USEED REPORT: DO FREE TEXTBOOKS MATTER?

An Exploratory Open Source Study
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An Exploratory Open Source Study

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Gratitude

On behalf of the student participants, a hearty and heartfelt thank you is in order. The Student Participants not only verbally expressed their gratitude, but they also demonstrated it through great measurable efforts. Thank you to each person that donated to help explore whether or not free textbooks matter; from the eight-year old Ms. Miami Ceyphes, who donated five dollars, to the most reluctant naysayer that donated $50, THANK YOU from Dr. T. Hambric (Principal Researcher) and the Student Participants.
ABSTRACT

The DCCCD Learning Framework discipline's charge is to help students find strategic and motivating ways to be successful in college. The one missing observation is free textbooks. In this study, “Do Free Textbooks Matter? An Exploratory Open Source Study,” the researcher investigates whether or not having free textbooks manifests into measurable student motivation and success. The following are the study’s findings:

1) 96% of the participants preferred to have free textbooks. 2) 72% of participants claimed that having free textbooks was an added source of motivation. 3) Of the 72% of participants that claimed free textbooks added to their sources of motivation, 62% of the participants were able to corroborate their claims with written expressions of added study time and engagement with the resource. To further collaborate students' claims of being more motivated, and to investigate if more motivation translated into student success, the researcher measured past, classroom collective success rates with current collective success. In Fall of 2016, the researcher’s past students, who did not receive free textbooks, scored a collective GPA of 3.17. This average includes eight letter grades of D. Free textbooks were given to the researcher’s current students/participants (Fall 2017). They scored a collective average GPA of 3.26 with only four letter grades of D. This study concludes that free textbooks do matter and translate into motivation. Students are more motivated as a result of free textbooks, and that motivation manifests into measurable, successful actions. As of January 10, 2018, the textbook used in this study will stream for FREE to all students.
Do Free Textbooks Matters? An Exploratory Open Source Study

Introduction and the Problem

The DCCCD Learning Framework Discipline is charged with helping students be successful in all college classes. The one missing observation is free textbooks. When asked about the struggles of academic success, students often cite no funding for books or lack thereof as one of their main reasons for not succeeding in their classes. Students tend to break copyright laws by copying their peers' textbooks, utilize library reference books that are limited to library use only, or go the entire semester without having a textbook at all. This lack of funding hinders students' ability to pay for their books in general, or at the very least, pay for their books promptly. As a result, students are ill-prepared or not prepared at all for their classes, thus reducing their overall success.

Goals and Objectives

The primary purpose of this study, “Do Free Resources Matter? An Exploratory Open Source Study” is 1) to explore whether or not free textbooks motivate students to be more successful, thus rendering free textbooks as a warranted need. Motivate is measured as students' increased attempts to be successful. Warranted is measured by students' increased fruitful attempts to be successful. There are two secondary goals. They are a.) to make more people aware of Open-Education Resources and there effects on student success and b.) to gain administrator support and embracement of Quality, Open Education Resources.

Methodology

The methodology is qualitative and quantitative in nature. The researcher collected data through open-ended survey questions, then used grounded theory coding, coupled with quantitative calculations for individual analysis and overall conclusions. Finally, grade calculations were used to measure average GPAs. The following are the specific research steps that were followed:
• Fifty-nine (59) students enrolled in the researcher’s Learning Framework (LF) classes, and 59 free textbooks were printed and administered to 59 participants.

• On the third day of class, after orientation, students were given a reflection survey, which consisted of the following questions:
  
  o Would you be motivated if you received a free textbook for class?

  o What do you currently do to be successful in class? If applicable, name at least three things.

• Participants were then given treatment throughout the 8-week semester (regular class instruction).

• Due to unforeseen logistical circumstances, starting at the beginning of week four, the participant's classroom environment changed from lecture to online. However, the students still remained with the researcher as their instructor.

• At the end of the semester, 57 participants (two dropped) were administered two surveys:
  
  o The first survey, an open and closed-ended survey, asked questions regarding motivation to see if there were any changes in how the participants answered the questions in the reflection survey and to capture any purposefully motivated behaviors (see page 9 for actual questions).

  o The second survey, an open and closed-ended survey, was given to the participants to rate the class and the quality of the book as well.

