Supporting Student Collaboration: Edmodo in the Classroom

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Abstract: As the use of online social networking sites and other Web 2.0 technology increases, Computer Mediated Communication (CMC) is at an all-time high. Educators must recognize the potential for improving student engagement in the classroom using these technologies. This paper describes a study in which students participated in literature discussions using the asynchronous discussion platform found on Edmodo.com. Reciprocal teaching strategies were used and student initiative was encouraged, supporting the role of the teacher as a mediator or moderator, rather than the purveyor of knowledge. Student participation, student engagement, complexity of discussion and the effectiveness of Edmodo discussion boards as a tool are discussed.

Research in social interdependence theory has proven that working cooperatively with peers promotes psychological health. Cooperative experiences have been proven to promote self-esteem when compared with individualistic and competitive experiences (Johnson, 2003). Johnson also describes the importance of providing students with guidelines and opportunities to develop interpersonal and small group skills. The effectiveness of cooperative learning depends upon the ability of group members to identify and solve problems. Tsay and Brady (2010) note that the very nature of cooperative learning is changing as social media outlets like Wikis and Facebook become widespread.

A previous study concerning the use of a Computer Mediated Communication (CMC) platform indicates that collaborative work encourages knowledge construction, in which students modify the learning of their peers to both broaden and deepen learning (Marttunen & Laurinen, 2007). Marttunen and Laurinen also witnessed an increase in real-world connections when students collaborated with one another with the aid of a CMC platform. Another study hones in on the importance of collective responsibility in a group of students, rather than relying on a leader or teacher to assign group roles and questions (Zhang, Scardamalia, Reeve, & Messina, 2009). A CMC platform could facilitate communication between groups during knowledge-building sessions better than traditional models. Zhang et al. call for an increase in cross-group interaction that moves away from traditional group designs. Groenke and Paulus (2008) suggest that this type of collaboration among students is unusual in a traditional classroom discussion, due to teacher tendency to ask questions that promote a recall of information, rather than promote genuine student inquiry. They suggest that CMC allows a more student-centered approach that could disrupt traditional teacher-centered methods (Groenke & Paulus).

MacArthur (2009) recognizes that Web 2.0 is a place where students can practice communication skills with authentic audiences, but reminds readers that there are privacy and security concerns raised when students use these technologies. Edmodo.com provides a training ground for safe internet behavior. The site has an appearance and navigation system that appears similar to Facebook, but instead of functioning with a recreational or social goal in mind, Edmodo promotes educational networking. Teachers can monitor the kinds of information that students post and provide useful feedback to support healthy student communication skills. By juxtaposing the informal nature of writing on the internet with formal assignments given by a teacher through an internet site, students learn to think critically about the purpose of their communication. As a result, students can practice important internet skills in a secure, adult-moderated environment. In addition to explicit educational goals set by this study, students
also gained transferable experience through the Edmodo network, as it is similar to existing social networks. This is a necessary life skill in our contemporary technology-saturated lifestyle.

The Study

Face-to-face student discussions are difficult for a single teacher to moderate, as it is impossible to attend to more than one group at a time, and difficult to determine which students are actually participating in the discussion. The use of the asynchronous discussion function available through Edmodo.com makes individual contributions transparent to the teacher, while simultaneously developing typing and communication skills. This study will examine the participation of public high school students in web-based discussion groups created by using the “Small Groups” function on Edmodo. Students from a 10th grade English class from a high school in Southern Maryland were divided into small groups based upon personalities of individuals that would work effectively together. The students responded to a series of questions about previously read chapters of the book The Contender. Due to the permanent nature of written communication about these novels, we were able to monitor individual participation within groups, as well as the nature and extent of participation.

The study employed the use of reciprocal teaching, a reading framework consisting of four meaning-making strategies: predicting, summarizing predictions, asking questions about what will be read, and clarifying what has been read. Ediger (2007) suggests the use of this framework as a useful tool to help students derive meaning from reading texts. According to Johnson (2006), when students are required to create highly structured responses using asynchronous forums, the resulting discussion tends toward higher-level thinking skills. After participating in the reading groups, comments were read and analyzed by the teacher and researcher.

The group discussions on Edmodo.com were completed during school hours within the computer lab, allowing students to talk with their groups face-to-face and respond to one another’s comments on the educational forum. Yang & Tang (2003) suggest that interpersonal interaction plays an important role in collaborative learning. Asynchronous forums should be a supplement to traditional classroom interactions, not a replacement. Yang and Tang recognize the potential of a web-based forum to aid and encourage participation from all classmates, not just those the teacher happens to call upon.

Results

When first introduced to Edmodo.com, the students were enthusiastic about the familiar layout of the site. Some students remarked, “This is just like Facebook!” In fact, some students needed to be reminded that this was, in fact, a teacher-moderated social platform. Some students engaged in off-topic behavior (see Figure 1), and other students did not follow the directions for joining just one of the three prescribed groups for the class.

Figure 1. Edmodo discussion demonstrating students’ initial off-task behavior.
Once students were settled down for a bit, it was time to introduce the work at hand. At first, students were given the assignment as a document from Edmodo’s library feature. While this tool is very useful for giving assignments for individual student completion, it is not the best approach for a group discussion. Students answered the first two questions using the “Turn it In” button, but this did not capture the spirit of group discussion, so these initial responses were disregarded.

It was much more effective to post each question individually to each of the three small three groups. Students were then asked to press “reply” to that question. This way, students could see what other group members had written, and potentially respond to them (see Figure 2). Responding to other student’s comments and questions, rather than the teacher, is something that this tenth grade class generally struggles with. The Edmodo.com platform provided the right atmosphere for students to begin responding to one another’s work. Because the asynchronous discussion platform functions just like “the wall” in Facebook, students understood immediately that they were to talk to each other and not to the teacher.

![Edmodo discussion demonstrating students responding to each other.](image)

Students made insightful predictions and had some interesting questions to ask about *The Contender*. Since student responses to the novel could be monitored very carefully, it was easy to see which students had a solid understanding of the story, and which students might need to re-read some of the chapters. The final question posted to the students small groups encouraged reciprocal questioning; it asked students to develop three of their own questions and respond to a classmate’s question. Figure 3 shows some of the students’ questions and their responses to each other.
Particular questions that students asked revealed some of the misunderstandings that students still had about the text. In the novel, Alfred lives with his Aunt Pearl and his two nieces. The student who asks, “Why didn’t [sic] Alfred [sic] go live with some of his family?” could benefit from a refresher on Alfred’s backstory, since Alfred lives with family, but his parents are dead or MIA. It was helpful to find out which parts of the novel students were struggling with, and if students had had more time to answer their classmate’s questions, I think that most students would have corrected or altered their classmates’ misconceptions.

Conclusions

The goal of this study was to improve the quality and depth of student discussion of literature in (and potentially outside of) an English classroom. The platform Edmodo.com was utilized because its appearance and functionality closely resemble that of Facebook and many students are already familiar with that social networking community. By leveraging students’ pre-existing experience with social networking, they were able to quickly become acclimated on Edmodo’s discussion boards and move from a teacher-centered question and answer session to a student-to-student discussion of the literature. As students gained more experience in literature-based online discussion, their ability to ask insightful questions and elicit meaningful responses with minimal intervention from the teacher successfully expanded. The use of both reciprocal teaching strategies for online discussion, and of Edmodo.com in the K12 classroom is recommended for future study in English and other content areas.

References


