Make student reading interesting: An analysis of student reading in two courses

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ABSTRACT

One of the many challenges faculty members face when teaching courses is insuring that students read the assigned material by the due date. This study examines student reading behavior in two courses in order to better understand how student reading behavior changes over the course of the semester. The purpose of this study is to identify factors that may explain why students choose to, or choose not to complete assigned reading material by the assigned due date. What this study indicates is that a high level of student interest in the assigned reading material is associated with higher rates of completion of the assigned readings, more time spent on the assigned reading, and greater depth in reading. Thus, the researcher argues that selecting reading assignments and structuring reading assignments that help to increase student interest can contribute to student completion of reading assignments.

Keywords: reading, interest, deep, surface, environment

INTRODUCTION

Faculty spend a great deal of time selecting reading materials for classes that explain the content of the class in interesting ways that students will grasp and take with them when the class is complete. Perhaps even more time is spent selecting chapters, sections of chapters, as well as due dates to those pages and chapters. The selection and assignment of class readings is done with the intention that students will read the assigned material by the assigned due date. It is incumbent on professors to design their courses and course assignments not only to facilitate and evaluate the students' learning of the course content, but to help teach students academic reading skills. Because, as Hermida's research on teaching academic reading shows,

> "when teachers design an aligned course that places academic reading at the forefront of the course, where the selected class activities encourage students to use higher-order cognitive skills to construct meaning from academic texts, and teachers implement assessment tools aimed at evaluating whether students use such skills to read academic texts, the result is that students tend to take a deep approach to reading and learning." (Hermida, 2009, p. 28)

The purpose of this study is to observe student reading habits in order to determine the degree to which students are reading the assigned material and what factors might impact the students' choice to read or not read assigned material. More specifically, this study seeks to examine the relationship between students' level of interest in the assigned material and whether or not they assigned material is read, read on time and done so with depth in reading. Previous research has shown that a high level of interest in the textual material facilitates reading comprehension (Asher, Hymel, & Wigfield, 1978; Baldwin, Peleg-Bruckner, & McClintock, 1985; Belloni & Jongsma, 1978; Stevens, 1980, cited in Hidi and Anderson,1992).

The results of this study indicate that over the course of the semester, students read less of the assigned material. This happened in both classes regardless of the aggregate level of interest of the class and the depth in which the class read the assigned material. However, the study supports the existing research showing that a high level of interest in the assigned reading is associated with increased depth in reading and a higher rate of completion.

BACKGROUND

This study began with the completion of a voluntary student survey on student reading habits and motivating factors. The survey was conducted in a freshman level business course titled, Business, Leadership, and Social Issues in the spring of 2011. The Business, Leadership, and Social Issues course was selected for the initial survey because of the emphasis the course had on the assigned reading material from a classroom discussion perspective. The researcher selected the same freshman course, along with Management Information Systems to conduct this study in the fall of 2011.

The survey completed by students asked a series of open ended questions about what assigned material was read, why that material was read, when the material was read, and what motivates the students read the assigned material. There were three common themes discussed by students on the survey. The first them was quantity. Student comments concerning quantity indicated that if they felt the reading assignments were too long, they may choose not to the read

and wait for the class discussion to get an understanding of the assigned chapters, or they may search on-line for a summary of the chapter. The second theme was how interesting the material was. Research on individual interest in assigned reading material indicates that individuals who express interest in a subject matter devote more attention for longer period of times, compared to subject matters in which the individual is comparatively uninterested (Hidi and Anderson, 1992). The final theme was individual accountability. The words individual accountability were not used by the students themselves on the survey; however, students did express that they were not as motivated to complete read assignments on the assigned date when it did not directly impact their grade. The results of the initial survey is consistent with Elias's study on student study strategies in introductory accounting courses, which concluded that the expected course grade is positively correlated with students who adopt a deep approach to study (Elias, 2005).

The idea that students will read assigned material more often and more effectively when they perceive the reading material itself to be interesting is of primary importance to this study. Hence, the research methods used in this study were designed to gather information student reading habits.

RESEARCH METHODS

The study was conducted in two courses in the fall term of 2011. The courses were Business, Leadership, and Social Issues (BUS1900), as well as Management Information Systems (MIS3100). The BUS1900 course is a freshman level course taught by the researcher. Enrollment in the Business, Leadership and Social Issues course in the fall of 2011 was 25 students. The assigned readings in the BUS1900 course were The Wal-Mart Effect (2006) by Charles Fishman, Fast Food Nation (2001) by Eric Schlosser, Onward (2008) by Howard Schultz, and selected chapters from The Worldly Philosophers (1953) by Robert Heilbroner. MIS3100 is a junior level course also taught by the researcher. Enrollment in MIS3100 in the fall of 2011 was 16 students. The assigned readings in Management Information Systems were selected chapters in James A. O'Brian's text Management Information Systems 10e.

