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Improving Student Engagement in College

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Abstract

The purpose of the current research was to determine whether students would improve their classroom engagement following an intervention. Approximately 146 college students participated in the study and completed a self-report survey indicating their level of engagement in the course before and after an intervention. Results suggest that by prompting students to think about their level of engagement in a college course at mid-term, students may increase their engagement to improve their course grades.

Introduction

The concept of student engagement as a tool for student success has a long research history with a robust body of literature, evidencing the link between academic engagement, performance, and persistence (Handelsman, Briggs, Sullivan, and Towler 2005; Nelson Laird, Chen and Kuh 2008; Pascarella and Terenzini 2005; Pike and Killian 2001; Rocca 2010). Despite the relationship between academic engagement and student performance, many students continue to fall short of meeting suggested tactics for engagement. According to the National Survey of Student Engagement (2013), almost 60 percent of full-time, first-year, college and university students are studying less than 16 hours outside of the classroom each week. Though college instructors may emphasize the importance of coming prepared to class, few students may actually do so. Research suggests that students are more engaged when faculty of courses promote higher-order thinking, encourage student participation in discussion, and provide opportunities for solving real-world problems (Nelson Laird et al. 2008), which all require student preparation and regular attendance. When students lack the background knowledge necessary to participate in class discussions, they are less likely to remain engaged throughout the course and apply learning strategies necessary to retain the required information (McNeil 2011).

Though learning new information is valuable, college students must also meet the requirements to maintain a certain grade point average in order to take subsequent courses required within their specific majors. Maintaining a focus on both learning and performance goals is most adaptive for college students (Harackiewicz, Barron, and Elliot 1998). The link between studying and grades has been extensively researched. Research suggests that students who are academically engaged have an increased likelihood of persisting beyond the first year of college (Nelson Laird et al. 2008) and tend to earn higher grades (Handelsman, et al. 2005). Longitudinal research also offers that students consistently engaged in college courses attain higher grades (Yurco 2014), especially when they have a rationale to do so (Jang 2008). The National Survey of

Student Engagement (2012) suggests that students earning grades in the A range studied roughly four more hours than their peers earning grades of C+ and below.

Wellborn (1991) describes student engagement as demonstrating the presence or lack of either behavioral (demonstrating overt strategies) or emotional (demonstrating covert strategies) engagement in the classroom. Students with greater classroom engagement may be more likely to focus on their class work and utilize learning strategies to enhance their understanding of new information. However, much of the research in student engagement has been conducted in the EC-12 levels with little focus on college classrooms. Because college students may be unaware of the effect that their engagement and preparation has on their classroom experience, a need exists to help college students become more aware of their level of engagement and its effect on their academic performance. O'Connor (2013) suggests that through class participation, students are more likely to engage in their college classes. In addition, students who choose seats near the front of the classroom are more likely to be engaged and participate in class (Losonczy-Marshall and Marshall 2013). Therefore, the purpose of the current pilot study was to determine whether students' level of classroom engagement changed from the middle to the end of the semester after being made aware of their current grade status and level of engagement. Researchers hypothesized that by prompting students to think about how they prepared and engaged in the course after receiving their mid-term grades, students would increase their level of engagement for the second half of the course to increase their final exam grades.

Methods and Procedures

During one semester in Spring 2013, researchers administered surveys in fourteen education courses at a small public university in Texas. Surveys were given twice during the regular fall semester with a total of 146 students (79% female, N=115) participating in the pilot research study. Students were recruited from the courses, which were all required education courses in the college. Complete demographic information can be found in Table 1. [next page.]

Following mid-term exams during the fall semester and after receiving their exam grade, students completed a survey, which included demographic items and a rubric about students' perceptions of their classroom engagement. The rubric portion of the survey was adapted from J.W. Lowery's Class Engagement Rubric (Lowery, n.d.). Modifications were made to the original rubric to more closely meet the current student sample. The rubric was divided into five sections:

1. Preparation for Class (Ex. I was always prepared for class, having read material in advance.),
2. Level of Engagement (Ex. I contributed in a significant way to class discussions.),
3. Listening Skills (Ex. I listened carefully when others talked and built upon their ideas.),
4. In Class Behavior (Ex. I never displayed disruptive behavior and actively discouraged others who did.), and
5. Attendance and Promptness (Ex. I was always prompt and ready for class and always attended class.).

