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*Effects of Various  
Methods of  
Assigning and  
Evaluating  
Required Reading  
in One General  
Education Course*

*Different approaches to creating out-of-class reading assignments for university general education courses might affect the amount of time students actually spend reading. Five instructors of a required religion/philosophy class used different approaches to assign out-of-class reading. Subsequently, their students (n = 504) were surveyed about their reading completion, their motivation to read, and ways that out-of-class readings affected their learning and personal study habits. Results showed that students who were assigned to read for a specific number of minutes outside of class completed the task more consistently than those who received other forms of reading assignments. Results also indicated that students who were graded on their outside reading completed it more frequently than those who were not graded.*

**M**any university general education instructors require their students to complete assigned readings in course texts and materials outside of class. Different approaches to creating these assignments and holding students accountable for them might affect the amount of time students actually spend reading.

Some instructors assign students to read outside of class for a specific number of minutes each day, while others invite students to set personal reading goals. Still other instructors require that students complete a specific number of pages or chapters before each class. Some assign points for out-of-class reading, and some do not have any reading requirements at all.

Students choose to complete or not complete assigned readings for a variety of reasons. Motivation theory, while complex and far-reaching (Condry & Stokker, 1992), can apply specifically to reading. Reading is primarily a cognitive act, but it is also affective. Cognitive and affective conditions are interconnected, interdependent, and interactive (Ruddell & Speaker, 1985; Ruddell & Unrau, 1994). Values, goals, and self-concepts influence attitudes (Mathewson, 1994). Reading can also be influenced by extrinsic and intrinsic motivation.

Students' attitudes toward reading determine their intention (Jackson, 2001). Students with positive reading attitudes are more motivated to read, read more often, and achieve greater reading success (Baker & Wigfield, 1999). Along with attitudes, feelings also influence readers' actions. Mathewson (1994) distinguished between prevailing feelings that focus on overall reading and specific feelings that constitute emotional responses to the text. Prevailing feelings can impact intention to read, while specific feelings are often linked to motivation to continue reading.

According to Mathewson's (1994) model, attitudes and feelings have a direct influence on intention to read. This intention is influenced by internal and external motivators. Fawson and Moore (1999) explained that "the difference between an extrinsically or intrinsically motivated reader is not in the outward manifestation of the behavior, but rather it lies within the source of the behavior and in the long-term interest of the [student] in reading" (p. 326).

Goals that come from inside the reader, intrinsic motivation, can be generated by personal interests and experiences and can develop into reasons for reading (Sweet & Guthrie, 1996). Intrinsic reading motivation goals include curiosity, involvement, and challenge (Guthrie et al., 2009). Individuals with high levels of intrinsic motivation have a sense of competence (Miller, Behrens, Greene, & Newman, 1993) and a coping mechanism for failure (Lehtinen, Vauras, Salonen, Olkinuora, & Kinnunen, 1995). They experience high levels of achievement in reading comprehension tasks (Benware & Deci, 1984).

In contrast, extrinsic motivation is reading in order to obtain recognition and rewards or to avoid a punishment. Extrinsic goals for motivation include compliance and competition (Mathewson, 1994; Wigfield, 1997).

Extrinsic motivators often have positive short-term effects on reading, but may have negative long-term effects on helping students become lifelong readers (Sweet & Guthrie, 1996).

The effect of external rewards such as points or grades on student performance and attitudes has been studied frequently with conflicting results. Deci and Ryan (2002) stated that external motivators might diminish intrinsic motivation. Shim and Ryan (2005) completed a short-term longitudinal study of 361 college students and found that grades could negatively impact the motivation and efficacy of learners. Many researchers have reported that using external rewards for tasks can have negative effects on how students view those tasks (e.g., Butler & Nisan, 1986; Kohn, 1993). Pilcher (1994) found that grades (as generally utilized) "are more harmful than beneficial to student learning" (p. 87).

