Hyper-inflation in the overall college costs and textbook prices in the last decade is no secret as covered by several major news reports. High textbook prices are deterring students from buying the required textbooks in a course or taking courses that have high-priced textbooks. In other words, cost of textbooks gets in the way of learning and derails students from degrees that they want pursue in college. Many universities and even state systems (Acker, 2011) are trying to lower the cost of textbooks for students. Indiana University, as one of these institutions started a pilot e-textbook program in 2009 to make the publisher/commercial content more affordable based on inclusive access model, which is addressed in more detail in the previous two chapters of this book. After a successful pilot phase, the program, also known as the IU eTexts Program, grew into full production. As of December 2017, IU eTexts program has served close to 200,000 students in almost 8,000 course sections and have saved students more than $13 million in textbook costs. In this chapter, we explain the research efforts behind the program, faculty and student support, and factors behind the program's success.

1. Indiana University’s E-Text Model

The Indiana University eTexts program had four primary goals when it started as a pilot in 2009:

1. Drive down the cost of materials for students
2. Provide high-quality materials of choice
3. Enable new tools for teaching and learning
4. Shape the terms of sustainable models that work for students, faculty, and authors

These four goals have served us well and we continue to maintain them. We have been very successful. As we continue, the newest goal is continued program growth – both in the number of participating publisher/vendor partners and in the number of faculty/students/classes using at least one “IU eTexts” title. Additionally, we want to take full advantage of the research opportunity provided by the data the e-reader captures. This will help us inform best practices for teaching and learning with technology, and contribute to the scientific conversation regarding student engagement with digital reading materials.

IU eTexts program has several distinct components that contribute to its success:

1. Publisher agreements
2. Ordering textbooks
3. Outreach
4. Universal e-reader

5. Cost savings
6. Offerings beyond publisher content

These components are explained next.

1.1. Publisher agreements

IU has contracts with more than 30 publishers to ensure significant cost savings. These contracts are between the publishers and IU. In addition, Indiana University is a founding member of the Unizin consortium, a group of like-minded institutions with a common goal of enhancing learning success with digital technology and resources. IU has been an early adopter of a university-wide affordable e-text program and has shared its knowledge and experience with the consortium and other member institutions. As a result, the Unizin consortium is now able to offer similar contracts and prices for its member institutions.

IU’s agreements with the publishers involve inclusive an access model, through which all students acquire day-one access or digital-direct access (Straumsheim, 2017). With IU’s model, course instructors have the option to choose an e-text for their course. Once the instructor opts in by submitting an order request, all of the students who enroll in the class are assigned the e-textbook by default. Their bursar account is charged the corresponding e-text license fee and e-reader license fee, and they get access to e-textbooks on or before the first day of class.

IU’s agreements with the publishers may differ from others in that it allows unlimited printing of e-textbook pages (up to 50 pages at a time). If students prefer a bound copy instead, they can order one for an extra fee. In addition, per IU’s agreement, student access to e-textbooks does not expire after the course is over. Students maintain access as long as they are enrolled at Indiana University.

In IU’s e-text model, students may elect to opt-out of the e-text fees for a class, providing they meet three eligibility criteria:

1) The exact same ISBN must be legally available elsewhere,
2) They must have never accessed the e-text, and
3) They must submit their request within 30 days of enrolling in the class.

When students register for the course, they see that this course has an e-text. They can opt out of an e-text at the class registration phase but they are discouraged from doing so. IU actively discourages opt-outs in two ways: Student education and faculty education. In the online opt-out request form, students are required to read a series of warning messages explaining the academic risks of electing to opt out of the e-text fees. On the faculty side, teaching and learning support staff are working to educate faculty on how to make effective use of e-texts, so it is less likely students will opt out.

1.2. Ordering textbooks

We mimic, as much as possible, traditional textbook-ordering models faculty have experienced. We set and advertise an ordering ‘window’ for each coming term, corresponding to the academic calendar. We expect faculty to submit their orders before students begin to enroll for the coming
term, in compliance with *Higher Education Opportunity Act* recommendations. This allows us to include an automated notation of the e-text requirement in the *Schedule of Classes* and the registration system as students are planning and enrolling for the coming term.