For each section, students circled the extent to which they believed they were engaged on a Likert scale from 5 (very engaged) to 1 (not at all engaged). For each engagement item, a mean score was calculated during each administration. In addition, a total engagement score was calculated for each student during each administration of the rubric. At the end of the semester,

the same students were administered an identical survey and rubric to determine whether their perceptions of their classroom engagement changed following the intervention. Students also gave permission for researchers to collect their course midterm and final grade from faculty teaching the course.

Table 1.

Demographics for Sample

	<i>N</i>	<i>%</i>
Ethnicity		
Hispanic or Latino	12	8.2
Non-Hispanic or Latino	131	89.7
Missing	3	2.1
Total	146	100
Classification		
Freshman	N/A	N/A
Sophomore	13	8.9
Junior	68	46.6
Senior	59	40.4
Gender		
Male	31	21.2

Female	115	78.8
Total	146	100

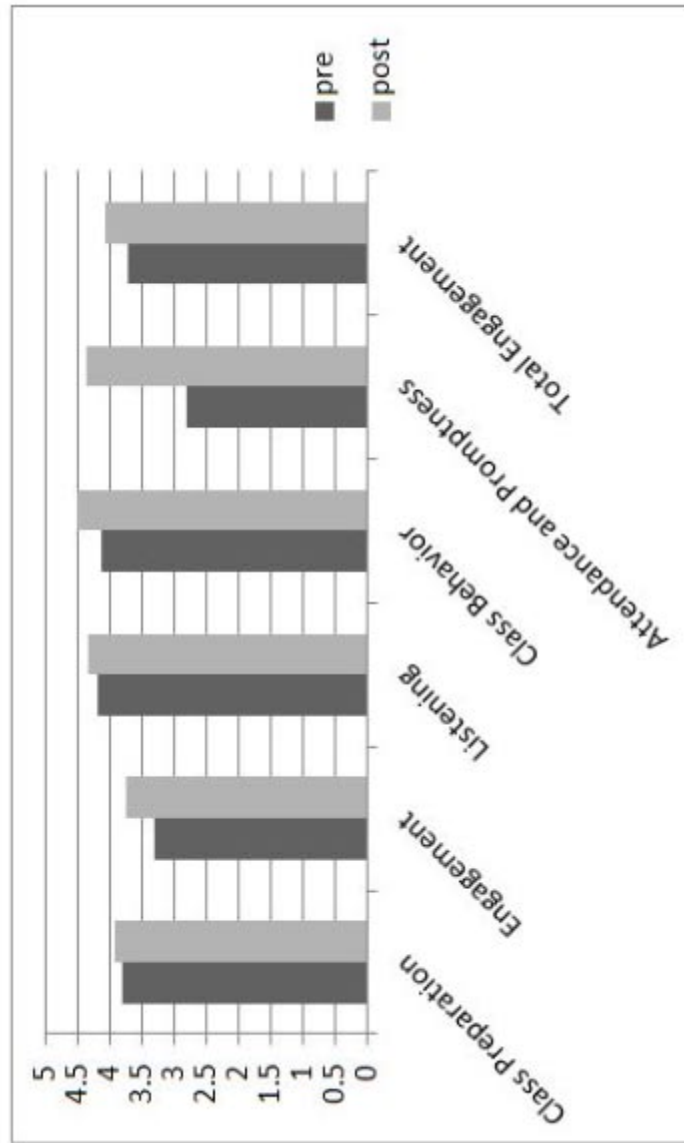
Age

Under 21	39	26.7
21-25	90	61.6
26-34	8	5.5
35-44	7	4.8
45-54	2	1.4
Total	146	100

Results

In order to determine whether students' reported classroom engagement was affected following receipt of their mid-term exam scores, a paired samples t-test was conducted to compare the means of students' engagement for each variable from the middle of the semester to the end of the semester. Results from the paired samples t-test revealed that the mean average of students' overall reported classroom engagement after mid-term exams was significantly different from their mean average of reported classroom engagement at the end of the semester because the t value equaled 4.75, therefore the p value was .001. Some of the reported individual engagement variables also showed a significant increase following the intervention after mid-term exam scores. Students' reported class engagement t value equaled 2.62, class behavior t value equaled 3.05, and attendance and promptness t value equaled 7.09, therefore the p value was less than .05. Results from the research revealed that by encouraging students to think about their engagement following mid-term exams, students increased their classroom engagement during the second half of the semester. Neither class preparation nor listening attained significance. However, students' mean average exam scores did increase from the mid-term (mean=78.31) to the final (mean=83.10), though the measurement did not attain significance. [Figure 1]

Figure 1.
Student Engagement



Discussion

As a result of the intervention to increase students' awareness of their class engagement from the mid-term to the end of the semester, students' overall engagement did increase. Students who self-reported their engagement at mid-term, reported a higher level of engagement at the end of the semester. This increase in the level of engagement from middle to end of the semester may have resulted from students' self-awareness of the relationship between their mid-term grades and mid-term level of engagement. In addition, students' course grades increased from mid-term to final exams, suggesting that as student engagement increased, so did their course grades.

