporate digital storytelling. Students can select to create special audio shows rather than one of the previously described online study guide activities. They also can complete an extra-credit project creating a history music video. While not used for digital storytelling, I use Twitter to provide supplemental readings for students.

Audio Shows. Earlier in this article, I illustrated use of audio files to prepare for exams. Rather than that option, students could instead create a cultural music or interview show. Students are free to create the music show themed around one of the countries or topics in the course. In addition to selecting four to six songs, students also introduce the music by explaining how the selections reflect the culture of the country or the history topic of their choice. (There are several free online sources for music autho-

rized to use with podcasts: *Free Music Archive*, *Creative Commons*, *CCmixter*, and *Royaltyfreemusic.com*.) The interview shows consisted of a ten-minute question-and-answer with someone in the community or on campus of the student's choice. Students made their recordings through their smartphone or with an inexpensive audio recorder they could borrow from me. Past topics included interviews of an immigrant's journey to the U.S., a Muslim cleric, and leader of a cultural center in the city. The music and interviews shows are interwoven into the course *Then and Now* podcast.

History Music Videos. The online *Animoto* digital software (http://animoto.com) permits mixing of images, text, and short video clips, with their vast music library to create music videos lasting the length of the selected song. Educators can obtain a license for their students to obtain a free account. My students were welcome to select any event or person for the video, and they could work by themselves or with two other classmates. Students reported the average time to create the videos is two hours or less. To reduce the anxiety of students, I made this an extra-credit activity. My students and I found a variety of ways to use these history music videos, and some of them reported using the technology for assignments in other classes. I requested permission from a few to play their videos to begin or end an appropriate course unit. I also created my own *Animoto* videos to preview new course units in the CMS and use as another resource for exam preparation. The following link provides samples of the work my students and I created for these purposes: http://www.arendale.org/animoto-class-links/.

Twitter. Many students are interested in world news but feel overwhelmed by how to identify meaningful articles from the flood of social media and news sources of varying quality. I created a Twitter account for the course: http://twitter.com/ThenNow_History. About 25% of the students voluntarily follow the account. I post a link to one good world news article each week. Most come from *The New York Times* or the *BBC*. I focus on significant news from outside the U.S. such as immigration into Europe or conflict in countries.

Recommendations for Implementing These Activities

It took me many years to learn how to implement these activities. I spent a semester or longer learning how to use the technology before bringing it to the classroom. Having an informal technology support team of campus tech-savvy staff, students, and faculty is key. Even though reading technology books, viewing *YouTube* tutorials, and attending workshops can be helpful, I find that students

are my best support. I ask their assistance, and they enthusiastically work to create class activities, teach me about the technology, and help others in the class. My students are not only my partners, they are also my best teachers. I learn much from the course surveys, individual student interviews, and periodic formal evaluations: what to revise, what to discard because the activities were not meaningful for students, and what to keep because the activities are contributing to students' meeting or exceeding course objectives. I learned long ago to keep a good sense of humor and humility when using technology and introducing new learning activities in the classroom. Despite careful planning, surprises occur. Most students are tolerant of the occasional mishaps as long as they understand the desired learning outcome and know that it is not just an excuse to try out the latest technology.

Conclusion

Meaningful use of social media and free or low-cost technology has been a productive partnership between the students and me. Student engagement has increased through their co-production of exam review media (audio podcast episodes and websites) and academic enrichment media (audio podcast episodes, history readings, and history music videos). These media and the online exam review sessions provided 24x7 access to everyone in the class where and when they wanted to listen and learn. Learning barriers were reduced and academic engagement was increased. This approach provides a way for academic content faculty members to support the success of all their students which has historically been the goal of developmental education: "helping underprepared students succeed, prepared students advance, and advanced students excel" (https://thenade.org/Mission-Vision-and-Goals).

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