Ohio eTextbook Pilot Project Final Report
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Executive Summary

Program

In 2013, the Ohio legislature established the Electronic Textbook Pilot Project to provide grants on a competitive basis to public and chartered nonpublic schools with the goals of assisting schools in the transition to digital content and building the capacity of Ohio schools in digital learning. Six million dollars was made available for this project through the State of Ohio HB 59 Section 363.580, with the Chancellor of the Department of Higher Education (formerly the Ohio Board of Regents) administering the program.

The primary goals of the eTextbook program were to provide an opportunity for schools to pilot digital texts and electronic educational content in the classroom or professional development on how best to utilize digital content for teachers and to share lessons learned with other schools across the state. Three hundred forty-three (343) grants were awarded to 271 districts, community schools and chartered nonpublic schools in 74 counties. Approximately 5,000 teachers and 155,000 students in grades K-12 were impacted in fiscal year 2014-15 by the eTextbook Pilot Project.

Evaluation and Key Findings

This eTextbook Pilot Project evaluation was conducted with Ohio schools and educators who participated in the grant during the 2014-2015 school year. The awardees participated in a multi-modal evaluation, which included administrator and teacher surveys and final reports. Five follow-up interviews were also conducted with exemplary grantees. The surveys and reports included demographic information and specific measurable variables, including the number of students and educators served, perceptions, attitudes and outcomes. Interviews were conducted to corroborate survey findings and information included in reports.

The key questions addressed in this evaluation were:

1. What are the benefits of using digital content?
2. What challenges do schools face when making a transition to digital content?
3. What are key factors or components necessary for successful implementation of digital content?
Executive Summary

Following is a summary of the key findings from the project evaluation.

Key Question 1: What are the benefits of using digital content?

Finding: The top benefits of using digital content selected in the teacher surveys were:
- greater student engagement in learning,
- improved technology skills for students,
- access to updated curriculum,
- opportunity to be more innovative in the classroom,
- improved technology integration skills for teachers,
- improved quality of instructional materials, and
- opportunity to differentiate and personalize learning.

The majority of teachers and administrators reported that the use of digital content was important for helping students’ overall success and helping them achieve academically.

Key Question 2: What challenges do schools face when making a transition to digital content?

Finding: The top challenges as identified by the teacher surveys were:
- not all students have access to computers and Internet at home,
- balancing instructional time constraints with time to use the digital content,
- concern about the reliability of the technology,
- not enough time to implement adequately and
- providing enough computers/devices with Internet access for students to use.

The top challenges identified by the administrators were:
- instructional time constraints,
- lack of teacher interest and buy-in,
- concerns about technology reliability,
- access to devices, and
- students with limited access to Internet at home.
Key Question 3: What are key factors necessary for successful implementation of digital content?

- Start planning early and assess readiness.
- Ensure students have access to devices and the Internet at school and at home.
- Review and try digital content. Make sure the content selected aligns with the state’s learning standards for students and works with your devices, infrastructure and bandwidth.
- Communicate with all stakeholders before and during any transition.
- Pilot with the teachers who are ready and willing for the transition to digital content.
- Provide initial and ongoing professional development on how to access and integrate digital content.
- Provide teacher support, both administrative and technical.
- Pilot with a reasonably sized group.
- Consider other state and local initiatives that will be occurring during the same time period.

Lessons Learned

Ohio’s eTextbook Pilot Project provided benefits for participating teachers, including increased knowledge and abilities for utilizing digital content in their classrooms. Having digital content, which in many cases includes links to videos, audio, and/or simulations, available to the students in their classrooms was effective in engaging and motivating students, increasing technological skills and in many cases increasing scores and student learning.

Of the grantees that received a one-year grant for the 2014-2015 school year, 63% stated in their final report that they planned or had already purchased licenses to continue the use of digital content, 9% were undecided and 28% reported that they would not be continuing use of the digital content at this time. Including both one-year and two-year awarded schools, 70% will continue utilizing digital content for the 2015-2016 year. The most reported reasons for not continuing use of digital content were cost/funding and not being ready for the change in terms of sufficient numbers of devices or teachers who were ready to transition to digital content. Other reasons mentioned were the digital content selected was not a good fit and not receiving complementary professional development.