Because the IU eTexts program is not affiliated with the university bookstore, we built our own ordering tool for faculty, imitating many of the familiar features of the bookstore application. This tool is open to faculty (and to select school and departmental staff members who submit orders on behalf of faculty) during the ordering window. A catalog view of available titles is always available for faculty who wish to plan ahead and view offerings. The tool also permits the electronic routing of requests for those schools and departments who wish to track, monitor, or collect e-text ordering data for internal purposes.

After an order is submitted (and, if necessary, approved), most of the remaining preparatory work is done administratively, behind the scenes. This includes the automated student notations, billing, communicating the order to our publisher partners, having Unizin complete the title setup in the Canvas learning management system, faculty notification when the title is ready to be accessed and prepped, and enrollment calculation and reporting.

### 1.3. Outreach

Outreach is a multi-pronged effort at IU. There is one dedicated IU eTexts staff member: A Principle Business Analyst and Faculty Consultant. Consulting with faculty (whether they are long-time users of e-texts, just beginning to consider the option, or anywhere in between) is, easily, more than half of this person's daily tasks. Outreach efforts take multiple forms, including a Canvas project site that serves as a repository and reference for all things related to the initiative. In addition, regular e-mail distribution list announcements remind faculty and staff of the coming ordering window. Campus visits are highly productive and valued efforts. The faculty consultant visits each of IU's nine campuses at least once each term, offering a day-long workshop for any faculty member who wishes to stop by to learn more about the e-texts program. The day includes general informational sessions, as well as tailored and specific training on specific issues or topics, depending on faculty, departmental, or school requests.

In addition, IU offers consultants in teaching and learning centers on each campus, as well as a group of instructional designers. There are also a few other IT sub-units who have opportunities to communicate with faculty. All of these staff are familiar with the initiative and help with outreach, often working in tandem with IU eTexts staff.

Outreach activities also take place at higher levels. The Learning Technologies executive team regularly communicates with campus leadership (i.e., provosts/chancellors and deans) to report the positive results and request their help in getting the message to more faculty. Formal and broad communications through university-wide channels are also a part of this effort. Finally, the publishers help with outreach efforts. Sales representatives regularly work to transition their new and existing faculty clients to e-texts, often working in tandem with IU eTexts staff.

### 1.4. Universal e-reader for the e-text program

Indiana University uses a single e-reader platform for its e-texts program. Using a universal e-reader allows for a unified e-reading experience for students throughout their educational experience.
Indiana University. Provided by the Unizin Consortium, the Engage e-reader is a publisher agnostic platform that integrates with Canvas. The Engage platform has the following features for student users:

- Search
- Bookmark
- Highlight text
- Annotate the highlighted text (and create tags)
- Ask instructor a question (convert annotation to question)
- Make additional notes
- Share notes and highlights with instructor and classmates
- Read offline by downloading the content to your device

The Unizin Engage e-reader also provides features for instructors. These include automatically sharing notes and highlights with students; interacting with students within the textbook through the question and answer feature; and using reading and engagement analytics to evaluate student- and class-level reading and markup usage.

1.5. Cost savings through IU eTexts Program

Publishers offer significant cost savings in exchange for higher sell-through rates. The promise of the nearly 100% sell-through rate results in deep discounts. The formal savings calculation reflects the actual difference between the "print list price" and the negotiated IU e-text price for the publisher content. As of December 2017, IU student savings on textbooks amount to $26,596,940. However, we recognize that many students do not pay the full list price for paper textbooks when they purchase online, buy used copies, or recoup some of their costs by reselling their texts after the semester is over. In fact, an article from the New York Times highlights that actual student spending on course materials, including textbooks, was about half the actual cost of the textbooks and related course materials (Carns, 2017). Therefore, we divide the calculated savings by two and report that total as a more accurate representation of student savings. Consequently, we claim that our students have saved about $13 million since IU's e-texts program started in spring 2012.