• Also at the end of the semester, 57 students’ (the experimental group's) final grades and collective GPA were then compared to the 71 students (the control group) that were enrolled in the researcher’s Fall 2016 lecture classes.

• The researcher read and coded all qualitative data. All comments, good or bad were coded.
• On the first survey, the following code labels were used for open-ended questions:
  o  A = “The style of writing motivated me to read the book.
  o  B = No worries about keeping the book clean for resale; I wrote directly in the textbook;
      I comfortably wrote in the book without worrying; No worries now, because I normally
don’t have a textbook.
  o  C = I highlighted and engaged with the textbook; I took notes outside the textbook.
  o  D = Getting a free textbook demonstrates the teacher cares, and I felt obligated to do
      well.
  o  E = Interacted with the book beyond what was required; I learned deeply and I was able
to deeply engage.
  o  F = I used the activities to guide my reading.
  o  G = I was able to engage with the text often; I was able to keep deadlines.

• On the second survey, regarding a critic of the book, the following code titles were used for the
  open-ended portion of the questions:
  o  Comfort, Lure, Active Engagement - Likes =

      ▪  The conversation style was engaging. It seemed like we were physically in the
          classroom with an instructor. The book was not boring. It was interesting. It
          was easy to understand. It was humorous. It was written like it was directed
          towards you [on a personal level]. It was like she [the author] was talking directly
to us [the reader]. It does not feel like a textbook.

  o  Quality, Relevant, Credible, Practical - Likes =

      ▪  This book was a good tool. It is a useful book. The material is relevant. The
          booked helped me get organized. I like the practical steps that help you learn.
I learned deeper. The book had great section breaks [the author advises the students to stop and break before reading certain sections, depending on the intensity of the previous or upcoming reading]. It was well written. The spaces to write and engage were great. All books should be more like this.

- **Content Development - Dislikes**
  - Clearer subject breaks are needed; Word index needed; Sometimes a bit confusing; Use chapter focus points for all the chapters; More examples needed.

- **Aesthetics - Dislikes**
  - The page number and table of content needs aligning; Improve the graphics that are fuzzy; Softcover—I did not like the spiral bound, but saw its benefit due to in-text engagements.

- **Success, Persistence - Future Usage**
  - Yes, I plan to keep my book for future use.
  - No, I will not use the book in the future.

  - All codes were then calculated by the number of participants responding to a particular code, and then analytics were applied.

**Results and Discussion**

The results of this study were exciting because it accepted the researcher's first hypothesis but rejected her second hypothesis. Both the supported hypothesis and the rejected hypothesis were positive results that supported this research's goals and objectives. The researcher's hypotheses were:

- **Hypothesis I** - More than 50% of students/participants will be more motivated due to free textbooks.
• **Hypothesis II** – Less than 30% of the students/participants who claimed that free textbooks would further motivate them will actually add measurable actions to their study routine. Thus, there will be no marked change in their collective GPAs.

The study commenced with 59 participants, and of the 59 participants, 57 finished the course. The two participants dropped the class without warning. Of the 57 participants that remained in the study, 54 returned the first survey and 52 returned the second survey. Fifty-four students were asked the following questions: 1) Would you prefer to have free textbooks? 2) Now that you were given a free textbook, did having it make you more motivated to study? 3) Did you do anything different to succeed in class because you had a free textbook? If yes, provide examples of what you did, on purpose, to be more successful.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Would you prefer to have free textbooks?</td>
<td>96%</td>
<td>4%</td>
</tr>
<tr>
<td>2. Now that you were given a free textbook did having it make you more motivated to study?</td>
<td>72%</td>
<td>28%</td>
</tr>
<tr>
<td>3. Did you do anything different to succeed in class because you had a free textbook? If yes, provide examples of what you did, on purpose, to be more successful.</td>
<td>62%</td>
<td>38%</td>
</tr>
</tbody>
</table>

**Question number one** helps one to understand the number of students that would enjoy receiving a free textbook. But, when subtracted from the results from question number two, one can measure just how many students would NOT be motivated due to free textbooks—24%. **Question number two** represents students who claimed to be more motivated before being given the book. **Question number three** represents the number of participants that claim to be more motivated in number two, and actually corroborated that claim by physically adding study time and engagement with the free resource—62%.