In summary, this evaluation documents that the Ohio eTextbook Pilot Project deployed digital texts and electronic educational content or professional development and training resources to awarded schools through a competitive process, and that across the audiences for the program, despite various challenges, benefits were realized. Additionally, important lessons were learned by the participating schools with the intention of disseminating that knowledge to other schools considering digital content in the future.
Introduction

In today’s digital age, computers, laptops, tablets and smartphones are used around the clock for communication, learning, entertainment and more. Many have already made a transition to reading digital newspapers and ebooks for pleasure. While certainly not replacing print books, the digital format is appealing to many and preferred by some.

Likewise, a few years ago in the educational arena, textbook vendors started offering the option of purchasing textbooks as electronic textbooks. These eTextbooks and other forms of digital content can be as simple as a PDF downloaded to a digital device. Alternately, they may include annotations, links to audio or video files, or more interactivity with simulations, enabling students to conduct experiments and explore virtually. Many school administrators are considering digital content as an alternative to traditional textbooks, with the hope that they will better engage students, provide deeper learning and current information, and perhaps realize cost savings.

Electronic Textbook Pilot Project Competitive Grant

In 2013, the Ohio legislature established the Electronic Textbook Pilot Project to provide grants on a competitive basis to public and chartered nonpublic schools with the goals of assisting schools in the transition to digital content and building the capacity of Ohio schools in digital learning. Six million dollars was made available for this project through the State of Ohio HB 59 Section 363.580, with the Chancellor of the Department of Higher Education (formerly the Ohio Board of Regents) administering the program.

Program Goal

The grant was designed to provide digital texts and electronic educational content to be used in the instructional activities of students or for professional development and training resources for teachers. Digital texts and electronic educational content (referred to as “digital content” in this report) are defined as student-consumable books or book substitutes that a student accesses through the use of a computer or other electronic medium, or that are available through an Internet-based provider of course content, or any other material that contributes to the learning process through electronic means. The goals of the eTextbook grant were 1) to provide an opportunity for schools to pilot digital content or professional development, and 2) to distribute lessons learned to schools and educators considering a transition to digital content.
Grant Description/Overview

The eTextbook Request for Proposals (RFP) was released by the Department of Higher Education (DHE) on January 27, 2014, and applicants were given 40 days to apply. Strong interest in digital content across the state was apparent, with 517 applications submitted from 361 public and chartered nonpublic schools and consortia representing 76 counties. Requests for eTextbooks and professional development from the applications amounted to $19,439,000.

The application review conducted by the Chancellor’s Electronic Textbook review committee utilized a competitive process for selection. The top scoring applications were recommended to the Chancellor, who made the final decision to award applications for funding.

Since the original number of applications far exceeded the grant committee’s expectations, it was recommended and agreed to award the funding for both fiscal years from the already submitted applications, rather than to do an additional round of eTextbook grants as originally planned. It was also agreed to limit awards to two-year licenses with publishers, due to the grant being a pilot program. Applicants were notified via email on May 30, 2014 as to whether or not grant funds were awarded.

Negotiations with publishers for licenses limited to two years took place during the summer. During that time, some original awardees also decided to decline the grant award for a variety of reasons. As a result, more funds became available, allowing additional schools not on the original award list to receive the eTextbooks for which they had applied. These additional awardees were called Phase 2 and Phase 3 schools depending on when they were notified. Phase 2 schools were notified in September 2014 and Phase 3 schools, were notified in October 2014. After the Phase 3 schools were notified, the eTextbook Pilot Grant funds were exhausted and no more awards were given.

