

THE INCREASING PROBLEM WITH TEXTBOOK PIRACY

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ABSTRACT

Textbook piracy is a continuous problem that has evolved as the digital era has progressed. Digital rights management (DRM) technology and legal action against pirating websites have been implemented to combat textbook piracy. However, the cheapest option to get a textbook is to download a copy from the Internet, as opposed to renting or purchasing a used copy. This paper conducted a qualitative study to investigate the current problems with student textbook piracy and look at the repercussions on the education industry. The purpose of this research is to assess academic textbook piracy, including its sources, effects, and proposed remedies. This qualitative study includes comments from students, faculty, and textbook publishers regarding their thoughts and opinions on textbook piracy.

INTRODUCTION

Imagine you are a Business Management student. The semester has just started, and your professor tells you that you need to buy an expensive textbook for the class you will only need for a short period of time. One of your friends also told you about a website where you can download the book for free. Tempted with the thought, you are faced with a dilemma. Buy the book or get it for free with the click of a mouse? For many, the latter option may seem like the best choice.

The unlawful use, replication, or distribution of copy-protected textbooks is textbook piracy. Students have turned to these illegal measures because of the rising cost of textbooks. Textbook piracy has been a topic of concern for many years. According to the Canadian Alliance of Student Groups in 2020 (Nemec, 2020), 50% of postsecondary students in Canada reported accessing free or inexpensive alternative resources, such as illegally obtained textbooks. In 2021, 78% of US students purchased course materials, 35% rented, and 30% downloaded materials for free (Follett, 2022).

In addition to rising school costs, the average cost of textbooks has risen approximately four times faster than the rate of inflation (Pilgrim, 2020). Individual textbooks routinely exceed \$200 and because of this high cost of textbooks, 65% of students skip purchasing their required books. (Pilgrim, 2020).

Internet piracy has been a major concern for decades and can be traced back to the early days of the Internet. The development and evolution of online piracy have been influenced by technological advancements, changes in consumer behavior, and legal and governmental responses.

LITERATURE REVIEW

In an effort to combat Internet piracy, Congress approved the Digital Millennium Copyright Act (DMCA) in 2004. The DMCA provides copyright holders with legal protection and a mechanism for the removal of copyrighted content from Internet sites (Johnson, 2020). In the 2010's, online piracy continued to increase as new technologies and file-sharing sites were created. In addition to The Pirate Bay, many other sites arose that allowed users to download even very large files using torrents. These new sites saw a 1390% increase from 2016 – 2019 (Spajic, 2023). The ultimate contributing factor to online piracy has been the increase in users' understanding and feeling comfortable working with technology. In addition, the increased speed of the Internet has significantly decreased the amount of time it takes to download unlicensed copyrighted material.

Current State of Textbook Piracy

Digital technologies have made it easier to copy, share, and distribute copyrighted materials, including textbooks. Google and other search engines have made it easy for students to find the textbooks they require and provide them with a link to download the material. Many of the textbooks are in simple “.pdf” format which can be directly downloaded to any digital device. While not all copyrighted textbooks that are available online can be easily located with a simple browser search, continued diligence typically results in locating the needed textbook (Hati et al., 2020).

Because textbook piracy is an unlawful and often unreported practice, there is little documentation on its overall scope. Many studies, however, have tried to determine the prevalence of textbook piracy in academia.

Use of digital resources continues to increase. In 2020, one of every five purchased materials were digital products, a huge increase from the ratio of one of every seven paid materials in 2019. From spring 2019 to spring 2020, the percentage of students who downloaded free textbooks doubled, from 14% to 26% (Nemec, 2020).

Many factors influence students' pro-sharing attitude. Some of these include their immersion in technology and the lack of a deeper moral understanding of why watching movies online or downloading music is illegal. A strong majority (70%) of younger online users find nothing wrong with online piracy (Vuleta, 2023).

According to digital piracy statistics, the millennial generation is most likely to consider piracy normal. Several factors contribute to this normalization, such as their pro-sharing attitude and preoccupation with the online world (Valuta, 2023). Table 1 (Follet, 2022) shows how textbook piracy has been increasing at an alarming rate over the last few years.

Year	% of Pirated Textbooks
2019	13%
2020	26%
2021	30%

Adapted from Follet (2022). Outcomes made accessible: Improving outcomes and retention while lowering the cost of college learning materials. *Follett Higher Education White Paper*. [chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://highereducation.follett.com/insight-content/outcomes-made-accessible-improving-outcomes-and-retention-while-lowering-the-cost-of-college-learning-materials/](https://highereducation.follett.com/insight-content/outcomes-made-accessible-improving-outcomes-and-retention-while-lowering-the-cost-of-college-learning-materials/) Accessed December 4, 2023.

There are several legal ways to acquire a textbook. Typically, new textbooks are more expensive, but they may contain updated content and supplementary materials. Used textbooks can be a cost-effective alternative, but they may not be in ideal shape and might not include all the resources that come with new textbooks, such as pass codes to online homework assignments. Renting textbooks is becoming an increasingly popular alternative for students seeking to save money. Most campus bookstores and online sellers provide rental alternatives, allowing students to utilize the textbook for a semester or year at a lesser cost than purchasing a new textbook. If a student does not need to keep the textbook once the course has ended, textbook rental may be the best choice. E-books are downloadable digital textbooks that can be read on a student's electronic device. They are usually cheaper than printed textbooks and can be accessed from anywhere there is a web connection.

METHODOLOGY

To investigate the issues of textbook piracy a qualitative study was conducted. Qualitative research is effective when researching a complex subject such as textbook piracy, which is illegal. It is difficult to study this issue outside the context in which it occurs (Benbasat et al., 1987). It may be difficult to get honest answers to questions regarding textbook piracy, therefore the qualitative method will allow the researcher to conduct probing questions (Benbasat et al., 1987).