Our findings showed that awareness of engagement relates directly to performance, which indicates the need for faculty to provide a supportive environment and provide opportunities for students to increase their participation. Especially in large classes, students may not feel that the environment is conducive to their participation, and the larger classes tend to hinder student involvement (Rocca 2010). Furthermore, faculty should be aware that students generally perceive and rate their in-class participation higher than ratings given by professors (Burchfield and Sappington 1999; Dancer and Kamvounias 2005) and faculty should recognize that students may perceive behaviors differently than professors, which may impact participation.

Faculty can promote student participation, regardless of the class size, through a variety of strategies to help them remain engaged throughout class (O'Connor 2013). Involving students in the process of determining participation grades allows students to engage in and appreciate their own learning (Rocca 2010). Allowing students to participate in a self-recording participation grading system is a resourceful and reasonably accurate way to increase the percentage of students participating in class discussion (Krohn et al. 2010). Making students aware of factors such as seating placement may help them to understand the decisions they make that impact their course grades (Losonczy-Marshall and Marshall 2013). Secondly, using technology as an engagement tool, faculty may have the opportunity to transform the classroom from a passive to an active learning environment. In addition, the use of small-group learning has been well documented as a method for encouraging student engagement (O'Connor 2013; O'Donnell 2006) and as an appropriate practice for fostering millennial students' learning (Werth and Werth 2011). Finally, by explaining to students the link between classroom engagement and grades (Yurco 2014), students maybe more encouraged to put forth effort to engage in class to receive not only the values of learning and improving their content knowledge but to earn high grades as well (Harakiewicz et al. 1998). Students who understand the purpose of actively participating in class and its link to their overall outcome may benefit most (Jang 2008).

Conclusion

Though results of the study support our hypothesis, some limitations of the current research should be considered. Because the data were collected from students in one college at one university, the results may not be generalizable to other students in other colleges, whether enrolled in other courses at the same university or enrolled at other universities. In addition, the duration of the experimental study was only over the course of a semester, and the feedback to students was measured after a few weeks. Additional research may be necessary to measure long-term effects of presenting students with information to prompt change in their course engagement. Finally, the majority of the sample was female, due to the study being conducted in education courses where the majority of majors are female. Future research in other colleges may suggest differences in engagement between male and female students.

Student engagement is an important education strategy that increases retention and encourages student learning. Active facilitation and management is important to improving students' participation in the college classroom. Quality teacher education programs should promote student engagement in their content during teacher preparation classes to develop individuals who are knowledgeable and skillful in research and pedagogy. Therefore, to ensure that teacher education majors gain an understanding of the content necessary to become successful teachers, courses should be designed to engage students in the class.

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