To gather information on student reading habits, students were asked to voluntarily participate in the study by completing a questionnaire on a weekly basis. The questionnaire was developed based on the findings of Elias (2005), Fitzpatrick and McConnell (2009), Pillips and Phillips (2007), and Sikorski et al .(2002). The questionnaire developed for this study gathered the following information on the student's reading:

- Amount of time spend on the assigned readings
- The number of occasions the students read, referenced or used the assigned readings
- Whether the student read the assignment:
    - In its entirety prior to the chapters being discussed in class
    - In its entirely after the chapters were discussed in class
    - In its entirety, but partially before and partially after the chapters were discussed in class
    - Not in its entirety and only before the chapters were discussed in class
    - Not in its entirety and only after the chapters were discussed in class
    - Not in its entirety with some before and after the chapters were discussed in class
    - Or, if the chapters were not read
- Level of interest:

  - High – intrinsic interest in the subject; eager to read and learn the assigned material
  - Medium – moderately interested in reading and learning the assigned material
  - Low – little or no interest in reading and learning the assigned material
- Depth of Reading
  - Deep – seek to understand the subject thoroughly and develop competence in the subject; relate ideas and conclusions to each other as well as to other contexts.
  - Surface – identify or memorize key concepts or information to complete assignments or pass exams.
- Reading Environment
  - No distractions - Generally quiet location and environment with little or no distractions
  - Mild distractions - Music or television in background, group study, occasional interruptions
  - Major distractions - Lots of people around, participating in online or texting conversations, video game being played nearby, reading during television commercials, etc.

Students who completed the questionnaire for each week of the semester earned extra credit points for the course. However, it was made clear to the students that their participation was voluntary, anonymous, and that they could withdraw from the study at any time without penalty. The questionnaire was delivered to the students in hard copy form at the beginning of the semester. The researcher reviewed the questionnaire with the students and answered questions about how and when the form was to be completed. In order to aid the students in keeping an accurate record of the length of time and frequency of occasion in which they read, the instructor provided a table where the students could record and tally their reading times. The researcher also periodically reminded the students to complete their questionnaires on a weekly basis.

The structure of reading assignments in BUS1900 consisted of particular chapters assigned from the course books. For example, the students would be assigned to read the first two chapters of The Worldly Philosophers. Students were also provided with questions about the assigned chapters to help guide them through the readings. The questions provided to the students on the assigned readings served as the basis for the essay questions that made up the midterm and final exams. The researcher divided the reading assignments as evenly as possible each week, so that students would have approximately the same reading load each week.

Students were also placed in small groups of 3-4 students at the beginning of the BUS 1900 course. Each group was assigned to address in class questions provided by the instructor about two of the assigned readings. For example, early in the semester Group 1 would be assigned to present to the class answers to questions about Chapters 1 and 2 of The Wal-Mart Effect. Later in the semester, Group 1 would be assigned to present to the class answers to questions about chapters 1-4 of Onward. In order to provide incentive for the whole class to read, and not just the assigned group for the day, pop quizzes were randomly given throughout the semester. The pop quizzes were given at the beginning of class and consisted of either true/false, multiple choice, or fill-in-the-blank questions.

The structure of the reading assignments in MIS3100 consisted of assigning students one chapter to read for each week from the assigned text, James A. O'Brian's text Management

Information Systems 10e. Each chapter was approximately the same length. To support the readings in class, weekly quizzes were given on-line outside of class and then discussed in class. The midterm and final exams given in the class were based on the assigned readings and modeled after the types of questions asked on the weekly practice quizzes. Weekly case studies and topic presentations were also assigned to individual students. To provide further incentive to complete the assigned readings, similarly to BUS1900, pop-quizzes were given throughout the semester. The pop-quizzes were given at the beginning of class and consisted of true/false, multiple choice, or fill-in-the-blank questions.

At the end of the semester, students who completed the survey turned them in to the researcher who checked for completion and granted extra credit points to the students. The data from the survey was then recorded and analyzed.

DATA AND ANALYSIS

All students in both the BUS1900 and the MIS3100 courses indicated their interest in participating in this study at the beginning of the semester. However, not all students completed and turned in the survey at the end of the semester. The completion rate was 80% for BUS1900 and 75% for MIS3100. An analysis of the data from both courses is presented below. Much of the data analyzed is presented in graphs and tables included in the Appendix.

READING TIME AND FREQUENCY

Existing research on the amount of time students spend reading assigned material varies greatly. Smith and Jacobs research on reading behavior in general and organic chemistry courses shows that students in general chemistry, on average, spend approximately 2 hrs. 36 min. reading the text each week and 3 hrs. 18 min. in organic chemistry. (Smith and Jacobs, 2003). Phillips and Phillips research on reading behavior in introductory accounting courses indicates that students spend, on average, approximately 1 hr. and 40 min. reading each assigned chapter (Phillips and Phillips, 2007). In addition, "As students progressed to later chapters, the overall tendency was for fewer students to read before the lecture and instead read after or concurrent with material coverage in class." (Phillips and Phillips, 2007, p.33). Consistent with the above research, Fitzpatrick and McConnell's research on student reading in principles of economics and financial accounting courses shows that students spent an average of 1 hr. 22 min. reading each chapter in principles of economics and 1 hr. 51 min. reading each chapter in financial accounting (Fitzpatrick and McConnell, 2009).

The focus of this study is not to examine and compare the total amount of time students are spending reading the assigned material, but to examine how students' behavior changes over the course of the semester. In other words, this study concerns itself, primarily, with looking at how the students reading behavior changed over the course of the semester and to identify elements that help explain why the students' behavior changes.

Figure 1 (Appendix) shows how the average number of hours students spent reading in both BUS1900 and MIS3100 changed over the course of the semester. The class averages were calculated and charted over 14 weeks of the semester. The researcher noticed two trends in the data.

The first trend the researcher noticed was that the average number of hours students spent reading the assigned material each week decreased between the beginning and the end of the

semester in both BUS1900 and MIS3100. In BUS1900, students were reading an average of 1.67 hrs. (1 hr. and 40 min.) per week at the beginning of the semester, but that average decreased to 0.70 hrs. (42 min.) per week by the end of the semester. This means that students in BUS1900, on average, spent 58% less time reading the assigned material at the end of the semester compared to the beginning of the semester. In MIS3100, students were spending an average of 1.33 hours (1 hr. and 18 min.) per week reading the assigned material at the beginning of the semester, but that average decreased to 0.35 hrs. (21 min.) per week by the end of the semester. This means that in MIS3100, students decreased the amount of time they spent reading the assigned material each week by an average of 74%. The question is, why?