In this study students from the author's classes were asked to respond to a question posted in a discussion forum. Out of approximately 200 students 121 participated. Students were junior and senior undergraduates, who it was felt would have had more exposure to textbook piracy. The discussion forum proposed the following: "I have found that there are many sites online where you can download .pdf versions of textbooks for free. Have you ever, or would you ever do this?". Faculty members were then asked to give their input on textbook piracy and if they would attempt to deter their students from downloading pirated textbooks or encourage them. Finally, five representatives from textbook publishers that were contacted were questioned. Open-ended questions were posed to the representatives to understand the depth of the problem

with pirated textbooks in the publishing industry and how it has affected the industry and their business plan for the future. The study was conducted at one of the Historically Black Colleges and Universities (HBCUs). Students in HBCUs tend to be more financially disadvantaged, therefore a heightened knowledge of textbook piracy could be present.

FINDINGS

Below are the findings from the interviews with the students, faculty, and textbook publishers. Throughout the study students identified reasons why they pirated textbooks. After reviewing the comments from the students, several areas were identified that caused them to pirate textbooks, including the costs of the textbooks and the need for the textbook for the course.

Costs of textbooks

Textbook piracy is a global issue affecting students everywhere. The high cost of textbooks continues to be a significant motivation for students to utilize pirated textbooks (Weisbaum, 2016). Students are concerned about their grades if they do not have the required textbook.

Although textbook piracy is still in its infancy, it has already had a significant influence on the way students access and utilize educational resources. As technology evolves, it is likely that textbook piracy strategies and techniques will also evolve (Gakhar & King, 2020).

According to Welding (2023), the high price of books was the top reason given by students who decided not to obtain the required texts, however 38 percent said they did not want them or did not believe they would need them.

The cost of printed textbooks has risen by 65 percent over the past decade (Pilgrim, 2020). In order to recover their investment and compensate for lower sales, academic publishers have established high prices for college textbooks.

Normally, students pay hundreds of dollars per semester for tuition alone, often through student loans. The high cost of textbooks adds substantially to student loan debt. According to a study, 65% of students reported not acquiring a required textbook due to its high cost, with 94% of those students reporting that they were concerned that it would affect their grades (Welding, 2023). These high costs also have a greater impact on low-income students who already have trouble trying to make ends meet.

Students are often caught in a lose-lose situation. They need the textbooks for class, but the costs are prohibitive. As long as the market is controlled by a handful of publishing giants that profit from students' necessities, it could stay that way. Students have to find ways to pay for textbooks. Around one-third (30%) of students reported paying for textbooks with financial aid (Welding, 2023).

The overall student loan debt in the United States hit \$1.7 trillion at the end of 2022, with the average student loan debt after graduation being \$37,574. (Welding, 2023).

According to a Student PIRGs poll, 15% of students reported borrowing money to pay for textbooks, with an average loan amount of \$1,205. According to the poll, 48% of students

chose not to purchase a required textbook because of its high price, with 29% of those students saying that they had postponed or delayed medical care to pay for textbooks. Students also claim that to purchase their textbooks they had to miss meals and family visits (Lederman, 2018).

High textbook prices may have long term impact on students. Ultimately this could prevent the student from investing in their future by buying a home or starting a business. According to the National Bureau of Economic Research, students are 1.6% less likely to purchase a home by the age 30 for every \$1,000 increase in student loan debt (Hati et al., 2020).

Large amounts of student loan debt can also affect students' career options and choices, as they may be pressured to pursue higher-paying employment rather than pursuing their dream job in order to repay their loans. Students who cannot afford to purchase the required textbooks may not have the appropriate tools for academic success, ultimately decreasing their future employment opportunities and earning potential (King & Gakhar, 2019).

The high cost of textbooks can pose substantial academic and psychological difficulties for students. The stress of being unable to afford necessities such as food and shelter can negatively impact a student's mental health. Financial difficulties may increase anxiety and cause depression, making it more difficult for students to concentrate on their education (Hinojosa, 2020).

Because of the aforementioned issues, some students believe that obtaining textbooks illegally through online piracy is the only option they have to get the required materials they need to complete their education.

Need for Textbook

Textbooks are a crucial component of many courses because they offer students the information and background knowledge necessary to comprehend course material. Textbooks may also include supplementary resources, such as study guides, Internet access codes, and practice examinations. Yet, the extent to which textbooks are necessary can vary among courses, teachers, and schools. Some courses may need students to purchase many textbooks, while others may heavily rely on lecture notes, Internet resources, or other types of teaching materials.

Professors may ask students to purchase textbooks they never use in class for a variety of reasons. Instructors may require students to purchase textbooks to guarantee that they have access to all the course information, even if it is not specifically taught in the class. Teachers may believe that the students will be better prepared for examinations and other assessments and will have a solid foundation of knowledge about the course available to them.

The number of students who purchase textbooks that are never used in class depends on a number of factors, such as the teaching style of the teacher, the course subject, and the usefulness of the textbook to the course subject.

Underutilized textbooks are quite prevalent, and students may be electing not to purchase textbooks because of financial concerns. Before requiring textbooks, teachers should consider the cost of textbooks and the possible financial burden it may have on their students. Teachers often do not consider the financial position of the students.

More than a third of students reported not having their prescribed textbook on the first day of class because they wanted to know if the textbooks listed in the syllabus or at the bookstore would be necessary for the course (Koenig, 2019).

In recent years, the proportion of students who have the majority of their textbooks purchased on the first day of class has decreased. In 2019-2020, only 34% of students had the majority of their textbooks before the start of sessions. 67% of students who did not receive their textbooks by the first day stated that they waited to determine whether the materials were necessary (Nemec, 2020).

Some students lack access to all materials in textbooks. In 2019-2020, around 28% of students report not obtaining at least one of their required textbooks, up from 25% in 2018-2019. Although 57% of this group identify price as a factor, they also cite other reasons, such as not desiring the textbook or not believing it was necessary (45%), other students saying it was unnecessary (35%), or the professor saying it was unnecessary (29%) (Nemec, 2020).