Three hundred forty-three (343) applications were ultimately awarded to 271 districts, community schools and chartered nonpublic schools representing 74 counties in three phases. Schools were permitted to choose any digital content to pilot, and the awarded applications included requests for 53 different vendors and publishers in all core content areas as well as world languages, technology, music and physical fitness. Approximately 5,000 teachers and 155,000 students in grades K-12 participated in and were impacted by the eTextbook Pilot Project in fiscal year 2014-15.
Once teachers and students had access to the content and learned how to use it, implementation proceeded with varying speed, scope and results. This will be shared in the Findings section under benefits, challenges and lessons learned. Below is one example of how implementation progressed in a school that was prepared for the digital transition.

The key factor in our success was starting with a device and easy access for each student throughout the day, and we had that. Certainly our teachers had to be willing to embrace the new digital resource and have support from their building administrators. We were able to load students into the system with ease and link correctly.... Professional development with any new resource needs to be ongoing and we found it helpful to the work. We have a good help ticket system for all technology challenges, so having that support was helpful as teachers try out a new resource. – Norwood City, Curriculum Director, Science
The Evaluation

The DHE retained the Ohio Resource Center (ORC) to develop and validate evaluation methodology and data collection protocols, develop collection instruments and assist with data collection. Analysis and reporting were performed by DHE and OH-TECH staff.

Key Questions

The key questions addressed via the Ohio eTextbook Pilot Grant and the resulting evaluation were:

1. What are the benefits of using digital content?
2. What challenges do schools face when making a transition to digital content?
3. What are the key factors or components necessary for successful implementation of digital content?

Evaluation Methods

Grant awardees participated in a multi-modal evaluation, which included administrator and teacher surveys, final reports submitted by administrators and pre-post data if content was used for core instruction. Five follow-up interviews were also conducted with exemplary grantees. The surveys and reports included demographic information and specific measurements, such as the number of students and educators served, perceptions, attitudes and outcomes. The reports also included a project summary, lessons learned and advice for others. Interviews were conducted to corroborate survey findings and information included in reports.
The Results/Findings

The state of Ohio awarded 343 applications, of which 275 were content applications and 68 were professional development applications. In addition, some vendors included professional development as part of the content package. The awarded grants covered all core content areas as well as world languages, technology, music and vocational areas as seen in Figure 1 below.

![Figure 1: Breakdown of Awarded Applications by Subject Area](image)

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>20</td>
</tr>
<tr>
<td>Carpentry, Electrical, HVAC, &amp; Woodworking</td>
<td>2</td>
</tr>
<tr>
<td>ELA &amp; Reading Focused</td>
<td>47</td>
</tr>
<tr>
<td>World Languages</td>
<td>3</td>
</tr>
<tr>
<td>Math</td>
<td>60</td>
</tr>
<tr>
<td>Music</td>
<td>2</td>
</tr>
<tr>
<td>Science</td>
<td>51</td>
</tr>
<tr>
<td>Social Studies</td>
<td>179</td>
</tr>
<tr>
<td>Technology</td>
<td>13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>377</strong>*</td>
</tr>
</tbody>
</table>

*This number is higher than the number of grants awarded because some grants were categorized in more than one subject area.
The Digital Environment

The teachers in the pilot reported that they largely used the digital content as a complement or supplement to their traditional textbooks rather than for core instruction (See Figure 2). Digital content was not yet being used to replace textbooks for most grantees.

Additionally, most students (67%) used computers in their classrooms, in a computer lab or from a mobile cart. The most common device used was a desktop or laptop computer. According to teachers’ surveys, very few students used smartphones to access digital content.
Benefits or Positive Outcomes

Teachers and administrators alike addressed positive outcomes or benefits of piloting digital content in specific survey questions.

Learning Gains

As Figure 3 shows, 93% of teacher survey respondents reported that using digital content is important to their students’ overall success. The majority of teachers believe teaching with digital content helps students navigate an increasingly digital world.

Figure 3: IMPORTANCE OF USE OF DIGITAL CONTENT FOR STUDENTS’ OVERALL SUCCESS

- Extremely Important: 44%
- Important: 25%
- Somewhat Important: 25%
- Not Important: 7%
Likewise, 94% of the teachers reported that using digital content is important in helping their students achieve academically, as shown in Figure 4 below.