However, some argue that external rewards, such as grades, improve performance. In Elton's conceptual analysis (1996), he reasoned that students "are unlikely to work hard without there being a recognition through grades" (p. 62). Covington and Mueller (2001) stated that "virtually all the students in our college samples rate achieving the highest grade possible as the main reason for learning, with such reasons as increasing one's knowledge or undertaking work as a matter of personal challenge rated far less important" (p. 159). College students sometimes read for intrinsic social or personal reasons (National Endowment for the Arts, 2007), but much of their reading is done for extrinsic reasons, such as complying with assignments to earn a grade.

While many students are motivated extrinsically, Wigfield and Guthrie (1997) concluded that reading assignments can also lead to intrinsic motivation. Schiefele (1991) noted that when students read for compliance, an important distinction needs to be made between individual and situational or text-based interests. Individual interests are relatively stable feelings about topics, while situational interests include less stable feelings and can be sparked by the content of a particular text. In one study, Schiefele examined how college students' situational interests in assigned text reading influenced their comprehension. Controlling for both prior knowledge and general intelligence, he still found that when college students became interested in textbook material, they processed that material more deeply and used more elaborate learning strategies while reading.

Another aspect of motivation and performance concerns the effect of students setting their own learning goals rather than receiving assignments from instructors. Savery and Duffy (1996) and Schunk (2004) have discussed the value of self-regulation and the importance of students

setting their own goals about what and how they learn. Elton (1996) argued for the right of students to determine their own motivational priorities. However, some have raised the concern that when students independently set their own learning goals, they may not reach as high or achieve as much as they could accomplish when instructors help them set goals. Locke and Latham (2002) reviewed research comparing whether people perform better with self-selected or instructor-selected goals and found conflicting results. Some of the effects of instructor-selected versus learner-selected goals may result from how the assignments are communicated. Students often comply only half-heartedly with assignments that they perceive as simply being busy work. As Savery and Duffy (1996) have stated, "Learning must have a purpose beyond [the fact that] 'it is assigned'" (p. 137). The differences between self-selected and instructor-selected assignments may have less to do with who selected the assignment and more to do with how the assignment was framed (Latham, Erez, & Locke, 1988).

Whatever the goal, research has shown that as students' performance is monitored, their self-regulation tends to increase (Deci & Ryan, 1991). Fawson and Moore (1999) and Schwartz (1982) have shown that assigning children to read for a specific amount of time is more beneficial than assigning a specific number of pages. Sappington, Kinsey, and Munsayac (2002) reported that college students resist required reading assignments, and self-reports of reading compliance may be questionable because students exaggerate how much they actually read. These same authors showed that if instructors occasionally give students a surprise quiz or other way of revealing their knowledge, students complete readings prior to class more frequently. Henderson and Rosenthal (2006) reported that college science instructors increased the consistency with which their students completed readings by asking them to submit a question about their out-of-class reading.

Completing reading assignments to earn grades appears to be a major motivation, and requiring out-of-class readings is a common practice. However, little is known about how various methods of assigning and evaluating required reading compare at the college level.

### **Purpose of the Study**

The purpose of this study was to compare various methods of assigning and evaluating required reading in one general education course. The following specific questions guided this study:

1. How do students complete out-of-class reading under different assignment conditions (i.e., minutes per day, personal reading goals, and assigned chapters)?

2. What differences exist between graded and non-graded out-of-class reading assignments within various assignment conditions (number of days, number of minutes, completion before class, motivation, and learning benefits)?
3. What proportion of out-of-class reading do students complete before class?
4. What proportion of students' motivation to complete out-of-class reading is attributed to earning a grade?
5. What proportion of out-of-class reading is beneficial to students' learning?
6. How does out-of-class reading influence students' personal study habits?

## Method

College students who were enrolled in a required religion/philosophy class completed a survey to describe the types of out-of-class reading assignments they were given and their motivation to complete them. The survey was sent via email inviting students to answer questions regarding their completion of required course reading.