Sixty percent of respondents indicated they did not believe their decisions had affected their grades. But around two-thirds agreed or strongly agreed that their academic performance would improve if they had access to all textbooks on the first day of class (Lederman, 2018).

Because professors often require students to purchase textbooks that are never or rarely used in the course is another reason students claim for resorting to textbook piracy. “Students want to wait to see if the professor is really going to use it and if it’s really going to be necessary for class,” says Lisa Malat, COO of Barnes & Noble College (Welding, 2023).

The high costs, along with students’ perceptions of the necessity of a textbook are reasons students delay or even avoid purchasing textbooks. (Welding, 2023).

By obtaining illegally pirated textbooks, these problems are no longer a concern for the students, so they feel better prepared for class and feel their overall performance can improve. It no longer matters if the textbook will be used in class. If it is free, then it is of no concern to them. Table 2 (Vorias, 2021) shows the reasons students avoid purchasing textbooks.

Why Students Avoid Textbooks	Percentage
Students who delay or avoid purchasing required materials	85%
Students who say this decision negatively impacted grades	50%
Students who cite cost as a reason for not purchasing	91%
Students interested in including the costs of textbooks with tuition	78%

Adapted from Vorias, T. (2021). College textbooks: The final blow of higher education’s affordability crisis. *The Michigan Daily*. August 10, 2021. <https://www.michigandaily.com/opinion/columns/college-textbooks-the-final-blow-of-higher-educations-affordability-crisis/> Accessed Jan 18, 2023.

Methods of Textbook Piracy

As students' knowledge of their ability to get their textbooks for free increases, it becomes an easy decision for them. The legal methods mentioned above are costly and the pirated option is free.

Campbell's Biology, eleventh edition, is one of the most popular biology textbooks among university students worldwide. A new copy of the eleventh edition of Campbell Biology, for instance, might cost more than \$200. A digital version, or e-book, of the same edition can be much less expensive, starting at approximately \$55; a new loose-leaf version on Amazon costs more than \$90 (Powell et al, 2021). However, no matter how low the costs become, the .pdf version of the book can still be easily found on the Internet for free. For a student, saving even \$55 can have a positive impact. Even students without financial difficulties may be unwilling to pay for something they can get for free. This generation of students have been raised in a time when music, movies, and games are freely available through online piracy. The generation is also tech savvy and has little problem finding what they are looking for. There seems to be little or no ethical concerns from the students or any fear of legal ramifications.

Pirated textbooks appear on a variety of sites, including "pirate libraries" that show in Google searches, unlawful PDFs on eBay, counterfeit physical copies on Amazon, hidden file-sharing groups on Facebook, and the sharing of USB drives by individuals. (Jenkins et al, 2020).

In November 2022, those operating Z-Library, a popular site for pirating textbooks, were arrested and charged with various crimes including copyright infringement, wire fraud, and money laundering (Woodcock, 2022).

Library Genesis was a site that was operated by Z-Library, but they were able to keep a mirror site running to allow continued access to pirated textbooks (Woodcock, 2022). As sites are identified and closed, others open to take their place. In many cases it is the very same site that has just been renamed and rebranded.

Many times, textbooks can be found with a simple Google search. Other times students have to be more tech savvy to search the Internet or the dark web, but with a little perseverance, pirated copies can usually be found. The author conducted a search of 30 textbooks that were currently being used in the business school and was able to find pirated versions of each.

Peer-to-peer (P2P) file-sharing networks and chat forums also provide access to pirated textbooks. Social media sites may also be a way to find pirated textbooks. Students can search social media platforms for organizations or sites that specialize in distributing pirated resources, such as textbooks. Some groups and pages may be private and require an invitation or approval to join. By far the easiest way to obtain pirated textbooks through social media is to post a comment asking if someone has access to a textbook or can tell you where to find one.

Reddit is another popular forum where you can find the textbooks you are looking for. First you can simply search www.reddit.com for the textbook, If the initial search is unsuccessful, you can simply create a post asking for someone to provide you with the specific textbook, by including the book name, author(s), edition, and ISBN.

Not all textbooks can be located online for free download. However, this does not mean that a textbook cannot be obtained for free. There's a good chance other students are also looking for the same book, which cannot be found on Reddit. Reddit also provides students with instructions for finding free textbooks (Reddit, 2023). Students can also utilize the non-technical way of pirating textbooks by simply using a copy machine to make a duplicate copy for a classmate.

When textbooks are purchased online through websites such as Amazon or through a book publishers' website, they are protected through digital rights management (DRM). DRM involves encrypting digital content with a unique key, so that only authorized devices may access it. This can include limits on the total number of devices that can access the material, as well as limitations on copying, printing, or distributing the content. DRM solutions can also be used to prevent content modification and reverse engineering. DRM is designed to protect the intellectual property rights of content creators and distributors, and to generate income through the sale or licensing of digital material. DRM is widely used in the digital textbook market (Reddit, 2023).

Typically, leased versions of textbooks arrive in ".azw4 format", whereas the purchased editions arrive in ".mobi format", both of which are DRM-protected. Certain piracy websites instruct users on how to remove the DRM that is intended to protect the copyright. DeDRM is a method to remove Digital Rights Management (DRM) restrictions from digital content. This allows the content to be shared on any device (Reddit, 2023).

DeDRM is a controversial topic, as it may violate copyright laws and is generally seen as unlawful. DeDRM technologies are not endorsed by e-book publishers or authors, and their use might have legal and ethical repercussions. Users should evaluate the possible implications of using DeDRM technologies and to prioritize ethical behavior and intellectual property protection (Reddit, 2023). To use DeDRM you need to have a specific level of technology knowledge, but instructions easily found online.