Most teachers indicated that the advantages of using digital content outweighed disadvantages when it came to helping students academically. They appreciated that digital content always had the most current information and that students could do simulations that they were not able to conduct in actual lab work. More details regarding learning gains were provided in the final reports. The following are some examples:

Our pretest scores in biology show an increase of 13% and an overall score for the year of 32%. Two examples of success are in grade 5 the pre- to post-test increase was 26.6% and in grade 7 the increase was 26.4%. – Norwood City, Curriculum Director, Science

Shanahan students increased their Lexile growth by an average of 171 Lexile points. Teachers agreed that gathering the data with the digital content was easier than traditional methods. – Olentangy Local, Teacher, ELA
The Results/Findings

Every teacher had gains in their SLO [Student Learning Objective] data when compared to the previous year. Some teachers nearly doubled their percentages. It can be difficult to determine the exact cause of this increase, but some of it can certainly be attributed to the digital media. – Brooklyn City, Science Department Chair, Science

A positive outcome for students was their exposure to higher level thinking required by the rigor of the new curriculum. The questioning allowed for students to apply their knowledge on a level that we were struggling to provide before piloting this program. Certain groups of students were pushed yet supported in their accelerated learning using the online resources. Teachers were appreciative that students were practicing math problems presented in the same manner in which state testing was going to assess our students. – Batavia Local, Principal, Math

Our ACT math scores have increased to levels that were previous to the 2010 school year. We are now only .5 points below the state average score. Prior to this adoption our math scores for the ACT had dropped to only 20 points as an average. Our percentage of students that were tested on the ACT that met the college readiness benchmarks has also improved for the 2014-2015 school year to a level higher than the last four years. We now are above the state level in college readiness standards in the college algebra comparative data. Our STAR data also shows tremendous growth for the 2014-2015 school year. The 9th grade students’ average pretest score was 8.3, with a post-test score of 12.3. This shows that those students had averaged nearly four years growth in one year of time. The other three grade levels began at 12.7-12.9 and had shown the most possible growth at 12.9+. – Amanda-Clearcreek, Curriculum Supervisor, Math

The digital content provided a realistic application of the content and helped with a deeper understanding of the material... all students had ‘aha’ moments when viewing the digital content. – Westside Academy, Director, Science and Math

There were multiple positive outcomes for students who participated in this pilot project, including students having access to digital content at school and home, which led to the opportunity for extended learning outside of the traditional brick and mortar classroom setting. Students increased their understanding of Ohio’s impact on the development of the U.S. In recent years the district has been unable to permit field trips due to cost factors. The teacher’s ability to access and use primary sources, interactive maps, artifacts and distance learning opportunities enabled our students to experience virtual field trips and learn about Ohio’s story. – Northwest Local, Director of Instruction, Social Studies
The Results/Findings

Figure 5 presents the results of a survey item in which the teachers were provided a list and instructed to choose the primary benefits of using digital content in their school. The top three benefits chosen by the respondents were:

1. Greater student engagement in learning
2. Improved technology skills for students
3. Access to updated e-textbooks/curriculum

![Figure 5: PRIMARY BENEFITS OF USING DIGITAL CONTENT IN THE CLASSROOM](image-url)
Figure 6 shows the benefits of using digital content in the schools according to the administrator surveys. The top three benefits selected were:

1. Improved quality of instructional materials
2. Increased student engagement
3. Differentiated school as innovative

Figure 6: PRIMARY BENEFITS OF USING DIGITAL CONTENT (ADMINISTRATORS)
**Engagement**

Many grantees indicated increased engagement and excitement associated with digital content that was not apparent with traditional content. This alone was one important reason many districts indicated they wanted to continue with the digital content after the grant period ended.

Figure 7 shows the teacher responses to a survey question rating their students’ level of interest and engagement with digital content. Sixty-one percent of the teachers reported that students were more interested and engaged with the digital content compared to print texts. Only 4% observed that they were less engaged. Several reports also contained references to the increased engagement and motivation experienced by students utilizing the digital content.