### Participants

The 504 students in this study were primarily first year college students, although some sophomores, juniors, and seniors also participated. All participants attended Brigham Young University, a large, private, church-affiliated university in the inter-mountain West. Students were enrolled in five separate sections of the same course; different instructors taught three of the sections and one instructor taught two of them. One of the instructors was a female with 8 years of experience teaching this course; the other three instructors were males with 2, 8, and 30 years of experience.

Instructors in all sections taught from the same text. Enrollments ranged from 57 in the smallest section to 155 in the largest, and the course satisfied a general education requirement. One section (referred to later as Section B) met once a week, and the four other sections met twice weekly. All classes met for 100 minutes each week during daytime hours, except for Section B which met from 5:00 until 6:40 p.m. The proportion of male and female students was roughly equal. The majority of students were Caucasian, with some representation of Latino, Asian, and Pacific Islanders as well. These students ranged in age from 18 to 23, with the majority being 18-19 years old. Brigham Young University attracts students primarily from middle to upper socio-economic levels within the United States and Canada.

International students represent a broader spectrum of economic levels. Entrance requirements are competitive, with the average 2008 ACT score of incoming students being 28 and the mean high school grade point average being 3.80.

### **Instrument**

The questionnaire, developed by one of the researchers, consisted of five closed response items and one open-ended prompt (see Appendix). Specifically, questions one and two of the survey were designed to gauge the number of days per week and minutes per day students spent completing reading assignments. The third question asked the percentage of assigned reading that students completed before class. The fourth question focused on students' self-reported external motivation to earn grades. The fifth question examined their perceptions of how much their out-of-class reading enriched their learning. The final question provided students with the opportunity to comment on how they felt assigned out-of-class reading affected their personal study. All of the survey questions were pilot tested and revised based on the responses of pilot test participants.

### **Procedures**

Five sections of a religion/philosophy course were selected to examine how instructors assigned their course reading. An objective of this course was to encourage students to establish a daily reading habit. None of the instructors changed established course practices for the study. Although all sections utilized similar course objectives, content, and text, the way individual instructors assigned class reading varied.

**Section A.** The students in this section ( $n = 85$ ) were required to read 30 minutes a day, Monday through Friday, throughout the semester, and write their reflections on their reading in a response journal. Students were given three opportunities during the semester to self-grade their performance in out-of-class reading. They gave themselves points for each day they read and wrote a reflection on their reading.

**Section B.** Students in this section ( $n = 57$ ) were required to set their own goals for how much time they would spend reading each day. They were also required to have read specific chapters before class. They gave themselves points for each day they met their reading goal, as well as points for having completed assigned reading.

**Section C.** In this section, students ( $n = 62$ ) were required to have read specific chapters before coming to class. They gave themselves points each class period corresponding to the amount of the assigned reading they had completed.

**Section D.** Students ( $n = 155$ ) were required to preview the entire text for the course during the first two weeks. Points were given to those who reported that they had completed this assignment. Throughout the remainder of the course, students were asked to finish specific chapters before coming to class. However, they were not held directly accountable for completing the reading, which was neither reported nor graded.

**Section E.** Students in this section ( $n = 145$ ) were participating in a university honors program. They had the same requirements and instructor as students in section D.

The online survey was available to students in March 2009, and an email invitation explained the study and invited them to participate. Students had five school days to complete the survey. The return rate was 32 percent, an acceptable rate according to criteria set forth by Sheehan (2001). Researchers obtained a waiver of consent, allowing completion of the survey to serve as implied consent. No reminders or follow-up surveys could be sent because the survey was completed close to final exams and the end of the semester.

### **Data Analysis**

Means and standard deviations were calculated for all questions except for the final one, which required a qualitative analysis. A MANOVA was run on all quantitative results to test for overall significance because there were multiple dependent variables. One-way between groups ANOVAs were also run with the different sections serving as the independent variables. Additional post hoc analyses were also completed to see if there was a difference between graded and non-graded conditions.