While the difference in overall decrease percentages is considerably different between BUS1900 and MIS3100, 58% and 74%, respectively, the change in total time between the two courses is almost exactly the same. In BUS1900, the average amount of time spent reading decreased 58 minutes, while in MIS3100 the average amount of time spent reading decreased 57 minutes. Thus, in both courses, students, on average, reduced the amount of time they spent reading the assigned material by almost exactly 1 hour.

The second trend the researcher noticed is the gap between BUS1900 and MIS3100 in the average hours students spent reading the assigned material each week. One can observe in Figure 1 that the gap between BUS1900 and MIS3100 narrowed and widened throughout the semester. However, over the course of the semester, students in BUS1900 averaged 1.14 hrs. (1 hr. and 8 min.) reading the assigned material each week, while the students in MIS3100 average 0.75 hrs. (45 min.) each week. Thus, students in BUS1900 spent 34% more time reading the assigned material each week in comparison to the students in the MIS3100 course. The question again is, why?

Figure 2 (Appendix) does not answer the questions of why students decreased the amount of time they spent reading the assigned material or why students in MIS3100 spent less time reading the assigned material than the students in BUS1900. Figure 2, rather, further illustrates the trends indicated in figure 1.

Figure 2 illustrates the change in the average number of reading sessions by week for both BUS1900 and MIS3100. Similarly to the average number of hours spent reading the assigned material each week, there is a trend downward in both BUS1900 and MIS3100 in the average number of times a student spends time reading the assigned material. However, the gap between BUS1900 and MIS3100 is narrower in terms of the average number of reading sessions per week is narrower than the gap between BUS1900 and MIS3100 in terms of the average amount of time spent reading the assigned material each week. On average, during the first week of the semester students in BUS1900 and MIS3100 had 1.90 and 1.83 reading sessions, respectively. During the last week of the semester the average number of reading session in BUS1900 decreased to 1.00 and the average number of reading sessions in MIS3100 decreased to 0.67. This means that the average number of reading sessions in BUS1900 deceased 47% between the first and last week of the semester. In MIS3100, the average number of reading sessions decreased 67% between the first and last week of the semester.

However, considering only the first and the last week of the semesters is misleading as a comparison. To begin with, one can observe that over the course of the semester BUS3100 steadily declined in terms of the average number of reading sessions. At the same time, MIS3100 showed a rapid decline during the first three weeks of the semester, which was followed by a leveling off. In fact, MIS3100 surpassed BUS1900 during the 10^{th} and 11^{th} weeks of the semester for reading session frequency. During the last three weeks of the semester,

MIS3100 experienced a second sharp decline in the average number of reading sessions. This resulted in the beginning and the end reading session averages for MIS3100 to be lower than the reading session averages for BUS1900.

Perhaps the most telling figures related to reading session frequency are the average number of reading sessions in each class over the whole semester. The average number of reading sessions in BUS1900 over the course of the whole semester is 1.46, while the average number of reading sessions in MIS3100 is 1.36. Thus the gap between BUS1900 and MIS3100 regarding the average number of reading sessions per week is approximately 6%, which is considerably lower than the 34% average reading time per week gap between BUS1900 and MIS3100. This means that students in both courses read the assigned material using about the same number of reading sessions. However, students in BUS1900 spend considerably more time reading the assigned material.

What Figure 2 has given us is not insight into answering the questions derived from Figure 1, but has, in fact, posed an additional question. Why does the average number of reading sessions per week decrease in both classes over the course of the semester? The graphs and analysis in Figures 3-8(Appendix) provide insight that may help provide a foundation on which the answers to the challenging questions posed from Figures 1 and 2.

STUDENT INTEREST IN READING MATERIAL

As previously noted, the research of Hidi and Anderson, et al., supports the idea that when students are interested are in the assigned material, they are much more likely to not only read the assigned material, but more deeply read the assigned material in order to fully comprehend the ideas presented, make connections among them and relate the ideas to their own experiences. There is however, an enduring tension that exists between presenting the students with interesting facts that draw them into important ideas, and presenting the students with an abundance of fluff that, while interesting, can distract the student from the important ideas being presented. In other words, the "seductive detail", as coined by Garner et al. (1992), that draws students into course content can also distract them from identifying the important concepts. Nonetheless, the research shows that, "highly interesting ideas were very memorable, and abstract "big" ideas were not particularly memorable." (Garner, Brown, Sanders, Menke, 1992, p.248).

In this study, the level of student interest is positively related to several factors concerning student reading habits. Figure 3 (Appendix) graphs the change in student interest in the assigned reading material over the course of the semester in BUS1900. When examining Figure 3, one observes several important trends. The first is that the number of students who indicate a high degree of interest in the assigned material increased from 1 to 7 over the course of the semester, while the number of students who indicated a low level of interest in the assigned reading material decreased from 7 to 3. The number of students who indicated a medium level of interest decreased from 10 to 7.

As Figure 3 indicates, students most often expressed a medium level of interest in the assigned reading material, with a high level of interest being 2nd and a low level being 3rd. On average, over the course of the 14 recorded weeks an average of 8.7 students indicated a medium level of interest, 4.9 students indicated a high level of interest, and 4.9 students indicated a low level of interest in the assigned reading material.