POTENTIAL SOLUTIONS

There are potential solutions available to curb the increasing amount of textbook piracy. Open-source textbooks are freely available to students. If professors would adopt these textbooks students would not have to pirate a textbook for their class. Another potential solution is to appeal to the ethical issue of textbook piracy. It is against the law and breaking the law has potential negative ramifications. Ethical considerations were useful in preventing the pirating of music (Nemec, 2020). Government programs have been created that may reduce the amount of textbook piracy. Most students agree that they would prefer textbooks to be included in the cost of their tuition (Welding, 2023). Finally, textbook publishers are playing their role by offering books to rent at a much more discounted price.

Open-Source Textbooks

A small number of schools have adopted open-source resource texts to address access and cost concerns. This eliminates the total cost of teaching materials for the student. Only around 6% of schools have adopted this curriculum model to date (Pilgrim, 2020). Open-source material is peer-reviewed academic content distributed under an intellectual property license permitting free use.

Open-source textbooks have the potential to save money for students. Open-source book proponents, such as the Bill & Melinda Gates Foundation and the Student Public Interest Research Group, emphasize the affordability of such textbooks as a solution to the escalating cost of college tuition. Textbook publishers adamantly oppose the use of open-source textbooks because it threatens their overall business model of selling textbooks to students (OnlineSchools.org, 2023).

OpenStax has served over 14 million students with its free textbooks. More than 36,000 instructors have adopted OpenStax textbooks. OpenStax textbooks are now used in 60% of universities that are degree-granting (Falk, 2020). In 2020, OpenStax has saved students approximately \$1.2 billion in textbook costs (Falk, 2020).

Open-source textbooks are a valuable resource for universities and a great benefit for students, however these benefits can only be realized if instructors at universities choose to use open-source material as the textbook for their courses. Table 3 (Jenkins et al., 2020) shows a list of open-source resources available.

Table 3 Open-Source Resources	
Source	Offerings
OpenStax	Operated by Rice University providing peer reviewed, quality open textbooks with interactive components
Open Textbook Library	Hundreds of complete, open college-level textbooks collected by the University of Minnesota.
BC OpenEd	A curated collection of open textbooks, many reviewed by British Columbia faculty.
WikiBooks	A project of the Wikimedia Foundation, this collection of group written textbooks in a variety of sources follows rules similar to Wikipedia.
Project Gutenberg	Find the full text of classics and public domain works from the first massive eBook creating organization in existence. Nothing fancy here, just files with the full text.
Google Books	Some books presented in this mass conglomeration of scanned books are fully available, most are excerpted.
American Institute of Mathematics	A list of open textbooks in various subdisciplines of Mathematics approved by the AIM editorial board.
Aviation Handbooks and Manuals	Open Textbooks on Aviation from the Federal Aviation Administration (US).
FreeBooks4Doctors	Free medical textbooks.
Lyryx Open Textbooks	Lyryx offers high-quality open textbooks in the fields of accounting, mathematics, and economics. They also have optional added (paid) resources such as homework and quizzes to accompany the open textbooks.
Bloomsbury Academic	Bloomsbury is a well-respected and longtime UK publisher who has released some of their academic titles for open access/open education.
Adapted from Jenkins, J.J., Sánchez, L.A., Schraedley, M.A.K., Hannans, J., Navick, N. & Young, J. (2020). Textbook broke: Textbook affordability as a social justice issue. <i>Journal of Interactive Media in Education</i> , 2020(1), p.3.	

Appeal to Students' Ethical Considerations

There are also several ethical issues that students may face when pirating textbooks. Copyright laws are in place to protect the intellectual property of authors and publishers. Textbook piracy violates these laws. When it involves taking and using another person's work without their consent, piracy can be viewed as theft (Hati et al., 2020). When students acquire these textbooks online for free, they are aware that it is illegal but also aware that there is little to no chance of any repercussion to them. So, it comes down to the ethical issues. But when students weigh the ethical issues with the high costs of textbooks, which can often have significant impact on their financial situation, the lure of the free textbook outweighs any ethical concerns they may have (Lakkaraju, 2022).

Students who engage in piracy contribute to a greater culture of unethical behavior. This can continue a cycle of dishonesty and ultimately have detrimental effects on both students which they may carry into other areas of their lives and society as a whole (Hati et al., 2020).

Textbook piracy can hurt the publishing industry by reducing the profits made from textbook sales. This can cause a decline in investment in the research and development of educational materials. It is essential that students understand that piracy is not a victimless crime. Publishers and authors devote significant time and money to creating and producing textbooks. They rely on textbook revenues to finance their work. When students pirate textbooks, they essentially take and use this work without permission, which can have major consequences for the authors of these textbooks (Davis & Bialik, 2020).

However, even with these looming legal and ethical issues, students continue to pirate textbooks. Students of this generation are comfortable with downloading illegal material, such as music and movies, so it is no surprise that this age group continues to resort to textbook piracy.

From the latest Internet piracy statistics, it seems this generation is taking piracy to new levels of popularity. Textbook piracy is just seen as an extension of this. They have never been punished before, so they do not fear any negative ramifications.

THE DANGERS OF TEXTBOOK PIRACY

There are some dangers to downloading pirated textbooks. Recent research by Kaspersky Labs demonstrates that many illegally acquired pirated textbooks include viruses. During the 2021 academic year, 356,000 incidents (Spajic, 2023) were detected in which a user downloaded an infected digital textbook (Spajic, 2023). Kaspersky classified the types of viruses included with pirated textbooks. The most frequently found virus was the Stalk worm, which spreads via USB flash drives and the local network and is frequently the forerunner to a more severe attack. Although Stalk does not exhibit any immediately dangerous behavior, it can facilitate the deployment of further malware by an attacker (Spajic, 2023). Consumers who download pirated textbooks are 28 times more likely to get their device infected with malware or viruses (Spajic 2023). If students are compelled to use illegal sources to find textbooks, they should exercise caution.