## **Results**

Six research questions guided this study. Results are presented in five sections: (a) completion of out-of-class readings (Questions 1 & 3), (b) graded and non-graded reading assignments (Question 2), (c) motivation (Question 4), (d) learning benefits (Question 5), and (e) personal study (Question 6).

### **Completion of Out-of-Class Readings**

Table 1 presents the average number of days and minutes students spent completing out-of-class reading and the percentage of reading assignments students completed before class. Students in all sections read more than five days per week, with students in two sections (Section B, personal goals; Section E, honors) reading six days per week or more. All students reported reading more than 17 minutes per day. Students in the section in which a specific number of minutes was assigned read

the most (28.10 minutes), followed by the students who set their own goals (24.31 minutes). Students in the section receiving specific reading assignments and grading themselves reported the lowest number of minutes per day.

**Table 1**

*Average Number of Days and Minutes Spent on Out-of-Class Reading and Percentage of Reading Assignments Completed before Class*

| Condition   | Days<br>per Week |      | Minutes<br>per Day |      | Percentage<br>of Reading<br>Completed<br>before Class |      |
|---|------------------|------|--------------------|------|---|------|
|   | Mean             | SD   | Mean               | SD   | Mean  | SD   |
| Assigned minutes<br>(Sec. A- graded)<br>(n = 21)                                | 5.81             | 1.29 | 28.10              | 9.7  | 93.00   | 9.7  |
| Personal goals<br>(Sec. B- graded)<br>(n = 16)                                  | 6.56             | .63  | 24.31              | 6.9  | 96.38   | 6.9  |
| Specific chapters,<br>reported<br>(Sec. C- graded)<br>(n = 29)                  | 5.72             | 1.3  | 17.24              | 5.9  | 88.76   | 36.0 |
| Specific chapters,<br>unreported<br>(Sec. D- non-graded)<br>(n = 47)            | 5.72             | 1.7  | 19.70              | 12.3 | 51.68   | 36.0 |
| Specific chapters,<br>unreported<br>(Sec. E- Honors-<br>non-graded)<br>(n = 49) | 6.0              | 1.5  | 18.22              | 11.5 | 54.39   | 38.9 |
| Total   | 5.9              | 1.5  | 20.36              | 10.8 | 68.90   | 36.4 |

All students reported coming to class with reading assignments completed at least half of the time. However, there was a large difference between students in sections that were graded (Sections A, B, and C) and those in sections that were not graded (Sections D and E). Students in Sections A, B, and C read their assignments before class approximately twice as often as students in other sections. Those who came most prepared were enrolled in Section B, in which students set their own

reading goals (96.38%). Those who came least prepared were students in the largest sections, in which students received reading assignments but were not expected to report (Section D, 51.68%; Section E, 54.38%).

### Graded and Non-Graded Reading Assignments

A MANOVA was used to test for overall significance. When significant differences were found ( $p < .0001$ ), a one-way between groups ANOVA was then run to determine if differences existed among sections. Each section served as the independent variable. Table 2 presents the results of this ANOVA.

**Table 2**

*One-way ANOVA for Days, Minutes, Percentage of Completed Reading, Percentage of Motivation Attributed to Grades, and Percentage of Time Assignments were Beneficial*

| Survey Items                                   | Df     | F     | Significance |
|--|--------|-------|--------------|
| Days per week                                  | 4, 157 | 1.20  | .313         |
| Minutes per day                                | 4, 157 | 4.73  | .001**       |
| Percentage of completed reading                | 4, 157 | 15.37 | <.001**      |
| Percentage of motivation attributed to grades  | 4, 157 | 3.02  | .020*        |
| Percentage of time assignments were beneficial | 4, 157 | 1.29  | .276         |

\* results significant at  $p < .05$

\*\* results significant at  $p < .01$

Within the graded and non-graded sections, procedures were followed to test for significance in multiple conditions (i.e., days per week, minutes per day, and percentage of completed reading) and in students' perceptions of motivation attributed to grades and learning benefits. A one-way ANOVA revealed a significant difference among the groups in percentage of motivation attributed to grades ( $p = .02$ ).