However, what is important to note from Figure 3 is not the average rank order of student reading interest from medium, to high, to low, but the change in the trend in each of those categories. As one can observe, in the first week of the semester, 10 students indicated a medium level of interest, 7 indicated a low level of interest and only 1 indicated a high interest in the assigned reading material. However, in the last week of the semester, 7 students indicated a high interest, 7 students indicated a medium interest and only 3 indicated a low interest. In sum, at the end of the semester, the number of students who indicated a high level of interest in the assigned reading material surpassed the number of students who indicate a low level of interest and tied the number of students who indicated a medium level of interest.

While student interest in the assigned reading material increased over the course of the semester in BUS1900, a different scenario played out in MIS3100. Figure 4(Appendix) explains the student interest scenario in MIS3100.

Figure 4 graphs the change in student interest in the assigned readings over the course of the semester in MIS3100. The element that stands out the most in Figurer 4 is the position of the high interest line in comparison to the medium and low interest lines. What one observes is that students indicated a high level interest in the assigned readings ranging from 0 to 2 students, with an average over the course of the semester of 0.86. Similarly to BUS1900, the number of students who indicated a medium level of interest in the assigned readings declined between the first and last week of the semester, starting at 7 and ending at 4, with an average of 5.21. However, unlike BUS1900, the number of students who indicated a low level of interest in the assigned readings increased between the first and last week of the semester, starting a 4 and ending at 6, with an average of 5.57.

The level of student interest in MIS3100 is a stark contrast to the level of student interest indicated in BUS1900. The primary difference lies in the number of students who indicated a high level of interest in comparison to those who indicated a low level of interest. In BUS1900, the number of students who indicated a high level of interest steadily increased over the course of the semester. At the same time, the number of students in BUS1900 who indicated a low level of interest decreased over the course of the semester. The opposite scenario occurred in MIS3100, with the number of students indicating a high level of interest decreasing over the course of the semester and the number of student indicating a low level of interest increasing. A comparison of the percent of total of the students' average level of interest helps to correct for the difference in class size and further illustrates the how the students level of interest in the assigned reading material differs between BUS1900 and MIS3100.

Tables 1 (Appendix) and 2 (Appendix) indicate two important differences in students' interest. First, the percent of total of students who indicated a high level of interest in MIS3100 was 7% compared to 26.5% in BUS1900. Second, the percent of total students who indicates a low level of interest in MIS3100 was 48%, compared to 26.5% in BUS1900. In short, students in BUS1900 indicated a higher level of interest in the assigned material over the course of the semester, while students in MIS3100 indicated a lower level of interest in the assigned reading material.

The fact that students in MIS3100 indicated a higher level of interest in the assigned reading material over the course of the semester may be a contributing factor to the gap that exists between the average amount of time students spend reading the assigned material in BUS1900 and MIS3100. The insight gained from the above analysis of student interest will also provide insight into the following analysis of student completion of the assigned material and the depth of reading.

COMPLETION AND DEPTH OF READING

The existing body of research shows that a majority of students read the assigned material after the content is discussed in class with a minority of the students reading the assigned material before the content is discussed in class. More specifically, Phillips and Phillips study shows that 55% of students read the assigned material before it is discussed in class, 29% read the assigned material concurrently with the class discussion, while only 17% read the assigned material prior to class discussion (Phillips and Phillips, 2007). Phillips and Phillips also noted that,

> "As students progressed to later chapters, the overall tendency was for fewer students to read before the lecture and instead read after or concurrent with material coverage in class." (Phillips and Phillips, 2007, p. 33).

Nonetheless, the same study shows that over the course of a semester, students experiment with different combinations of before, concurrent and after class discussion reading strategies (Phillips and Phillips, 2007). This study builds on the existing body of research in this regard by analyzing not when students read the assigned material, but rather whether the students either fully or partially completed the assigned readings, or whether or not the students read the assigned material at all.

When examining how many students completed all assigned readings, partially completed the assigned readings, or read nothing for each week in BUS 1900, three trends were observed. First, over the course of the semester the number of students who indicated that they completed all of the assigned readings trended down, with 14 students indicating that they read all of the assigned material during the first week of the course and 9 indicating that they read all of the assigned material during the last week of the course. At no point during the semester did more than 14 indicate that they read all of the assigned material, and at weeks 3 and 7, the lowest value of 8 was reported. Second, there was an increase in the number of students who indicated that they either partially completed the assigned readings or read nothing. During the first week of the semester, 2 students indicated that they had read nothing, but at the end of the semester, that value more than doubled ending at 5. The number of students who indicated that they partially completed the assigned material fluctuated throughout the semester with a value as low as 1 at week 8 and as high as 8 at weeks 3 and 6. However, at the end of the semester the same number of students that indicated that they had reading nothing, 5, indicated that they partially completed the assigned readings.

What is, perhaps, more telling than the two trends discussed above is the overall ranking among the categories of student reading completion rates in BUS1900. Over the course of the semester more students indicated that they completed all of the assigned readings in comparison to the number of students who indicated that they partially read the assigned readings, or read nothing. Though the trends in the number over the course of the semester started to converge, there is still a difference between the number of students who completed all of the readings and students who partially completed the assigned readings or read nothing in BUS1900. This scenario is unique in comparison to the scenario in MIS3100.

Again, in BUS1900 that number of the students who indicated that they read nothing trended upward and, in fact, more than doubled between the beginning and the end of the semester. The same trends existed in MIS3100, except that the increase was more dramatic with

0 students indicating that they read nothing during the first week of the semester and 7 indicating that they read nothing at the end of the semester. Also similarly to BUS1900, the number of students who indicated that they completed all of the readings trended downward in MIS3100. However, unlike BUS1900, the downward trend in MIS3100 was greater with 4 students indicating that they completed all of the readings during the first week and 0 indicating that they completed all of the readings during the last week of class.