Textbook piracy falls under the same legal category as legally downloading copyrighted movies or music. Many of the offers for pirated textbooks are phishing scams, asking for credit card information from gullible victims before allowing them to access the free copy (Powell et al., 2021). Many sites advertise VPNs for the user to purchase to make sure the download is secure, thus another way to extort money from those looking for free textbooks.

Websites that offer pirated textbooks are often not legitimate, as they participate in illicit duplication, sharing, or distribution of copyrighted goods. Downloading pirated textbooks through these websites is a breach of copyright law and may have legal and ethical consequences.

Pirated textbooks may contain errors, omissions, or out-of-date content, which can have a severe impact on the learning and performance of students. The use of pirated textbooks may also restrict students' access to supplementary resources, such as online study aids, discussion forums, and teacher support, which are frequently included in authentic textbooks.

Copyright infringement, which textbook piracy falls under, is illegal and can result in fines ranging from \$750 to \$30,000 (Lakkaraju, 2022). Textbook piracy is illegal and can have serious repercussions, such as criminal prosecution, academic sanctions, and ethical implications. Downloading unlicensed content can also expose students to malware and other security

threats. Students who choose to do this should be very diligent to ensure they are not exposed to these risks.

RESULTS

The result from the study will be presented below, showing student comments, faculty comments, and finally publisher comments. The first results come from students' comments with their experiences with issues that face them and their experience with textbook piracy. Regarding the high costs of textbooks, students made various comments about their experiences with textbook piracy. Textbook prices are a large contributor to textbook piracy. (Weisbaum, 2016).

Student Comments

Textbook costs seemed to be one of the prevailing themes.

Student Comment
<i>The price of textbooks has gotten out of hand and as a result of this, I prefer to download books for free online. The benefits of downloading books include the convenience and affordability.</i>

The following student expresses frustration with the cost of textbooks at the bookstore, so purchasing from online sites such as Amazon gave some cost relief. Renting textbooks was also more cost effective. However, once a site that offer free textbooks was found, that became the method of choice.

Student Comment
<i>The price of textbooks has always been super expensive; my first semester of college I noticed how outrageous the prices were for textbooks in the bookstore, so I purchased my textbooks from different websites like Amazon. Renting or purchasing textbooks I needed for class wasn't even half the price the textbooks were in the bookstore. The purchase of textbooks became a huge weight I got to lift off my shoulders, especially when I came across a website that provided free textbook pdf versions online. The website was super resourceful and came in handy for different classes that I took. For the classes I couldn't find I would stick to Amazon or another website where I am able to rent the book; till this day I still use the free textbook online for my graduate classes.</i>

As previously mentioned, (Lederman, 2018), students may have to choose between food or textbooks. The following student express this concern.

Student Comment
<i>I have had to choose books over a meal plan.</i>

A big concern was that the textbook that was listed in the bookstore or on the faculty member's syllabus may not be necessary (Koenig, 2019), therefore students wait to purchase the textbook after the first day of class. While professors may want students to show up to class on the first day with their books (Nemec, 2020), this frustrates the students, uncertain about which professors will use the textbook or not. Students are concerned about their grades if they do not have the required textbook. This has given way to more textbook piracy.

Student Comment

<i>[One of my professors] requires that we show up to class on the first day with our textbook or we will be penalized. I don't think that's fair because we have all experienced times when we didn't need the textbooks. I always showed up on the first day to hear what the professor says about the book and if we need to buy it or not. Sometimes a professor says it's ok to buy a previous version which is usually much cheaper. I don't want to spend \$200 if I'm not going to use the book.</i>
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Discovering textbooks are required but not used for class has led to student frustration.

Student Comment

<i>Finally, after all these years we are finally heard. Textbooks are outrageously priced. Only purchased to sit on the desk. I have taken so many classes where we didn't even open the textbook. Everything we needed was all there in the PowerPoint or lecture.</i>

The next students have experience with purchasing textbooks that are rarely used. Because of this, students sought online free solutions they felt were easily found.

Student Comment

<i>I have a website where you just input the title/ISBN and the book will be pulled up. I feel justified because I am already paying double the tuition with no textbooks included. Every year we have to purchase a new textbook and they are rarely ever used. Most of the information in the books is online anyways for the most part so why would I pay so much for something I could get for free?</i>
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Although students originally purchase their textbooks when they initially enter college, they find more cost-effective solutions with textbook piracy.

Student Comment

<i>This was one of the issues I have faced during my time in school I started out buying books for every class and it financially drained me, so I switched to downloading my books for class online and it feels like a financial burden lifted off me.</i>
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<i>There were times in my first year where I purchased or rented books I never used, so I have used other alternatives like downloading the book from an online source, or simply taking pictures of someone else's books when I couldn't find a free version. The price of books has gotten astronomical over the years. When I began graduate school, my professor recommended a site called vitalsource.com to find cost effective books online. This was something I found relieving, but wished I knew about it sooner. With other expenses hanging over the heads of many students, there is no question as to why finding PDFs or other free discounted options is a better route financially.</i>

<i>I am grateful for the Internet and search engines. It has been a game changer and allowed me to relieve some of the financial burdens of being a student.</i>
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While all textbooks may not be found online for free, students with the right technological expertise can be very successful in finding the free textbooks.

Student Comment

<i>The benefit of being a student in the age of the Internet is having resources to find alternatives. There are several websites that offer textbook pdfs for free. As a resourceful student, I currently leverage this approach whenever I begin a new course. Before buying it out right, I always search Google for an available .pdf, and have been relatively successful taking this approach. It has saved me hundreds.</i>
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Student Comment

<i>I have used this technique before I buy a book for a course. 8/10 I will find a pdf version online</i>

Z-Library was a popular website for downloading pirated textbooks (Woodcock, 2022). This is just one of the resources that are available to students.