1.6. Use of e-text program beyond publisher content

IU’s e-text model is mainly driven by publisher/commercial content, but it is not limited to publisher content. Instructors may choose to deliver their own content (e.g., faculty-created, fair use, OER, etc.) through the Engage e-reader platform and take advantage of its interaction and data analytics features. The platform has the ability to deliver content in many formats, including PDF, Word, PowerPoint, and Excel. Unizin is currently developing the next version of Engage, which will also be able to offer multimedia content via ePUB.
2. Reading data & faculty and student experiences using e-texts at IU

Beyond providing course-based reading engagement/analytics for instructors, using a single reading platform (Unizin Engage) for all e-textbooks leads to rich data on student reading behaviors for researchers. In this section, we summarize our research findings regarding faculty and student experiences and what they mean for teaching and learning with e-texts.

2.1. Instructor Engagement with E-texts

As researchers at Indiana University, we published an EDUCAUSE Review case study in early 2015, investigating the effects of instructor engagement with e-texts on student use of e-texts (Abaci, Morrone, & Dennis, 2015). Self-reported data on e-texts usage was collected from students during the pilot phase of the program. This data indicated that, overall, students whose instructor used e-texts actively (i.e., shared highlights, annotations, and notes) read, annotated, and learned more from e-texts than students whose instructor did not use e-texts actively.

Based on these findings, we identified and interviewed instructors who were using e-text markup features (i.e., highlights, annotations, page notes) in order to understand their motivations and how they use e-texts in their teaching. In addition to the cost savings, instructors gave four reasons for adopting e-texts:

1. Guaranteed access to e-texts by all students when the semester starts
2. Ability to share highlights and notes with students directly on the e-texts
3. Ability to use e-texts more effectively during class time
4. Ability to view student engagement in readings

Instructors in our study used shared highlights and notes as another way to communicate with students about the reading materials. Use of these interactive markup tools can help both in-class activities and outside review and study for exams. The interview data confirmed that when instructors engage with e-texts, so do their students. In other words, instructors play a key role in adoption and effective use of e-texts for learning by modeling active e-text use and creating meaningful interaction around the content.

2.2. Student Engagement with E-texts

Following up on our earlier research and having access to universal e-reader data such as page views and markup, we turned our attention to actual usage data to gain a deeper understanding around student and instructor engagement with e-texts at IU. We published another case study in EDUCAUSE Review, which reports on e-textbook usage by undergraduate students in residential courses between 2012 and 2016 (Abaci, Quick, & Morrone, 2017). The usage includes page views and use of markup and interactive features such as highlights, notes, questions and answers. This study showed that students access and use their e-texts more after 5pm Monday through Thursday in a typical week, indicating that they use e-texts mainly as a self-study resource. In a typical semester, students read or viewed pages more in the first four weeks and less in later weeks. In terms of markup tool use, highlighting was the feature most used by students while interactive markup features were used minimally. We also found that higher engagement with e-texts (reading and highlighting) correlated with higher course grades. That is, high performing students (A and B grades) read and highlighted significantly more than average performing students (C grades), who also read and highlighted significantly more than poor performing students (D and F grades).
2.3. Faculty and Student Use and Experience with E-texts at IU

In fall 2016, we conducted a university-wide Learning Technologies survey using a random sample of all students, faculty, and staff. The survey's purpose was to assess awareness and use of specific teaching, learning, and collaboration services/technologies provided by University Information Technology Services. Twenty-five percent of the faculty sample and 10 percent of the student sample from three different campus profiles (Bloomington, Indianapolis, and regional campuses) responded. The student and faculty surveys included a section on e-text use, where they were asked if they used an e-text, whether they were aware of markup and interactive features, and what they liked most and least about e-texts.

Faculty Use and Experience

Of the 222 faculty who responded to this section of the survey, 52 percent found it very or extremely important that every student in their class have the correct version of the required textbook on the first day of class. Only 25 percent of these faculty have used an e-textbook through IU’s eTexts program. Within the previous IU eTexts program participants, nearly half (n=24) taught one course with an IU e-text. Previous users of e-texts were also asked if they were aware of the features the e-reader platform has to offer. More than half of these faculty knew they could make their own notes within the eTexts (60%) and read/access their e-text offline (55%). Nearly half of the faculty (45%) were aware that they could see and answer student questions within the e-text.