While there are similarities in the trends in MIS3100 and BUS 1900 regarding the completion of assigned readings, there are also differences. One difference is that unlike BUS1900 in which the number of students who partially completed the assigned readings increased over the course of the semester, the number of students in MIS3100 who indicated that they partially completed the assigned readings decreased over the course of the semester. During the first week of the semester, 8 students indicated that they partially completed the assigned readings and by the 4th week that value had increased to 10. However, by the time the last week of the semester arrived, 5 students indicated that they partially completed the assigned readings.

The second difference between MIS3100 and BUS1900 is in the rank order of the aggregate reading completion over the course of the semester. The differences are presented in Tables 3 (Appendix) and 4 (Appendix).

As one can observe in a comparison of tables 3 and 4, over the course of the whole semester in BUS1900, most students (56%) indicated that they completed all of the assigned readings, while in MIS3100 20% indicated that they completed all of the assigned readings. In MIS3100, most students (57%) indicated that they partially completed the assigned readings; while in BUS1900 22% indicated that they completed the assigned readings. At the same time, in both BUS1900 and MIS3100, approximately one-quarter of the class indicated that they did not complete any of the assigned readings, with values of 22% and 23% respectively.

Though in both courses, the number of students who indicated that they completed all of the assigned readings trended downward and the number of students who indicated that they did not complete any of the assigned readings trended upward, the difference in the degree of the downward trend and the composite rank order over the course of the semester indicates differences between the courses. Like the differences that exist between BUS1900 and MIS3100 in terms of the amount of time that students spend reading the assigned material, the level of student interest in the assigned material may help explain why students most often only partially completed the assigned readings in MIS3100 in comparison to BUS1900 in which students most often completed all of the assigned readings. That is, students in BUS1900 indicated a higher level of interest in the assigned material in BUS1900. This higher level of interest could be the driving force behind not only the amount of time students spend reading the assigned material, but also whether or not they complete the assigned readings. The two areas that remain to be examined from this study are the depth in which students read the assigned material and the environment in which the material is read.

Research on the depth of student reading is expansive. Briggs' 1998 study on teaching and student learning discusses both the surface and deep approaches to learning adopted by students. Briggs argues that it is more common now for students to adopt a surface approach to learning rather than a deep approach (Biggs, 2007). As described by Briggs, a student who takes a deep approach to learning,

> "comes to lecture with relevant background knowledge and a question…finds an answer to that question; it forms the keystone for a particular arch of knowledge" (Biggs, 2007, p.57).

This is opposed to a student who takes a surface approach, which the student is at the university,

> "not out of a driving curiosity about a particular subject, or a burning ambition to excel in a particular profession, but to obtain a qualification for a job…comes to lecture with no questions to ask…wants only to put forth sufficient effort to pass." Biggs, 1998, p. 58).

The results of this study support the finding of Biggs. The first fact that came to the researchers attention when examining the data on reading depth is the difference between the number of students in BUS1900 who indicated that they read the assigned material at a surface level and the number of students who deeply read the assigned material. More specifically, each week over the course of the entire semester, more students read the assigned material at a surface level than deeply read the assigned material. This means that more students read the assigned material to identify or memorize key concepts or information to complete assignment or pass an exam, rather than seeking to understand the subject thoroughly and develop competence in the subject, and relate ideas and conclusions to each other as well as to other contexts.

However, while there was a consistent difference between students who read at a surface and deep level, there was convergence between the two over the course of the semester. That is, over the course of the semester, more student indicated that they were deeply reading the assigned material and fewer students indicated that they were reading at a surface level. For example, over the course of the semester, the number of students who indicated they were reading at a surface level decreased from a high of 15, ending at 9. At the same time, the number of student who indicated that they were deeply reading the assigned material started at 4 and then increased form a low of 2 at week 5 to a high of 7 at the end of the semester.

What these results indicate when compared the results presented in Figure 3 is that there is a direct relationship between the students' level of interest in the assigned material and the depth in which they read the assigned material. That is, as the students level of interest in the assigned reading material increases over the course of the semester, the depth in which the students read the assigned material also increases. The analysis below demonstrates that the contraposition is also true.

Just like in BUS1900, there is a difference between the number of students in MIS3100 who indicated that they read a surface level and the number of students in MIS3100 who deeply read the assigned material. The primary difference, however, between BUS1900 and MIS3100 in terms of depth of reading is in the change of the course of the semester. Unlike BUS1900 in which the number of students who read a surface level decreased and the number of students who deeply read the assigned material decreased, the number of students in MIS3100 who read a surface level increased over the course of the semester and those who deeply read the assigned material decreased over the course of the semester. In addition to the difference in trend over the course of the semester in student depth of reading, there was a difference at the aggregate level as shown in Tables 5 (Appendix) and 6 (Appendix).

It is true that in both BUS1900 and MIS3100, over the course of the semester the aggregate percentage of students who indicated that they read the assigned material at a surface level was higher than the aggregate percentage of students who indicated that they deeply read the assigned material. However, the aggregate percentage of students who indicated that they read at a surface level was higher in MIS3100 (84%) in comparison to BUS1900 (72%). Therefore, the aggregate percentage of students who indicated that they deeply read the assigned material in BUS1900 (28%) was higher than the aggregate percentage of students who indicated that they deeply read the assigned material in MIS3100 (16%). In sum, one can observe from the above findings that as students' interest in the assigned readings increase, the depth in which the students read the assigned material increases. This finding further supports the theory of this paper that the level of student interest in the assigned readings is important to students' learning.