Student Comment

<i>I can download the purchased books from Z-library without payment in pdf files and collect the information I need. It has made things easy for me. It seems unfair for students - who are already financially limited to incur additional costs and pay thousands of dollars on top of tuition. Online libraries are a very good source of information, and it makes sure to reduce the challenges for students and smoothen their lives. I prefer the pdf version of the books rather than paying a lot for them.</i>

Student Comment

<i>Guys, if you haven't seen this before, you need to! Why spend \$500+ on textbooks each semester when you can download them for free? The textbook industry has been screwing us, now it's time for us to screw them. These sites will potentially save you HUNDREDS on your books! I have found PDF downloads of 75% of the books I needed. Enjoy!</i>

Reddit is another popular site for downloading textbooks.

Student Comments

<i>By checking online, I discovered at times there are free PDF's available for downloads, but if you were to buy the same text from the bookstore it costs arms and a leg. Reddit is a good tool in help looking for textbooks, often you will find others who were seeking the same textbooks and what website they used to get it.</i>

While there are many sites available to download pirated textbooks, sometimes it takes no more than a simple Google search.

Student Comment

<i>Whenever I am searching for a .PDF of a book, I usually start with googling the ISBN and seeing the results that pop up. Its hit or miss for the most part, but I have been able to find some books for some of my classes.</i>
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When students find these .pdf books or sites that provide free textbooks, they are likely to share it with other students.

Student Comment

<i>I can totally agree with you about the relief I felt when I gained access to a site that allowed me to download PDFs for the required text. Literally as soon as I was given the site, I sent it to everyone that I knew in college or attending school. It has been a huge help and I always feel a sigh of relief when I find books that I need on the site</i>
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There are potential dangers and ethical issues concerning textbook piracy. Pirating someone else's work is considered theft (Hati et al, 2020). Students are aware that downloading pirated textbooks is illegal, but they don't feel threatened by any potential punishment, nor do they have any ethical concerns (Lakkaraju, 2022).

Student Comment

<i>Downloading textbooks for free can be considered illegal as they are still under copyright. But I consider it like this. The Internet is said to be a place where information can be accessed easily and if someone else has taken the opportunity to make textbooks easily available for free I definitely can't complain and I would go with the best and cheapest option available to me.</i>

Other potential dangers include downloading textbook from sites that could infect the students' computer with malware and/or viruses (Spajic, 2023).

Student Comment

<i>There are also websites that you can indeed download the PDF file and use it just like that. The website might be sketchy but it gets the job done.</i>
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Faculty Comments

Faculty members were also interviewed to get their feedback. While getting comments from faculty members, they also understand that the prices of textbooks are unreasonable.

Faculty Comment

<i>Maybe the textbook publishers deserve this. They have been fleecing students for years.</i>
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Students from lower-income schools feel the costs pressure even more. This study was conducted at an HBCU

Faculty Comment

<i>I teach at an HBCU, so our students come from different backgrounds than students at other universities. Budgets are tight and many of them are working one or more jobs just to pay for school. We have many who are single parents. If there is a way for them to save some money, I'm all for it (pirating textbooks).</i>
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Faculty members even admitted to making their students aware of these free textbook options.

Faculty Comment

<i>I have told my students that there is a free version of the textbook we are using for this class available online. I don't actually give them the link but they all know how to use Google.</i>
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Using open-source textbooks are available to students at not costs. Many faculty are aware of, and use, open-source material, which takes financial burden off their students.

Faculty Comment

<i>If faculty would start using more open-source material, then this wouldn't be a problem. There are a lot of good choices in open source. I use it for my class...and it's free</i>

One faculty member acknowledges the efforts put in by textbook authors and that they should be rewarded for their efforts. The faculty member believed that textbook rentals could reduced textbook piracy while still giving credit and monetary returns to the authors.

Faculty Comment

<i>Many academics spend a lot of time writing textbooks, which include exercises, exams, and other useful information. They deserve to be paid for their work. The prices do tend to be high, so it would be good if they could be delivered in a less expensive manner. Many publishers are allowing students to rent textbooks at a much cheaper price. I know this has helped many of my students.</i>

When students consider the ethical issues with textbook costs, the lure of the free textbook can overcome ethical considerations they may have (Lakkaraju, 2022). Ultimately faculty member believed that it was up to the student to make the decision to pirate textbooks even though there are ethical considerations.

Faculty Comment

<i>Our students understand the ethical issues and the risks associated with downloading stuff from the Internet. I'm not their priest, I'm their teacher. It's up to them what they choose to do.</i>

One faculty member referred back to the days when Napster was popular with the illegal downloading of music, implying that students have been pirating material for a while so textbook piracy is just an obvious step for them.

Faculty Comments

<i>With the prices of textbooks, I'm surprised it has taken this long for students to start doing this. They have been downloading music for years. I remember Napster.</i>

Faculty members believed that many students are tech savvy enough to find pirated textbooks.

Faculty Comment
<i>Today's students are more tech savvy, so I think many of them have already figured it out.</i>

Faculty Comment
<i>It's only going to get worse. Students will figure it out and it will snowball. The textbook publishers should be worried.</i>

After learning about textbook piracy, two faculty members were more than willing to inform their students.

Faculty Comment
<i>I'm all for telling my students!</i>

Faculty Comment
<i>I've been teaching here for over 20 years, and I have seen the struggles that students have with paying for school. Textbook prices are outrageous. I always try to use older versions, so the books aren't as expensive. But students still come to my office crying about their financial situation. I have personally bought textbooks for students out of my own pocket. Now that I know students can get their books for free, you're damn right I'm going to tell them.</i>

Publishers' Comments

Students have the option of keeping or reselling second-hand textbooks when they have completed a course, however digital products offered by Cengage, Pearson, McGraw-Hill and other textbook publishers are rented and the license expire after a defined term. This renders the textbook useless at the end of the rental period. This software cannot be duplicated by students so they must purchase the license from the textbook publisher. Students are required to purchase access codes to have access to the material they need to complete homework assignments for their classes. This is a method that publishers have started to use to combat textbook piracy.