The faculty who indicated previous use of e-textbooks through the IU eTexts program were asked to comment on what they liked most and least. Thirty faculty commented on their positive experience. The major themes emerging from these comments included low cost of the e-textbooks, convenience, inclusive access to e-textbooks (all students acquire), and markup and interactive features of the e-reader platform. Twenty-seven faculty also commented on what they liked least about their experience. Their responses did not result in any major theme; rather they highlighted a variety of concerns including students’ dislike of the e-texts and mandatory e-text fee, faculty’s own preference for paper textbooks, navigation or having to scroll on a page, and slow page load.

The faculty who reported no e-textbook use through the IU eTexts program were asked to comment on barriers keeping them from using e-texts and incentives that may encourage them to use e-texts in the future. The majority (66%) commented on the barriers, and several themes emerged. Thirty-six faculty noted that they haven’t used e-texts because they do not require traditional textbooks for their classes or e-texts would not work for their particular courses. Eighteen faculty indicated that they did know anything or enough about the IU eTexts program to consider participating. Another 16 faculty, who knew about the program, complained that their textbook choice was not available in the e-text catalog. Other notable comments included preference for paper textbook (n=8), cost of e-textbook to students (n=7), and not being able to keep the e-texts forever as a reference (n=6).

When asked about one thing that would encourage them to use IU e-texts in their classes, 87 faculty made comments but 11 showed no future interest. Comments from those who showed interest mainly asked for title availability (n=18), lower cost or better still prices (n=15), and
more information on or sample use of e-text (n=14). Other notable comments included departmental buy-in, more time to explore e-texts, and adding online homework apps to e-texts.

**Student Use and Experience**
Forty-eight percent of the student respondents (n = 875/1,816) indicated that they took at least one course that used an e-text. As a follow-up question for students who had used e-texts before, we asked if they were aware of the interactive and markup features of the e-text platform. While 57 percent of respondents knew that they could take their own notes within the e-text platform, only 33 percent realized they could ask their instructors questions within the platform. In addition, only 40 percent were aware they could read their e-text offline, even when not connected to the Internet. These numbers indicate room for improvement in terms of increasing awareness of the e-text platform features.

In the survey, we also asked students who have used an e-text to respond to two open-ended questions regarding what they liked most and least about their experiences. A total of 379 students commented on what they liked most; a total of 376 students commented on what they liked least. These comments were coded by two of the authors with 95 percent inter-rater reliability. Several themes emerged from the positive and negative comments (figure 1).

![Figure 1. Thematic analysis of student comments](image)

Nearly 200 students noted that they liked e-texts because of convenience, particularly not "having to lug around a physical textbook" and having an e-text "accessible at any time." In contrast, 118 students preferred physical books over digital books. These students noted that they still "like physical books" or "prefer to read on paper versus on screen for studying." As noted in the introduction, students have the option to request a paper-on-demand copy of their e-texts in IU's e-texts program.

Sixty-six students expressed that they were pleased with e-texts because the program helped them save on their college costs. Therefore, "low cost" and "affordability" were appealing. On the other hand, 25 students argued that e-texts are still expensive, or they did not like having to pay a mandatory e-text fee once their instructor signed up for an e-text. Another comparable theme between likes and dislikes was the lack of understanding about markup and interactive features of the e-text platform. Fifty-six students praised the features as contributing to their positive experience. Comments referenced "ease of searching," "adding self-notes," and "important information is highlighted." By comparison, 26 students wrote negative comments such as "can't write in" or "can't add note or highlight," which indicated a lack of awareness of
the markup and interactive features. Had they known about these features, they might have had a more positive experience.

In another theme, 40 students indicated they found the platform easy to use, while 64 students found it difficult to use or navigate, particularly when flipping back and forth through the pages. Finally, a group of students \( (n = 43) \) explicitly stated that they did not like e-texts, without offering a reason for their dislike.