READING ENVIRONMENT

The study by Fitzpatrick and McConnell into student reading strategies also examined student reading environment. What their study showed was that most students read the assigned course material in an environment with no distractions. More specifically, 50% of the students in principles of microeconomics and 58% of the students in financial accounting read in an environment with no distractions (Fitzpatrick and McConnell, 2009, p.6). A smaller portion of the class read in an environment with mild distractions, i.e., television, music or other people in the background, with 33% in both principles of microeconomics and financial accounting reporting that they read in an environment with mild distractions (Fitzpatrick and McConnell, 2009, p.6). The smallest portion of students read in an environment with major distractions, such as noisy videogames or many conversations occurring in the room. In principles of microeconomics 17% reported reading in an environment with major distractions and 9% reported reading in an environment with major distractions in financial accounting (Fitzpatrick and McConnell, 2009, p.6). As one can observe from Tables 7 (Appendix) and 8 (Appendix), the results presented in this study does not vary, but rather supports the research presented by Fitzpatrick and McConnell on the environments in which students read.

Tables 7 and 8 indicate is that in both BUS1900 and MIS3100 half of the students (49% in both courses) read in an environment where there are little or no distractions. A smaller portion, 43% for BUS1900 and 37% for MIS3100, read in an environment with minimal distractions, and an even smaller portion, 8% for BUS1900 and 14% for MIS3100, read in an environment with major distractions. While the results for mild and major distractions are similar between BUS1900 and MIS3100, it is worth noting that a lower percentage of students in BUS1900 (8%) read in an environment with major distractions in comparison to MIS 3100 in which 14% read in an environment with major distractions. Like length of reading time, completion of assignments, and depth of reading, the difference in the percentage of students who read in an environment with major distractions could also be a reflection of the students' level of interest in the assigned readings.

INTEREST AND DEPTH – STATISTICAL AND LINEAR RELATIONSHIP

A majority of the research presented in this article provides a side by side comparison of student reading survey results in BUS1900 and MIS3100. Several observations and conclusion have been drawn regarding student reading behaviors in both courses. However, when the data

regarding the students' level of interest and the time spent reading the assigned material is simultaneously analyzed in both classes, the results are conclusive and support the existing body of research regarding the relationship that exists between students' level of interest and the time spent reading. Table 9 (Appendix) shows the mean and standard deviation for each level of interest in the combined data set from BUS1900 and MIS3100.

One observation that becomes clear when examining Table 9 is that students who indicate a high level of interest spend approximately 25% more time reading the assigned material than students who indicate a medium level of interest. At the same time, students who indicate a low level of interest spent almost 33% less time reading the assigned material than students who indicated a medium level of interest. In addition, the variation in the amount of time students spend reading the assigned material is the lowest for students who indicated a high level of interest, while the variation in the amount of time spent is highest for students who indicated a low level of interest. In other words, students who indicate a high level of interest more consistently spend more time reading the assigned material than students who indicate a medium or low level of interest.

The data and observations made above line up well with the results of a regression analysis performed on the relationship between the amounts of time spent reading and the level of interest. The regression analysis was performed on a combined dataset of time spent and level of interest indicated in both classes. With time spent reading serving as the dependent variable and interest level serving as the depending variable, the analysis yielded a coefficient of 20.16, $p<.0001$, $n=404$. Thus, the model predicts that as the students' indicated level of interest increases from one level to the next, the amount of time the student will spend reading the assigned material will increase by approximately 20 minutes. The challenge for the professor is therefore to both capture and maintain the interest of their student over the course of the semester.

CONCLUSION

There were two questions posed early in this paper; why did the amount of time students spend on assigned readings decrease of the course of the semester? And, why did students spend less time on the assigned readings in MIS3100 in comparison to BUS1900? While this paper alone cannot fully address both of those questions, this paper does provide insight into why students in MIS3100 tended to spend less time on the assigned readings than the students in BUS1900. In addition to providing insight into potential answers to the above questions, this study gives many more insights into student reading behaviors and how they differ across courses.

The insight that received the most attention in this paper was the difference in interest in the assigned reading material indicated by students in BUS1900 and MIS3100. Overall, students in BUS1900 indicated a higher level of interest in the assigned material, while students in MIS3100 indicated a lower level of interest in the assigned reading material. In addition, student interest in assigned reading material in BUS1900 trended up over the course of the semester, while student interest in the assigned reading material trended down in MIS3100 over the course of the semester. The research shows a statistically significant and positive relationship between the amount of time a student spends reading the assigned material and the indicated level of interest. What the research does not show is why the level of interest waned in MIS3100 compared to BUS1900. Further research would need to be performed to be conclusive, but the

researcher believes that differences in the kinds and variation of reading material reading material presented in BUS1900 and MIS3100 may explain some of the difference between the courses.

In addition to time spent, the researcher believes that the level of student interest affects whether or not students complete reading assignments. The data gathered in this study shows that students in BUS1900 most often completed all of the reading assignments, while in MIS3100, students most often only partially completed the reading assignments. At the same time, the data shows that student depth in reading the assigned material increased over the course of the semester, while the level of interest in the assigned reading material simultaneously increased in BUS1900. This is counter to MIS3100, in which student depth in reading decreased over the course of the semester, while student interest in the assigned reading material was low throughout the semester.

The researcher believes that many more studies can be built from this study to help develop more insight into student reading behavior in courses. For example, future research could include examining BUS1900 and MIS3100 in consecutive semesters, using the same survey, to examine how a changes in assigned reading materials, or how reading assignments are structured and evaluated to observe if, and if so, how these changes influence student reading behavior. The results of such a study can help inform instructors how to select and assign reading materials that improve assignment completion and comprehension of course material.