Publisher Comment

<i>We are starting to use products with access codes more often. This forces the students to purchase the code to do the work for the class. We have really been pushing this method which can ultimately help us reduce the textbook piracy we are seeing in the industry. It seems like other book sellers have also caught on. Access codes are the future of textbooks.</i>

Several textbook publishers have adjusted their pricing policies to make textbooks more affordable for students. This involves giving cheaper e-book editions of textbooks as well as textbook rentals. Some textbook publishers have cooperated with educators and institutions to produce customized resources for students. This may involve the creation of open educational resources or digital textbooks that are less prone to piracy. To stop the circulation of pirated textbooks, publishers have also taken legal action against pirate websites and even individuals.

Some textbook publishers have focused on education and awareness efforts to inform students and teachers of the potential legal and ethical implications of textbook piracy. This may mean providing information about copyright laws and encouraging the use of legal sources for textbooks. Students who engage in textbook piracy may face legal action and academic punishments. In addition to these effects, students should also be aware of the number of risks involved with textbook piracy.

Publisher Comment

<i>We are trying to work with the universities to get them to purchase university licenses for our products. By selling such a large amount we would be able to significantly reduce the cost of the access codes and universities could include the lower costs in the students' tuition with very little impact. Students wouldn't even notice a \$50 or \$60 increase in their tuition. Then they would have unlimited access to all the courses we offer at no cost to them. We think it's a win-win situation for universities and students.</i>

CONCLUSION

No one can predict the future of textbook piracy. The growth of textbook piracy may lead to a greater emphasis on open-source options. Open Source can provide a cost-effective and flexible alternative to traditional textbooks, and educators and students may use them more frequently to avoid the legal and ethical consequences of piracy. Publishers moving more toward a model that requires access codes will eliminate pirating for their products.

Increased efforts to prevent textbook piracy, including legal action against pirating websites may have an impact, however this has been tried in the music and movie industry with little success. Once one site is taken down, it re-opens under another name. Greater awareness and emphasis on the ethical and legal use of textbooks can result in a heightened awareness. As sites that provide pirated textbooks become more detectable and the Fed starts to crack down more, many move to the dark web, where it is difficult for anyone to track, making the books readily available to students (Woodcock, 2020).

Although progress has been slow, the federal government has recently made efforts to curb the rising cost of textbooks. The following represents some of the key strategies the government is using to address the issue.

The Higher Education Opportunity Act (HEOA), which became law in 2008, prohibits publishers from bundling textbooks with other materials unless they are completely essential for the course and requires that publishers disclose textbook costs to universities. In the interest of helping students make educated judgments about their textbook purchases, the law also requires that schools and universities provide details on the necessary texts in course schedules (Hinojosa, 2020).

The Affordable College Textbook Act would give grant funding to encourage the creation and use of open educational resources and other low-cost alternatives for textbooks. This would mark a possible step toward making instructional resources more accessible and inexpensive for students (Hinojosa, 2020)

Educators, publishers, and legislators are collaborating to create new and inventive methods to make educational resources available, while ensuring that charges are acceptable and equitable. Open educational materials, subsidies, and tax credits can help make higher education cheaper and more accessible to all students.

Publishers may have to consider reducing the price of textbooks to make them more affordable for students. This could decrease the motivation for students to pirate textbooks, but pirating textbooks for free would still be the most economical option. The government could strengthen copyright laws and enforcement mechanisms. Copyright laws should be updated to keep up with the advancements in technology. Additionally, copyright laws should be enforced strictly to deter students from engaging in piracy. Educational institutions should also increase awareness of copyright laws and their implications to encourage students to respect intellectual property rights. Publishers should also consider providing free or discounted access to supplementary materials to students who lawfully purchase or access their textbooks. This can improve the value of textbooks and reduce the motivation for students to engage in textbook piracy.

It is possible that textbook piracy will continue to grow as long as textbook costs remain high. With the growth of digital technology, sharing and accessing pirated information has become easier than ever. This trend will undoubtedly continue to grow as new technologies and ways to share textbooks emerge. Even if the cost of textbooks decreases, the costs will still not be lower than the free textbooks that are available online. It has been suggested that the cost of textbooks be included in the cost of tuition. This would be a way to prevent textbook piracy.

The study shown in this paper merely provides a snapshot of the current level of textbook piracy and cannot accurately predict its future growth. It is essential for educators, publishers, and students to continue working to find new and inventive ways to make educational materials available while obeying copyright laws and upholding ethical and legal behavior.

Many faculty members are also concerned and frustrated with the high price of textbooks. They often see students coming to class unprepared without textbooks, realizing the reason is that they cannot afford the textbook for the class. But what are they to do? To complete the course the textbook is required, so their hands are tied.

In conclusion, to show the extent of textbook piracy at our university, every syllabus of every faculty in the business school was reviewed. Thirty faculty members use textbooks in their courses. All 30 of the textbooks were available online for free download. One course that stood out required 3 different textbooks which would cost the students over \$500 if purchased at the university bookstore (which many students must do to use their financial aid). As faculty members we must realize the high costs of textbooks are a problem for many students and we should look for alternative ways to help our students, such as investigating open-source textbooks. Students' financial situations are different, and as faculty we have little to no way of knowing which students are struggling financially. School is stressful enough without having to worry if you must choose between textbooks or a meal plan. Textbook piracy is illegal and unethical. As faculty it is our duty to steer our students in the right moral direction, but as human beings who see the suffering of our students, we ourselves are faced with an ethical dilemma.