A post-hoc Tukey HSD was then run to see if there were differences between graded and non-graded conditions. There was a significant difference between sections that were graded on reading and those that were not graded in how frequently students completed assigned reading before class. Although the graded Sections A, B, and C did not significantly differ from each other, all three of these sections were significantly different from the non-graded Sections D and E (see Table 3). Differences in completion of reading assignments between graded and non-graded sections were both statistically and practically significant, given that students in Sections A, B, and C completed the assigned reading before class approximately twice as often as students in Sections D and E (see Table 1).

**Table 3**

*Tukey HSD Test for Mean Percentages of Out-of-Class Reading Completed Before Class by Condition*

| Condition            | Comparison Condition    | Mean Difference | Standard Error | Significance |
|----------------------|-------------------------|-----------------|----------------|--------------|
| Assigned minutes (A) | Personal goals (B)      | -2.815          | 10.460         | .999         |
|                      | Graded chapters (C)     | 4.560           | 8.832          | .986         |
|                      | Non-graded chapters (D) | 41.637          | 8.070          | .000*        |
|                      | Honors (E)              | 38.930          | 8.017          | .000*        |
| Personal goals (B)   | Assigned minutes (A)    | 2.815           | 10.460         | .999         |
|                      | Graded chapters (C)     | 7.375           | 9.935          | .946         |
|                      | Non-graded chapters (D) | 44.452          | 9.264          | .000*        |
|                      | Honors (E)              | 41.746          | 9.218          | .000*        |

| Condition               | Comparison Condition    | Mean Difference | Standard Error | Significance |
|-------------------------|-------------------------|-----------------|----------------|--------------|
| Graded chapters (C)     | Assigned minutes (A)    | -4.560          | 8.832          | .986         |
|                         | Personal goals (B)      | -7.375          | 9.935          | .946         |
|                         | Non-graded chapters (D) | 37.078          | 7.376          | .000*        |
|                         | Honors (E)              | 34.371          | 7.319          | .000*        |
| Non-graded chapters (D) | Assigned minutes (A)    | -41.637         | 8.070          | .000*        |
|                         | Personal goals (B)      | -44.452         | 9.264          | .000*        |
|                         | Graded chapters (C)     | -37.078         | 7.376          | .000*        |
|                         | Honors (E)              | -2.707          | 6.378          | .993         |
| Honors (E)              | Assigned minutes (A)    | -38.930         | 8.017          | .000*        |
|                         | Personal goals (B)      | -41.746         | 9.218          | .000*        |
|                         | Graded chapters (C)     | -34.371         | 7.319          | .000*        |
|                         | Non-graded chapters (D) | 2.707           | 6.378          | .993         |

\* results significant at  $p < .01$

Data were then analyzed in two additional ways. First, a post-hoc comparison of the means of the graded sections (A-C) versus the non-graded sections (D-E) was conducted. This analysis showed statistically significant differences between these two groups in the number of minutes studied each day, the percentage of assigned reading completed before class, and the percentage of reading motivation attributed to getting a good grade in class. Table 4 summarizes the results of this analysis.

**Table 4**  
*Post-hoc Analysis of the Means of Multiple Conditions and Perceptions in Graded and Non-graded Sections*

| Survey Item   | df  | Mean Difference | Standard Error | T    | Significance |
|---|-----|-----------------|----------------|------|--------------|
| Number of days participants read text each week       | 157 | .17             | .24            | .72  | .47          |
| Number of minutes participants read text each day     | 157 | 4.25            | 1.69           | 2.52 | .01*         |
| Percentage of assigned reading completed before class | 157 | 39.68           | 5.08           | 7.81 | < .001**     |
| Percentage of motivation attributed to grades         | 157 | 10.74           | 3.17           | 3.38 | < .001**     |
| Percentage of time assignments were beneficial        | 157 | 2.38            | 3.81           | .63  | .53          |

\* results significant at  $p < .05$

\*\* results significant at  $p < .01$

Post-hoc comparisons using the Tukey HSD test indicated that the mean score of students in the section assigned a specific number of minutes per day (Section A) was significantly different from means of students who were assigned specific chapters (Sections C, D, and E). However, means for those in Section A were not significantly different from means of those who set their own goals (Section B). Table 5 summarizes these differences.