APPENDIX

Figure 1

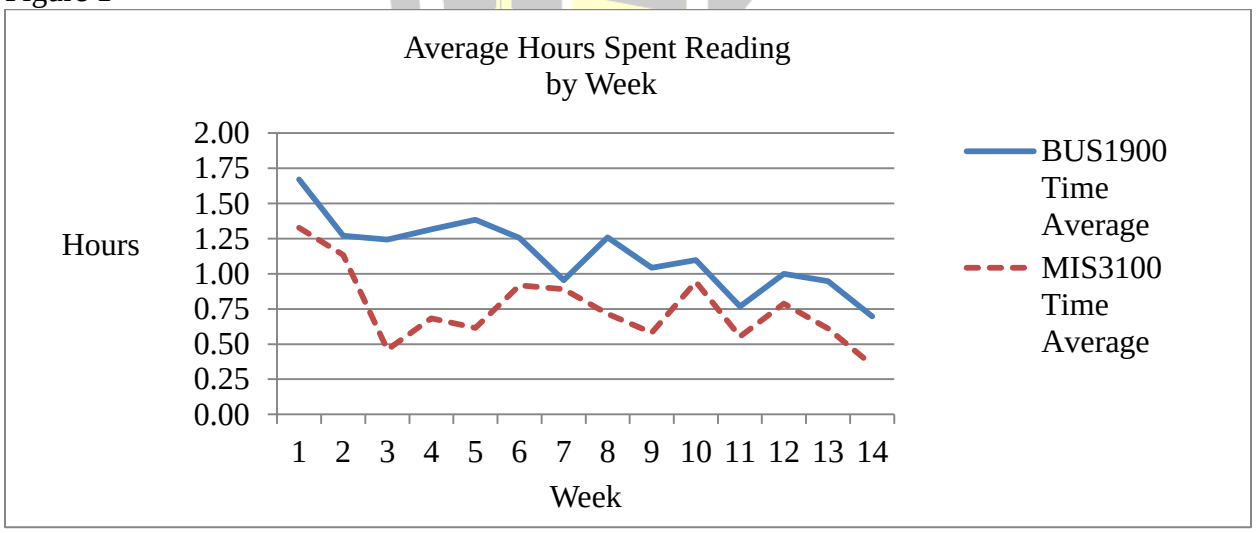

Figure 2

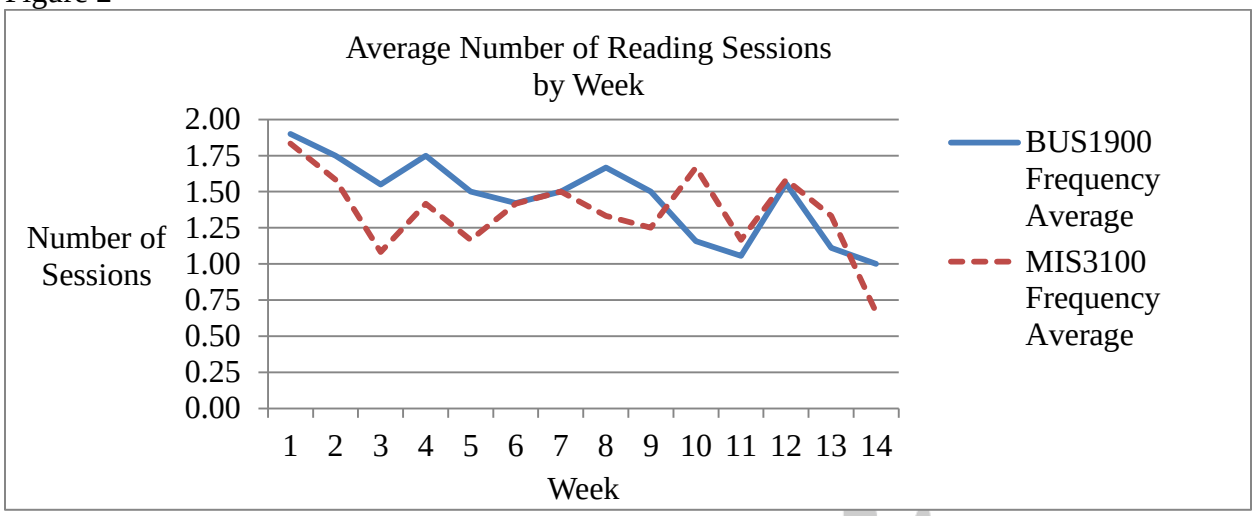

Figure 3

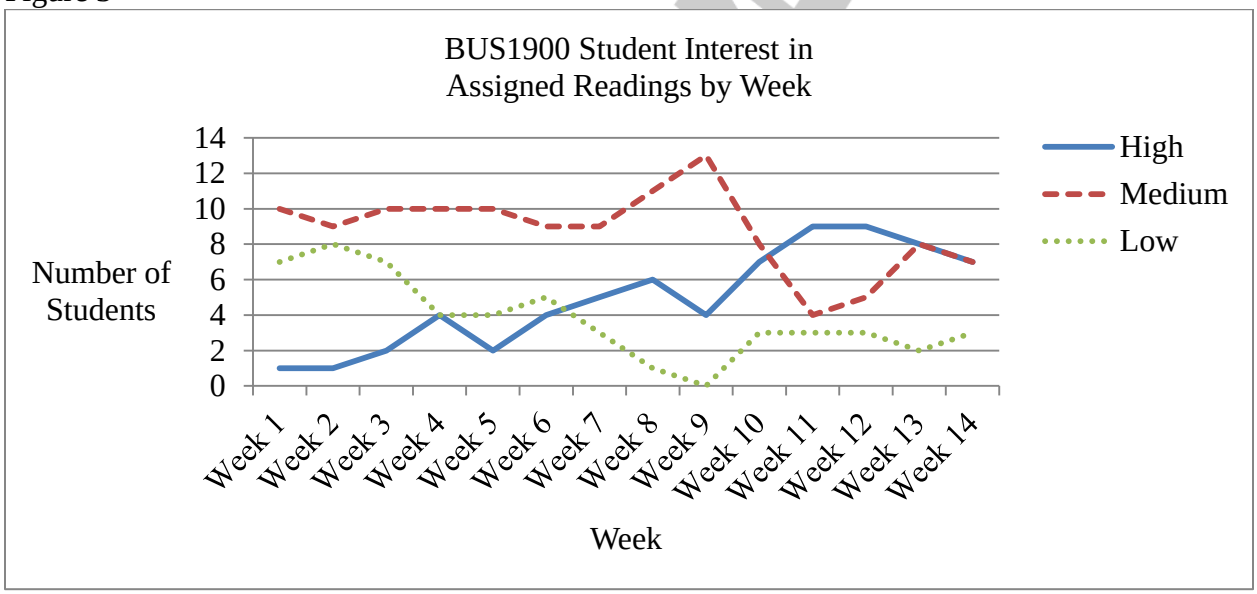

Figure 4

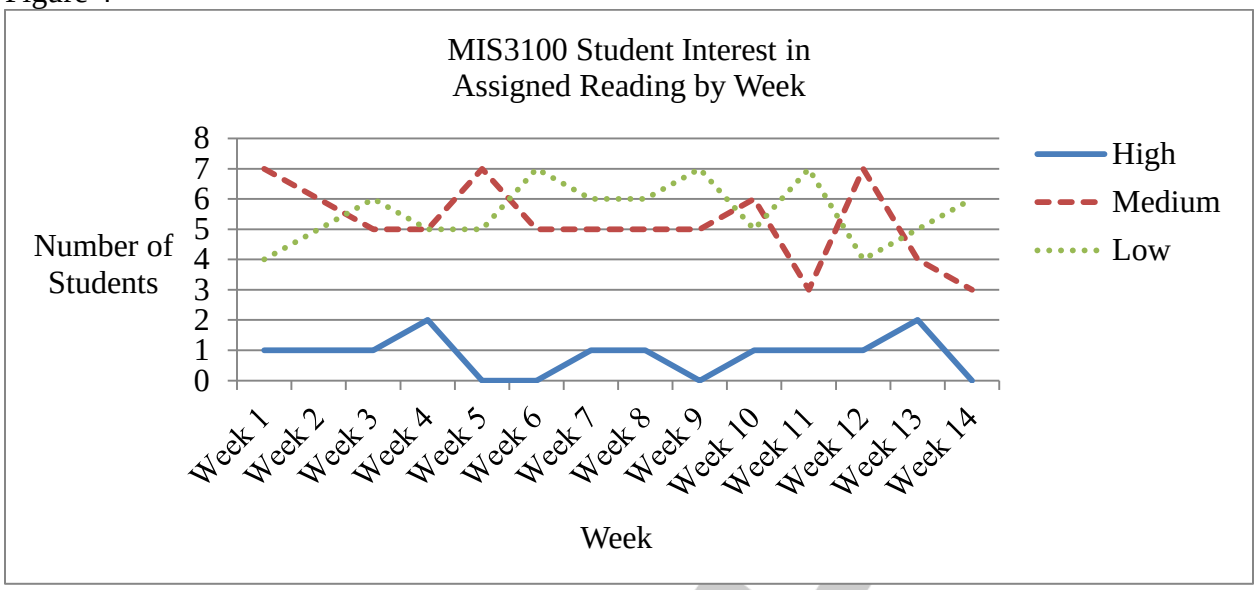

Table 1

BUS1900 Interest Level	BUS1900 Number of Students' Average Level of Interest	Percent of Total
High	4.9	26.5%
Medium	8.7	47%
Low	4.9	26.5%

Table 2

MIS3100 Interest Level	MIS3100 Number of Students' Average Level of Interest	Percent of Total
High	0.86	7%
Medium	5.21	45%
Low	5.57	48%

Table 3

BUS1900 Reading Completion	BUS1900 Number of Students' Average Completion	Percent of Total
Completed All	10.9	56%
Partial Completion	4.3	22%
Completed None	4.3	22%

Table 4

MIS3100 Reading Completion	MIS3100 Number of Students' Average Completion	Percent of Total
Completed All	2.4	20%
Partial Completion	6.9	57%
Completed None	2.8	23%

Table 5

BUS1900 Depth of Reading	BUS1900 Number of Students' Average Depth of Reading	Percent of Total
Deep	4.86	28%
Surface	12.21	72%

Table 6

MIS3100 Depth of Reading	MIS3100 Number of Students' Depth of Reading	Percent of Total
Deep	1.86	16%
Surface	9.93	84%

Table 7

BUS1900 Reading Environment	BUS1900 Percent of Total over Semester
No Distractions	49%
Mild Distractions	43%
Major Distractions	8%

Table 8

MIS3100 Reading Environment	MIS3100 Percent of Total over Semester
No Distractions	49%
Mild Distractions	37%
Major Distractions	14%

Table 9

BUS1900 & MIS3100 Interest and Time	Mean of Time Spent Reading	Standard Deviation
High	84.94	49.59
Medium	66.57	52.76
Low	44.97	59.51

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