*Student engagement has been high with the online curriculum.* – Olentangy Local, Teacher, Math and Language Arts

*Certainly through this process students were engaged in the work at a very high level.* – Norwood City, Curriculum Director, Science

![Figure 7: Compared to traditional print-based content, level of interest and engagement with digital content](image-url)
Technology Skills

Although digital content was intended to help the students make learning gains in core content areas, an additional benefit is that students tended to improve their technology skills as well.

*Aside from increasing specific content knowledge in the subject areas, students increased technology skills, writing skills and reading skills... Teachers and students commented that the practice of completing the testing online better prepared students for college-level expectations. They were excited to get the opportunity to do “college” types of activities.* – Fairborn City, Former Director of Curriculum and Instruction, Geometry and American History

*Positive outcomes included students becoming more technologically literate and comfortable using laptops and iPads in the learning environment.* – Bethany School, Teacher, Social Studies

*The technical manipulation of the simulations was similar to many of the things students said they were asked to do on the new PARCC and Ohio Next Generation Assessments for Science. Students reported they were comfortable with doing the assessments because they had used Gizmos all year.* – Wheelersburg Local, Technology Director, Science
The surveys provided to teachers and administrators included a question regarding the major challenges to implementing digital content. According to the teacher surveys as shared in Figure 8, the most challenging obstacles to using digital content in the classroom were: not all students having access to computers and Internet; balancing instructional time constraints with time to use the digital content effectively; and concern about the reliability of the technology and lack of reliable technology support.

A couple of the challenges were intensified for teachers who experienced delays in receiving the digital content. That impacted the delivery of professional development, as well as getting acquainted with the content and planning how it would be integrated into the curriculum before school started. Delays were caused for a variety of reasons beyond the control of the teachers, including a large number of grant applicants, pricing negotiations, additional awards for Phase 2 and Phase 3, and communications hindered by school staff changes.

### Figure 8: MAJOR OBSTACLES TO IMPLEMENTING DIGITAL CONTENT IN THE CLASSROOM (TEACHERS)

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not all students and families have computer and Internet access at home</td>
<td>50%</td>
</tr>
<tr>
<td>Balancing instructional time constraints with time to use the digital content effectively</td>
<td>40%</td>
</tr>
<tr>
<td>Concern about the reliability of the technology</td>
<td>30%</td>
</tr>
<tr>
<td>Not enough time to implement adequately</td>
<td>20%</td>
</tr>
<tr>
<td>Providing enough computers/devices with Internet access for students to use digital content</td>
<td>15%</td>
</tr>
<tr>
<td>Lack of reliable technology support</td>
<td>15%</td>
</tr>
<tr>
<td>Lack of training on how to incorporate digital content effectively</td>
<td>10%</td>
</tr>
<tr>
<td>Providing enough Internet bandwidth to fully leverage digital content</td>
<td>10%</td>
</tr>
<tr>
<td>Concern about Internet safety issues and liabilities</td>
<td>5%</td>
</tr>
<tr>
<td>Managing student and teacher subscription-based content in and out of school</td>
<td>5%</td>
</tr>
<tr>
<td>Lack of orientation by the vendor on how to access and/or how to use content</td>
<td>5%</td>
</tr>
<tr>
<td>Understanding role of digital content within Common Core standards or other new state standards</td>
<td>5%</td>
</tr>
<tr>
<td>We have other higher priorities than integrating digital resources into our curriculum</td>
<td>5%</td>
</tr>
<tr>
<td>No obstacles</td>
<td>5%</td>
</tr>
<tr>
<td>Lack of support from administrators</td>
<td>5%</td>
</tr>
<tr>
<td>Lack of clarity on legal use policies around digital content</td>
<td>5%</td>
</tr>
</tbody>
</table>

A couple of the challenges were intensified for teachers who experienced delays in receiving the digital content. That impacted the delivery of professional development, as well as getting acquainted with the content and planning how it would be integrated into the curriculum before school started. Delays were caused for a variety of reasons beyond the control of the teachers, including a large number of grant applicants, pricing negotiations, additional awards for Phase 2 and Phase 3, and communications hindered by school staff changes.
In some cases, schools and vendors were not prepared for the support teachers would need in making the digital transition. In the past, when new textbooks were ordered, they were delivered to each classroom before school started and teachers would pass them out to students on the first day of school. With digital content, that process changed. Assistance was needed in setting up online student accounts and in accessing online content.