**Table 5**  
*Tukey HSD Test for Mean Scores for Minutes Read per Day by Condition*

| Condition Comparisons                                    | Mean Difference | Standard Error | Significance |
|--|-----------------|----------------|--------------|
| Assigned minutes v. personal goals (A v. B)              | 3.78            | 3.44           | .806         |
| Assigned minutes v. graded chapters (A v. C)             | 10.85           | 2.97           | .003**       |
| Assigned minutes v. non-graded chapters (A v. D)         | 8.39            | 2.72           | .020*        |
| Assigned minutes v. non-graded chapters- honors (A v. E) | 9.87            | 2.70           | .003**       |

\* results significant at  $p < .05$

\*\* results significant at  $p < .01$

### Self-Reported Motivation

Table 6 presents results for the fourth survey question, which asked for students' self-reported motivation for completing reading assignments. Students were asked what percentage of their motivation they attributed to getting a grade in class. All students reported that grades accounted for nearly one-fourth of their motivation. Students in Sections A, B, and C, in which they were held accountable for their reading assignments, reported being more motivated by grades than their counterparts in Sections D and E, in which reading was not graded.

### Learning Benefits

The fifth survey question asked students to indicate what percentage of their assigned reading time was beneficial to their course learning. Overall, students saw relevance in their course reading, reporting that an average of 78.59 percent ( $SD = 23.5$ ) of their reading time was beneficial. Results were consistent regardless of condition. Section A's percentage was 83.10 ( $SD = 15.4$ ); Section B's was 76.25 ( $SD = 23.6$ ); Section C's was 80.41 ( $SD = 19.3$ ); Section D's was 82.21 ( $SD = 19.4$ ); Section E's was 72.86 ( $SD = 23.5$ ).

**Table 6**  
*Percentage of Students' Motivation for Completing Reading Attributed to Grades*

| Condition   | Percentage of Motivation |       |
|---|--------------------------|-------|
|   | Mean                     | SD    |
| Assigned minutes<br>(Sec. A) (n = 21)                     | 28.10                    | 24.40 |
| Personal goals<br>(Sec. B) (n = 16)                       | 28.44                    | 21.50 |
| Specific chapters, reported<br>(Sec. C) (n = 29)          | 27.34                    | 22.60 |
| Specific chapters, unreported<br>(Sec. D) (n = 47)        | 18.43                    | 18.00 |
| Specific chapters, unreported<br>(Sec. E-Honors) (n = 49) | 16.02                    | 15.50 |
| Total   | 21.54                    | 20.00 |

### **Personal Study**

The final survey question asked students to describe how completing the assigned reading affected their personal study. Responses to this question were coded to reflect positive, negative, or neutral perceptions. An example of a comment coded as positive was "They pushed me to study longer and in a more effective, better way." An example of a comment coded as negative was "Honestly, it has made it more of a duty than a choice. I don't like reading ... just to get a grade and I find myself hurrying through it." An example of a comment coded as neutral was "I've found that there is always something new that I can learn from the readings." Table 7 summarizes student responses. All students responded to this item except for three students in Section C, the section in which chapters were assigned and points were given for reading them.

