

Facebook and D2L as Discussion Forums

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Introduction

Three first-year writing courses participated in the study in fall 2016. All three are hybrid courses that conducted their discussions online. Two classes did discussion forums on Facebook and one did it on D2L. Qualtrics surveys were used to gather student information at the end of the semester to analyze students' cognitive learning, learning community experience, social community experience, and multitasking behavior online.

Hypothesis

1. There is no significant difference between D2L and Facebook in terms of **cognitive learning**. (Rejected)
2. There is no difference between D2L and Facebook in terms of **engagement with course content**. (Rejected)
3. There is significant difference between D2L and Facebook in terms of **fostering a sense of social community**. (Rejected)
4. There is significant difference between D2L and Facebook in terms of **fostering a learning community**. (Rejected)
5. There is significant difference between D2L and Facebook in terms of **multitasking behaviors**. (Rejected)

Personal Interviews

A random sample of students were interviewed at the end of the semester regarding their experiences of using both platforms. Overwhelming number of students who used Facebook said Facebook is more interactive than D2L and easily accessible and recommend continued use of Facebook in the future. The majority of those interviewed said they did not feel distracted using Facebook as a discussion forum. In Qualtrics survey, 95% (37 students) of the Facebook group recommended that I continue using FB as a discussion platform, while 5% (2 students) recommended that I don't use it in the future.

The main criticism of D2L is that D2L is not as interactive and it does not send notifications when their classmates posted on the forum.

Qualtrics Surveys

Independent variable

Facebook (N=39) vs D2L (N=17) discussion groups

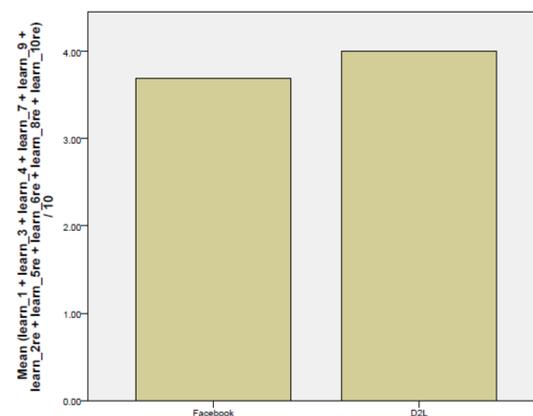
Dependent variable

Cognitive learning (M=3.78, SD=.50, $\alpha=.85$) (e.g., I have learned a great deal in this class)
Engagement with course material (M=3.00, SD=.60, $\alpha=.79$) (e.g., I thought about the course content outside the class)
Social community (M=3.32, SD=.59, $\alpha=.81$) (e.g., I felt that students in this course cared about each other)
Learning community (M=3.70, SD=.44, $\alpha=.62$) (e.g., I felt that I was given ample opportunities to learn in this course.)
Multitasking behavior (M=2.78, SD=.94, $\alpha=.79$) (e.g., Used social networking sites for fun (e.g., updated own status, viewed friends' posts))

Results

There was a statistically significant difference in **cognitive learning** between Facebook (M=3.68, SD=.53) and D2L (M=4.00, SD=.36) groups ($t=-2.18$, $p < .05$).

There was a statistically significant difference in **engagement with course material** between Facebook (M=2.89, SD=.60) and D2L (M=3.24, SD=.53) groups ($t=-2.11$, $p < .05$).



There was no statistically significant difference in **social community** between Facebook (M=3.26, SD=.58) and D2L (M=3.46, SD=.60) groups ($t=-1.16$, $p > .05$).

There was no statistically significant difference in **learning community** between Facebook (M=3.65, SD=.45) and D2L (M=3.81, SD=.41) groups ($t=-1.29$, $p > .05$).

There was no statistically significant difference in **multitasking behaviors** between Facebook (M=2.67, SD=.98) and D2L (M=3.02, SD=.83) groups ($t=-1.31$, $p > .05$).

Conclusions

While Facebook students found Facebook more convenient to use and easily accessible, D2L platform produced better results in terms of cognitive learning and engagement with material. This study also shows that there was no significant difference in terms of social community and multitasking behaviors for both groups.

Future Research

Three more classes have participated in the study in Spring 2017, which increased the number of student participants to 116.

Two coders have been hired to code the quality of students' discussions on both platforms. For each class, two discussion forums will be coded to see if there is any significant differences in terms of critical analysis, learning community contribution, quality of writing, and timeliness of contribution.

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