From the administrator perspective, as seen in Figure 9, the biggest challenges to implementing digital content were instructional time constraints; lack of teacher interest; and concerns about the reliability of the technology and access to devices. Time once again was mentioned as an issue, as administrators observed teachers trying to become familiar with their new content, but not having as much time as they needed due to their many other responsibilities. Administrators also noted that they had trouble with teacher buy-in, as many teachers saw this as just another “thing to add to their plate.” The administrators had the same concerns as the teachers with reliability and access with the technology.

**Figure 9: CHALLENGES FACED IN IMPLEMENTING DIGITAL CONTENT (ADMINISTRATORS)**
Lack of Access, Time, Teacher Buy-In, Professional Development, Support and Research

Many of the same obstacles were shared in the final reports, such as access issues in general, and also access during testing time from February through March, lack of time to plan and practice, teacher buy-in, and not enough professional development. However, other obstacles were also mentioned, including students needing to take more responsibility for their learning and familiarity with the technology.

Another of the challenges we faced was adequate and consistent access to technology in the buildings. Often, computers and computer labs were being utilized for online testing. Students faced the challenge of not having Internet access at home. – Cleveland Metropolitan, Curriculum and Instruction Manager

Attention to clear, focused and differentiated professional development is key to engaging all staff in the buy-in and use of a new digital resource. – Ross Local, Department of Curriculum and Instruction

Teachers need time to prep for any change to the curriculum or new devices/textbooks being introduced to their classroom. Providing a new curriculum a quarter of the way through the school year is far from the ideal situation. – Rolling Hills Local, Director of Student Services, Science and ELA

Another challenge faced had to do with the selection of the actual curriculum. Our social studies group felt that the content was not rigorous enough for the students. However, the math group felt the content was nearly too difficult for the general level students. Spending more time reviewing and researching the programs can save time and issues in the end. – Fairborn City, Director of Curriculum and Instruction, Math and Social Studies.

The implementation process had some challenges; we had to look at schedules and computer lab availability and had to create student accounts. Once student accounts were set up, students had access to the content at their fingertips when and where they needed it. – Washington Local, Director of Curriculum and Instructions, Science and Math

These types of challenges likely contributed to some districts deciding not to continue the use of digital content. Twenty-eight percent of one-year grantees reported that they would not continue use of the digital content. The most reported reasons for not continuing use of digital content were cost/ lack of funding and insufficient access. Other reasons reported for not continuing were: teachers were unprepared for the transition; teachers preferred hard copies; and problems with the piloted content, such as incompatibility with certain devices, the reading level or vocabulary was too high, or it was more of a supplement and they were looking for core materials.
Lessons Learned

The outcomes and evaluation of the eTextbook Pilot Project suggest that the following components should be in place for schools desiring to transition to digital content:

- Assessing school and teacher readiness
- Professional development and teacher support
- Access to appropriate technology
- Communication with key stakeholders
- Careful selection of materials

Assessing School & Teacher Readiness

Engaging ready and willing teachers who were eager and excited to try digital content emerged as a key factor to success in the eTextbook grant. Starting with those who are willing to be involved in a pilot and ready to try a new approach was suggested as a successful method in gaining teachers’ support.

*Some teachers are going to take the opportunity of using digital content and jump right in, while others are going to struggle because it is not their strength. Allow teachers to go at their own pace with implementing digital content in their classrooms. What you will find is that if you force the implementation, then some teachers will be turned off to using the program in their classrooms. If you allow teachers to work the program into their classrooms at a slower pace, they will find the best way that it can work with their teaching style. Eventually, those teachers will see the value of the digital content and use it more in their daily teaching.* – Northwest Local, Director of Curriculum Services, Social Studies

*We found that teachers who were more progressive and intuitive with technology embraced the program, promoted it, and used intervention/enrichment time to have students work on the program. However, some teachers who are not as comfortable with technology and manipulating the program struggled to embrace the program.* – Strongsville City, Director of Curriculum, Reading

In addition, schools should consider whether they have the necessary infrastructure to support digital learning. Prior to the grant, administrators indicated they had sufficient and reliable access to computing devices and the Internet. However, after the grant began, some grantees found that they were overwhelmed by the need to ensure that every child had a device and access to the Internet at school and at home.