**Table 7**  
*Student Comments Related to Effects of Reading Assignments on Personal Study*

| Conditions  | Positive  | Negative | Neutral  |
|---|-----------|----------|----------|
| Number of minutes<br>(Sec. A) (n = 21)                    | 18        | 2        | 1        |
| Self-selected goals<br>(Sec. B) (n = 16)                  | 12        | 1        | 3        |
| Specific chapters, reported<br>(Sec. C) (n = 26)          | 20        | 3        | 3        |
| Specific chapters, unreported<br>(Sec. D) (n = 47)        | 25        | 2        | 20       |
| Specific chapters, unreported<br>(Sec. E-Honors) (n = 49) | 28        | 8        | 13       |
| Total Comments and Percentages                            | 103 (64%) | 16 (10%) | 41 (26%) |

Positive comments were made by 64% of the respondents to the question asking how the reading assignments had affected students' personal study. Considering just the graded sections, 79% of the comments were positive, compared with 55% of the comments in non-graded sections. In graded sections, 10% of comments were negative, similar to the 11% negative comments in non-graded sections. Students in the non-graded sections were much more neutral (34%) than students in graded sections (11%). Students in the non-graded honors section made the highest percentage of negative comments.

## Discussion

Six research questions guided this study. The discussion is presented in three sections: reading assignments (first and third research questions), graded and non-graded conditions (second research question), and student perceptions (research questions four, five, and six).

### **Reading Assignments**

Three types of reading assignments were compared in this study—minutes per day, personal reading goals, and assigned chapters. Students who were assigned 30 minutes per day read significantly more than those who were assigned specific chapters. They also read more than those who set personal reading goals, but not at a statistically significant level. This result is consistent with other research that shows that assigning students a specific number of minutes is preferred over assigning a number of books or pages (Fawson & Moore, 1999; Schwartz, 1982). Students in this sample who commented on how reading assignments affected their personal study also supported this finding. For example, one student in Section E (non-graded honors) wrote, “[Another] class has improved my personal motivation to read the most. We have a half hour assigned to study every night, and I try to do at least that.” Similarly, another student wrote, “My first semester class required me to read half an hour a day. I really liked that because it forced me to set aside time to really study each day and not just read a quick chapter before bed if I had forgotten earlier.” Another student reported, “Being assigned to read every day helped me to establish the habit.” In the section in which minutes were assigned (Section A), students were also asked to keep a response journal and were graded on writing about what they read. Several students mentioned the journal in positive ways. A typical comment was “I love the [response] journal we use in our class. It helps me focus on what principles I’m learning and how they apply to me personally.”

### **Graded and Non-Graded Conditions**

Results of this study support Elton’s (1996) conclusion that students perform best when held accountable and their work is graded. Students who were not monitored on their reading (Sections D and E) were significantly less likely to complete their assigned reading before class than students who were held accountable (Sections A, B, and C). A greater percentage of students in graded sections made positive comments about how reading assignments affected their personal study habits than students in non-graded sections. It is important to note that the same person taught both non-graded sections, which could have been a contributing factor in these results. However, the percentages of neutral and negative comments made by students in these two sections differed enough to indicate that instructor effect was not the only factor that could explain these differences.

A significant difference was found between students who were graded on reading assignments and those who were not in the percentage of motivation they attributed to obtaining good course grades. Although

the Tukey analysis did not reveal significance, there was an approximate ten-percentage-point difference between the sections in which reading assignments were graded (A, B and C) and sections in which they were not (D and E).

No significant differences were found related to whether reading assignments strengthened students' personal learning. However, student comments did reveal insights into how grading procedures affected their personal study. Many students in ungraded sections expressed the feeling that being asked to complete specific chapters in advance of class helped their study. For example, one student said, "I didn't do much personal study before entering a religion class, but class assignments have motivated me to set a habit of reading each morning." Some students in non-graded sections expressed preference for grading of reading assignments. One student wrote, "I've found that when there are self-assessments or tracking logs required it helps me increase the amount that I study." Another student said, "I probably would read more if it were an assignment, so now that I don't have to, I don't do it."

Students in Section E (the honors section) reported more negative feelings about reading assignments than students in any other section. Perhaps their negative attitudes were because the reading assignments in the honors section were non-graded and honors students tend to be more grade-oriented, wanting to receive credit for their efforts. On the other hand, this result could also indicate that many of these students were self-motivated and did not need assignments to encourage reading.

