Instructional Technology: Article Analysis -- Using Social Media for Classroom Peer Assessment and Teaching[1]

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Abstract. *In this short paper, I analyze an article by Demir [1] that studies the use of social media (Facebook) for peer assessment in a university course. Later onwards, I describe how I could incorporate the use of a social media platform in my teaching.*

1. Demir's Study [1]

In Demir's experiment, an online peer assessment on Facebook was carried out involving 24 "student teachers" (similar to a teaching assistant in US universities) at a science education department of a university in Southeast Turkey. Semi-structured verbal (audio-recorded) interviews were conducted to obtain their feedback on the experience. Based on analyzing participants' feedback, the use of Facebook as a platform for peer assessment was largely perceived to be positive: the assessments made in the experiment were objective, the participants were actively involved, and the process was found to be exciting. The study has several aspects that can be explored.

To begin with, all participants who were picked were mentioned to be active Facebook users. Although the use of Facebook may appear widely prevalent, it may never have been used by many people in education in several parts of the globe (e.g. in China). In addition to getting used to the platform, new users would have to initially climb a non-trivial learning curve on how to use the tool. Although the curve may not necessarily be too high for most people, it may be higher for individuals who have never been on social media. Consequently, inexperience in using such tools would significantly affect the perceptions of participants.

Second, following on the aspect of tool-usage familiarity, students from the IT and Computer Science (CS) departments may have a deeper familiarity with the tool's mechanics: using privacy settings, knowing when and where their posts/activity is public or private, ability to detect malicious posts, and other more sophisticated details. Although such skills can be learned from various well available resources (e.g. online material, friends and connections), IT/CS students have a relatively greater opportunity and incentive to get acquainted with these skills than their arts/humanities counterparts as the tools may be directly relevant to the formers' domains. IT/CS students may thereby feel more comfortable in doing activities on such platforms. Thus, it is important to reinvestigate such a study with members from non-science majors to draw more refined conclusions.

Third, the peer assessment in [1] did not factor in blinding; participants were able to see the author names of the works. This may influence reviews if the members knew each other. In fact, some of the participants felt that reviewing a friend's work may have slight biases. It would thus be worth investigating the review process and the quality of the reviews when names are anonymized. That may be difficult to do on Facebook, which uses a real-name system policy [4]. Platforms that allow anonymization, such as the educational online platform Piazza, may be more suitable.

Finally, while most participants had a positive experience in this experiment (in terms of motivation, quality of feedback received, and excitement), we do not have any benchmark on how participants' experience would be in doing the same peer review task in an offline setting. Conducting some form of an offline study would give us the opportunity to concretely compare a conventional style of the

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activity with an online style (on Facebook), and thereby allow us to more precisely evaluate the educational value that Facebook brings into the activity.

2. Instructional Technology in Teaching

Using a social media platform in education is an interesting idea, and although I think it would need further investigation to clearly determine the effectiveness of platforms like Facebook, I think it may be used only for a selective portion of a course in a controlled manner. This cautionary approach is due to the disadvantages of social media, of which I discuss some of the relevant ones for our case. However, first, let us take a look at how we may leverage the benefits of a platform like Facebook towards teaching.

The easy visibility of messages in Facebook across multiple users, and allowing the users to synchronously (and asynchronously) give feedback to those messages promotes the free flow of ideas, which is a key component of active learning. Any group activity may be assigned on Facebook. For instance, we may assign tasks for a part of the class duration to solve problems (e.g. coding problems in a Computer Science course). Students may be split into small groups and they could then collaborate to solve problems in individual Facebook groups. Such an approach gives us a number of advantages in carrying out class activities. First, it allows students to collaborate virtually, cutting out the time to rearrange student seating in order to be close to each other, something that is quite often a logistic obstruction in conducting class activities. Second, it allows students absent from class to participate. Third, from my experience, small groups (3-4 students) typically exhibit more equitable participation and engagement than larger groups do, and in a virtual setting we can have multiple groups collaborating with each other in the same physical environment in a quieter environment (assuming text messaging is used for communications). Fourth, sharing online resources becomes easy when all are in the same virtual platform, which would help students be more productive in their collaboration.

While there may be several potential benefits of using social media platforms in teaching, without clear and accurate results on their effectiveness, care must be taken in introducing them to a classroom. This caution is invoked because of prevalent issues such as online abuse [5,6], social media addiction and anxiety [2], the distraction-inducing nature of online social media, security and several others. Moreover, there have even been studies showing that quitting Facebook leads to higher levels of well-being [3]. In light of these realities, there may be many students in the class population who feel reluctant to enter such a platform. Although global students' attitudes towards Facebook would need greater investigation, the negative impacts of Facebook and social media have been extensively researched, and thus, in an educational context, we have to be careful as to how we use social media. To prevent online abuse, moderators from among the students may be assigned to each group to monitor and guide discussions towards constructive directions. For minimizing distraction, students may be asked to tune their notification settings to turn off non-group notifications during class activity, and turn off their chat with their non-group connections. Also, it is important to keep such activities short, in moderation (to keep students from getting distracted too much from the fun[1] such activity creates), and focussed with specific goals, such as designing the specifications of a component of a software system architecture. Finally, although there are few free online platforms, e.g. Piazza, targeting education, with the advances in online social media technology we should be on the watch for platforms that can match Facebook's robustness and ease-of-use. Such educational platforms should offer tools like quizzes, polling, grading, special instructor controls, video chats, etc., and would thereby add more value to teaching than generic social media platforms.

References

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