### 3. Educational modules to promote effective use of e-texts for teaching and learning

Based on findings from self-reported data (Abaci, Morrone, & Dennis, 2015), we suggested earlier that there is a need for faculty professional development regarding the effective use of e-texts in classes. Our findings from e-reading data confirm that students are more engaged with e-texts when their instructors use e-texts more effectively. The survey data we summarized above suggests that some students who have used e-texts through the IU eTexts program may not be aware of all of the features the Engage e-reader offers. Lack of awareness might be a barrier to engaging with reading materials to their full capacity. Therefore, in summer 2017, we created a small module to educate students about the features of the Engage e-reader. This module was created as a stand-alone course in IU's Canvas LMS. However, instructors are able to easily integrate this module into their course site in Canvas, if they choose to do so. This module was designed to take 15 minutes, with both textual and video instructions allowing students multiple options. The module has the following sections/pages:

- **What you will learn about eText** - Introductory page to the module
- **Accessing and navigating the eText platform (Engage)** - Explains and shows how to launch the Engage e-reader and navigate within an e-textbook (i.e., zoom in and out, turn pages, jump to chapters or pages, and search for a particular term or phrase)
- **Interacting with your eText** - Explains and shows how to add highlights, notes on selected text, and page notes.
- **Interacting with your classmates** - Explains and shows how to share notes with other members of the class.
- **Interacting with your instructor** - Explains and shows how to turn highlighted notes into questions to instructors.
- **Accessing your eText offline** - Explains and shows how to read e-textbooks offline either by downloading the book to a device or using printed copies.

### 4. Factors behind success of the IU eTexts program

When we embarked on the IU eTexts initiative, we knew that the program's success would depend on specific characteristics. At the top of the list was driving down the cost of textbooks to help make college more affordable for students. This required working with the publishers to help them understand that a model in which all students acquire the e-texts—even at substantially lower costs—would not reduce their profits and, in fact, had the potential to
increase their profits because the used book market would no longer be needed. Today, publishers no longer have to be convinced of the value of an inclusive access model and many now widely promote these kinds of models.

4.1. Giving faculty the choice to choose to use an e-text
When we are asked about pushback from faculty about e-texts, the response has always been clear: One key to our success is that the program has always been completely voluntary. Faculty can freely choose whether or not they want to adopt an IU e-text. If they choose not to use an IU e-text, they simply order their course materials through the official university bookstore process.

Another key to the program's success was to make sure faculty who wanted to adopt an e-text had a wide range of publisher choices, so they could adopt the high-quality publisher materials of their choice. We did not want a scenario where faculty could choose from only a few publishers. We wanted faculty to have an extensive catalog of materials from which to choose. We currently have more than 88K titles available from more than 30 publishers who participate in the IU eTexts program. We also provide the option for faculty to choose an open educational resource (OER) e-text by selecting that text through the ordering portal. These OER texts are drawn from OpenStaxx and the University of Minnesota. There is no cost to adopt an OER e-text and no cost for the use of the Engage reader.

4.2. Early socialization of the program
When we began the program, we spent a great deal of time meeting with faculty groups, student groups, advisory committees, faculty councils, and so on to tell them about the program and to answer their questions. We also conducted open town hall meetings and invited interested faculty, staff, and students to attend. All of these meetings were important. Some of the most gratifying meetings were those with student government organizations on the Bloomington (IU Bloomington) and Indianapolis (IUPUI) campuses. Student leaders were eager for ways to save students money on textbooks, and they viewed the IU eTexts program as a way to accomplish that goal. They became strong advocates for the program, which bolstered our early efforts in raising awareness. On the faculty side, some initially had concerns that there would be a university or campus mandate to use an e-text – but when they learned that their participation in the program was entirely voluntary, these concerns were alleviated.

4.3. Improving teaching and learning through new tools
A key advantage of the IU eTexts program is the use of a standard e-reader (Unizin Engage). The Engage platform enables faculty and students to use and share annotations, highlights, and notes in ways that simply are not possible with a paper textbook. As faculty become more comfortable with the platform, they are increasingly using these markup tools to extend the discourse with their students within the textbook itself. At the same time, it has also become clear that both faculty and students need additional support to effectively use the Engage reader tools. The educational modules described earlier are intended to meet this need by providing best practices in the use of e-texts for both faculty and students. The effective use of e-texts and the Engage reader has the potential to transform the educational experience for both faculty and students by making the reading experience an engaging and interactive one.
In summary, the IU eTexts program has provided a successful model that puts choice in the hands of the faculty, saves students millions of dollars, and provides new tools to enhance teaching and learning. We also have access to rich data sets that provide key insights into teaching practices and student reading behaviors that can improve learning outcomes.
References:


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