### **Student Perceptions**

The overwhelming majority of students reported that their out-of-class reading was beneficial to learning. Similarly, a large percentage of students reported that out-of-class readings affected their personal study in positive ways. These results seem to validate the widespread practice of assigning students to read outside of class.

Students reported that one-fourth of their motivation to read was due to grades. While this finding may represent their primary motivation, other factors were also involved to motivate these college readers. Wigfield and Guthrie (1997) have claimed that students may be motivated both externally and internally.

### **Limitations and Directions for Future Research**

Several limitations to this study exist. First, since students were not randomly assigned to the different sections, it is possible that the members of the sections were not equivalent at the outset of the study. A second weakness is that those who responded to the survey did so by

choice, so it is not clear whether non-respondents shared similar feelings. A third limitation is that the survey did not take into account that students might be taking additional classes similar enough to confound the results obtained. Fourth, although there were significant differences between groups, it is important to note that the instructor in the class may have been a more important factor than the method of grading reading assignments. For example, instructors might assign students 30 minutes of reading each day but communicate this assignment in such a way that they obtain significantly different results from the instructor who assigned minutes in this study. As stated earlier, an important influence on how students react to assignments depends on how the assignment is framed (Latham, Erez, & Locke, 1988). A fifth weakness in this study is that because it was conducted over only one semester, results cannot predict students' long-term study habits. A sixth limitation is that this study considers only one requirement; a typical course may have many assignments that involve out-of-class reading. Finally, this study was completed in a religion/philosophy class at a church-affiliated university where students may already be motivated to read material of a religious nature. Different results could have been obtained in other academic courses at the same university or in religion/philosophy courses at institutions with no religious component. These seven weaknesses are limitations because any one of them, or a combination of them, may have affected the results of the study. Results of this study should be read with caution because a study designed without these limitations may contradict these findings.

Future research could address the limitations of this study. Although randomly assigning students to various sections is not feasible, more sections could be included in the sample. To increase response rate, students could be surveyed in class rather than online. As part of the survey, students were asked to evaluate the relative influences of various courses (past and present) on their responses. Instructor differences, while always an issue in multiple sections, could be minimized through classroom observations and instructor interviews considering teaching practices. A future study could follow several students over multiple semesters in various courses to examine long-term effects. A follow up study could determine how other classroom requirements (e.g., quizzes, tests, or papers) affect out-of-class reading. This study should be replicated at a completely secular institution.

In the survey used in this study, students were asked three questions requiring them to specify percentages—what percentage of reading they completed before class, what percentage of their motivation they attributed to getting a grade in class, and what percentage of their

reading benefitted their learning. While such percentages may be helpful, the results lead to more questions that need to be explored. If readings were not completed before class, were they completed at all? If only one-fourth of motivation was attributed to earning a grade, what other sources of motivation were present and to what degree? Were these motivators external or internal? What other elements of the course also benefitted student learning? Some students reported a low percentage of time that readings benefitted their learning. Why did some students view the readings as not beneficial? For those who did claim readings were beneficial, in what ways did course readings help them?

Future research is necessary to examine the impact of various reading assignments, a variety of graded and non-graded conditions, and student perceptions because assigned out-of-class readings constitute common practice on university campuses. Instructors need to give these assignments with confidence that they are using the most effective methods. One goal of general education courses is to expand the horizons of students as they gain a liberal education. When out-of-class reading assignments can be given more effectively and efficiently, instructors and students can move more surely toward this goal.

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## Appendix

### Reading Assignment Questionnaire

1. On average, how many days each week do you read assigned reading? \_\_\_\_ days
2. On average, how many minutes do you read assigned reading each day? \_\_\_\_ minutes
3. Approximately what percentage of the reading that is assigned in your class do you read before coming to class? \_\_\_\_ %
4. Approximately what percentage of your motivation to read would you attribute to getting a grade in class? \_\_\_\_ %
5. Approximately what percentage of the time do you feel your assigned reading benefits your course learning? \_\_\_\_ %
6. What other information can you share about how the reading assignments in your class have affected your personal study?

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