REFERENCES

- Benbasat, I., D. Goldstein, & M. Mead (1987). The case research strategy in studies of information systems. *MIS Quarterly*, 11(3), 369-386.
- Davis, M., & Bialik, K. (2020). From page to pixel: A comparative study of the digital textbook market. *Journal of Education for Business*, 95(5), 283-289.
- Falk, J. (2020). OpenStax surpasses \$1 billion in textbook savings, with wide-ranging impact on teaching, learning and student success. *Openstax.org*. <https://openstax.org/press/openstax-surpasses-1-billion-textbook-savings-wide-ranging-impact-teaching-learning-and-student-success>. Accessed April 10, 2023.
- Follet (2022). Outcomes made accessible: Improving outcomes and retention while lowering the cost of college learning materials. *Follett Higher Education White Paper*. chrome-extension://efaidnbmnnnibpcajpcgclefindmkaj/https://highered.follett.com/insight-content/outcomes-made-accessible-improving-outcomes-and-retention-while-lowering-the-cost-of-college-learning-materials/ Accessed December 4, 2023.
- Gakhar, A., & King, T. M. (2020). A typology of textbook piracy behavior among university students: Exploratory findings from a mixed methods study. *Journal of Academic Librarianship*, 46(3).
- Hati, S.R.H., Fitriasih, R. & Safira, A. (2020), E-textbook piracy behavior: An integration of ethics theory, deterrence theory, and theory of planned behavior, *Journal of Information, Communication and Ethics in Society*, Vol. 18(1), pp. 105-123.
- Hinojosa, J. (2020). Digital piracy in higher education: An exploration of students' attitudes and behavior toward textbook downloading. *Journal of Educational Computing Research*, 58(1), 186-205.
- Jenkins, J.J., Sánchez, L.A., Schraedley, M.A.K., Hannans, J., Navick, N. & Young, J. (2020). Textbook broke: Textbook affordability as a social justice issue. *Journal of Interactive Media in Education*, 2020(1), p.3.
- Johnson, A. (2020). 22 years after the DMCS, online piracy is still a widespread problem. *Information Technology & Innovation Foundation*. February 7, 2020. Accessed December 7, 2023.
- King, T. M., & Gakhar, A. (2019). Textbook piracy among university students: A cross-sectional investigation. *Journal of Academic Librarianship*, 45(5), 480-487.
- Koenig, R. (2019). More college students are downloading course material for free or skipping them entirely. *Journal of Higher Education*, July 25, 2019.
- Lakkaraju, A. (2022). Textbook piracy if morally justified. *The Daily Illini*. Published August 31, 2022. <https://dailyillini.com/opinions-stories/2022/08/31/textbook-piracy-college/> Accessed April 10, 2023.
- Lederman, D. (2018). Textbook prices' impact on student behavior: Prices shape student decision on when and how to use textbooks. *Inside Higher Education*. August 1, 2018.
- Looper, C. (2014). History of The Pirate Bay: Internet outlaw or internet file-sharing freedom fighter. *Tech Times*, December 17, 2014. Accessed December 4, 2023.

- MyIntyre, H. (2018) The piracy sites that nearly destroyed the music industry. *Forbes*, March 21, 2018.
- Nemec, J. (2020). Student spending on course materials continues to decline. *NACS Report*. June 25 2020. Accessed December 7, 2023.
- OnlineSchools. (2023). Open source textbooks <https://www.onlineschools.org/visual-academy/open-source/>, Accessed April 10, 2023.
- Pilgrim, K. (2020). Should college textbooks be free? Analyzing the outcomes. May, 21, 2020. <https://collegefinance.com/blog/should-college-textbooks-be-free-analyzing-the-outcomes> Accessed December 7, 2023.
- Powell, F., E. Kerr, & J. Moody. (2021). 14 ways to cut your textbook costs. *US News*. August 17, 2021. https://www.yahoo.com/video/12-ways-cut-textbook-costs-155851859.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAEW3Q-hf6YZx2QTOvTSA_ufpJdNeyp_JQ0IdMD89T7HZDcwithNehMOqLj3BzHnt420bCaqLeS8F7roeBcqfY6WRZKXSP0zGDo8TAo92v4ZpDyIQG33HuDISWAayE-VO2W8cjevCyC8sRzCkMWptgbWSLxnCxrP2B8HAXtqXrRi4. Accessed December 7, 2023.
- Reddit. 2023. Easy-to-follow beginner's guide to DeDRMing Amazon trial and purchased ebooks : r/Piracy (reddit.com). https://www.reddit.com/r/Piracy/comments/3kv9k6/easytofollow_beginners_guide_to_dedrming_amazon/?rdt=41338&onetap_auto=true Accessed March 18, 2023.
- Spajic, D.J. (2023). Piracy is back: Piracy statistics for 2023. *DataProt*. <https://dataprot.net/statistics/piracy-statistics/>
- Valuta, B. (2023) 23 Corrupting piracy statistics you must know in 2023. *Legal jobs*. <https://legaljobs.io/blog/piracy-statistics/> Accessed March 24, 2023.
- Vorias, T. (2021). College textbooks: The final blow of higher education's affordability crisis. *The Michigan Daily*. August 10, 2021. <https://www.michigandaily.com/opinion/columns/college-textbooks-the-final-blow-of-higher-educations-affordability-crisis/> Accessed Jan 18, 2023.
- Weisbaum, H. (2016). Students are still saddled with soaring textbook costs, report says. [online] *NBC News*. Available at: <https://www.nbcnews.com/business/business-news/students-are-still-saddled-soaring-textbook-costs-report-says-n516011>
- Welding, L (2023). Average cost of college textbooks: Full statistics. *Best Colleges*. March 27, 2023. <https://www.bestcolleges.com/research/average-cost-of-college-textbooks-statistics/>. Accessed April 1, 2023.
- Woodcock, C. (2022). 'Shadow Libraries' are moving their pirated books to the dark web after fed crackdown. *Motherboard* <https://www.vice.com/en/article/v7vnn4/shadow-libraries-are-moving-their-pirated-books-to-the-dark-web-after-fed-crackdowns> Accessed April 10, 2023.