By performing a self-assessment prior to transitioning to eTextbooks, schools can ensure they have planned appropriately for professional development and have accrued all of the needed technology.
Professional Development & Teacher Support

According to teachers and administrators, professional development that complemented the digital content was a key component critical to the success of the grant. When asked what they would need to effectively implement a 100% digital or online curriculum, administrators reported professional development for teachers as the most important item. More than 90% of the teachers and administrators who responded to the survey reported that the professional development sessions were effective overall.

Grantees described the importance of professional development to the success of their pilots:

*In order for any new program to work, professional development is needed. The knowledge gained by our teachers through this professional development was invaluable and is attributed to the success of our pilot.* – Defiance City, Assistant Superintendent, Science and Math

*The training was an essential piece and really gave our teachers a starting point with the curriculum.* – Amanda-Clearcreek Local, Curriculum Supervisor, Math

*Providing professional development is critical. Teachers need some sandbox time with a new resource to get a feel for what it has to offer and how it can be used.* – Wheelersburg Local, Technology Supervisor, Science and Math

*As you move to digital, be certain everyone is familiar and comfortable with the digital material and media. This is an assumption that cannot be taken for granted. Offer some after-school optional sessions for anyone who is needing extra support. It will make a difference.* – Noble Local, Principal, ELA

Effective professional development tended to include training on the shifting role from director to facilitator that is necessary when using digital content. Teachers reiterated that teaching from the book is very different from teaching using primarily digital resources.

*We did not invest in sufficient professional development to support our teachers in what is truly a change in teaching style. Letting go of the traditional “math book” was much harder in daily practice for teachers and parents than in our planning discussion. Moving teachers from a director to a facilitator role in mathematics instruction is one that needs continually supported from day one.* - Batavia Local, Principal, Math
Many grantees also noted the importance of early and ongoing professional development so the teachers have enough time to become acquainted with the content before the year begins, and so they can continue to ask questions throughout the year as they arise. Teachers recommended starting the planning of using digital content a year in advance to ensure a smooth transition to digital content when the school year begins.

Our advice is to ensure that professional development continues throughout the process and that there is time for teachers to talk about using the resources and working out any small challenges as quickly as possible to ensure that the product doesn’t have an unintentional break in usage because of a small challenge. PD needs to be ongoing.
– Norwood City, Curriculum Director, Science

It is important that administrators and teachers receive professional development in the use of the online programs and, most importantly, learning how to effectively use the data reports to inform and guide instruction.
– West Muskingum Local, Superintendent, Reading

Our building placed a huge focus on instruction and, most specifically, blended learning. The teaching staff and district as a whole decided to focus our professional development on changing our instructional practices. We placed a priority on student engagement and independence. The grant provided our teachers the resources they needed. We provided professional development through waiver day pullouts, countless hours of team planning, and team-level book studies. In addition, we provided individual support through a building-level curriculum specialist. She would meet with teachers, observe lessons and assist/coach them with anything they needed. This allowed teachers to attempt new programs and have the support to handle issues as they arose.
– Marlington Local, Assistant Superintendent, Math, Science, ELA

One lesson learned is to make more time for professional development and allow time for teachers to really dig their heels in and work together to develop a digital curriculum. Don’t be shy with the PD and find ways to give staff time to work with each other and help each other out with this new frontier of learning.
– Minford Local, Technology Supervisor, All Subjects.
If teachers felt they were given time to properly learn the new digital content and to plan for implementation with their students, the use of digital content was generally much more successful. When they felt that they were not given time to fully learn the product, many of them chose not to use it to its full extent and the use of digital content was not as successful.