The second survey asked the students to critique the class and also the book. The following is a chart of the questions and the results. The discussion will immediately follow.
Here, it is important to discuss the book’s results, because it appears that the book’s unusual style and presentation may have negatively skewed the results. For example, 52 out of 57 participants returned the second survey, and of the 52 participants, 100% stated that they enjoyed the book. When broken down into two “Like” Categories, in category one, Comfort, Lure, Active Engagement, 83% raved about the books’ Conversation Style, First-Person Effects, Polarized and Personal Engagements and Ease of Reading and Understanding. In category two, another 67% liked the Quality, Relevance, Credibility, and Practical use of the book. Participants stated that they were actively engaged and that they learned much deeper beyond the assignments and reading requirements (see page 8 for all specifics). Since the participants like the book so well, one cannot help but pose the question, “Can this textbook be compared to a free textbook that is written in the third person, less engaging, and without humor? Would it still motivate students to purposefully plan for success, simply because it’s free? Yes, it can. But that would need to be completed in another study. But for the sake of Hypotheses I and II, presented in this study, both questions were answered.

- Hypothesis I - More than 50% of students/participants will be more motivated due to free textbooks.

According to the data, 72% of the students claimed they would be more motivated to succeed if given a free textbook. In this study, motivation was measured by students increased attempts to be successful. Of
the 72% of participants that claimed to be more motivated, 62% followed-up their claims with increased attempts to be successful. As a result of the data, Hypothesis I was accepted. The second hypothesis stated:

- **Hypothesis II** – Less than 30% of the students/participants, who claimed that free textbooks would further motivate them, will actually add measurable actions to their study routine. Thus, there will be no marked change in their collective GPAs.

According to the data, 67% of the students added measurable actions to their study routine. Thus, the data support rejects Hypothesis II. This rejection, however, is welcomed because it means that 37% more students manifested motivation into action than what the researcher had originally believed, but now that leaves the notion of collective GPAs.

In Fall 2016, the researcher's students paid for their books, copied them, or did not have a book at all. Their collective GPA was 3.17. The participants of this study, Fall 2017, were all given a free textbook. The collective GPA of this class was 3.26. In the Fall 2016 classes, there was a total of eight (8) final letter grades of D or worse. In the Fall 2017 classes, there was only four (4). To account for the differences in the total number of students, in the Fall of 2016, the data shows that for every 9 students, one would earn a D or worse. But in the Fall of 2017, the data shows that for every 14 students, one would earn a D or worse. So one can see that free textbooks given in Fall 2017 may have played a major part in students' motivation and ultimately their success.

**Conclusions**

In summary, the main purpose of this study, “Do Free Resources Matter? An Exploratory Open Source Study” was to explore whether or not free textbooks motivate students to be more successful, thus rendering free textbooks as a warranted need. **Motivate** was measured by students increased attempts to be successful. **Warranted** was measured by students increased fruitful attempts to be successful. Clearly,
both of those goals were met. The secondary goals were to a.) Make more people aware of Open-Education Resources and their effects on student success; and b.) To gain administrator support for Quality, Open-Education Resources. This report is available at the Eastfield College Library in the Lib pages at http://libguides.eastfieldcollege.edu/ under the category of Open Education Resources. The researcher hopes that the results of this study gain the attention of the DCCCD administrators and their financial support to fund free textbooks for all DCCCD Students.

**Research Recommendations**

It is the researcher’s recommendation to further study the idea of “Manifested Motivation” via free textbooks. Further, the researcher would like to see additional studies on traditional third-person textbooks compared to QPOR Publications. QPOR textbooks are Quality Protected Open Resources that are **FREE** and:

- *Written in the first person*
- *Radiates quality*
- *Written in conversation style*
- *Thematic in nature*
- *Highly Engaging*
- *Personal*
References