*Make sure you have ongoing support for the teachers implementing – often when teachers hit a snag, they don’t have the time to figure out what to do. Our teachers found the curriculum supervisors to be invaluable in helping them in this area and are more willing to try something new when they know there is ongoing, continuous support for them that can be accessed quickly. Also, consider how you will continue to support the hardware needed. Nothing is more frustrating to teachers than when they plan a digital lesson or project and the computers don’t work because they have not been maintained.* - Fairfield City, Curriculum and Instruction, Science

*Professional development and technical support are crucial. Even tech-savvy teachers needed support. Someone will need to take ownership of the programs to see that student data is input correctly and the programs are working. The tech coordinator needs to be involved from the beginning, and coaching is extremely important. We found the more support provided by the vendor, the more successful the program implementation.* - East Guernsey Local's Director of Programs

**Access to Devices and the Internet**

Access was listed in the top four challenges by both teachers and administrators. It was often mentioned in final reports by administrators when asked to provide advice to other administrators considering a transition to digital content. Below are a few examples.

*Access is important. Although we never want to focus too much on the device, the truth of the matter is, there has to be a device to access these resources. We are still mostly in an environment of 7-8 computers in a classroom and a handful of labs. That alone is not enough to transition to a digital curriculum. We ultimately have to get to the point where each student has access to these resources any time they need them.* – Minford Local, Technology Supervisor, All Subjects

*It is important to have the infrastructure and hardware in place to support the online endeavors.* - West Muskingum Local, Superintendent, Reading

*Mobility is essential, and the tech director needs to be involved and understand that if a teacher cannot access the media because of restrictions on the network, the teacher will soon quit trying. Teachers comment that they struggled with getting the computers only to find their students could not access the content because the filter is so tight. Administrators and tech directors should let the AUP control access, not the filter. The teacher is trained and can be responsible for the students’ safe access.* - Geneva Area City, Assistant Superintendent, All Subjects
Communication with Key Stakeholders

Having all stakeholders aware of the plan to move to digital content was another key factor mentioned in reports. One of the most important groups of stakeholders to have on board is parents. Parents are vital resources to talk with other stakeholders including community members, teachers and students.

*One factor that helped our successful implementation was developing parent information, which we sent home several times throughout the year, presented at our “curriculum night” and reviewed during parent conferences. Digital content is a foreign concept to many adults. We didn’t learn this way...so keeping parents informed was an important component in our use of digital content.* – Olentangy Local, Lead Teacher, Language Arts

*This was our first attempt to integrate an eTextbook into our elementary school. Several of our 4th grade parents desired for our students to have a “real text.” With continual communication, we were able to overcome these fears and anxiety. Likewise, the teacher of the course had some reservations regarding the lack of a physical text for the students.* - Ayersville Local, Principal, Social Studies

*Having input from all stakeholders is key to the success of any project. Within the eTextbook opportunity, participation and cooperation of staff has been a critical aspect. Knowledge of project information and of expectations was important in the beginning of implementation, but also will continue to be crucial in furthering the success of this project.* – Oak Hill Elementary, Assistant Principal, Social Studies

*Our advice to other administrators considering digital content is... to have a solid rollout plan for staff and students.* – Shelby City Assistant Principal, Math

Careful Selection of Materials

Several schools mentioned the importance of researching the digital content available to ensure it meets the needs of students. Here is what one school shared:

*The key factor for adoption of eTextbooks is the ability to try various options before purchasing. eTextbooks can be quite expensive when compared with the conventional textbook model. It takes time to evaluate just how closely the eTextbook aligns with curriculum and how user friendly the eTextbook interface is to the end-user. Our advice to any district looking at eTextbooks is to first have a one-to-one program in place with teachers properly trained to assist students in supporting their one-to-one device and the district’s wireless network.* – Upper Valley Career Center, Director of Technology, Subjects: Carpentry, Electrical Trades and HVAC
The Results/Findings

Our advice to other administrators considering digital content is first make sure it is aligned to your district goals. - Shelby City Assistant Principal, Math

Another aspect of the program that we would talk about with future grantees is the selection of the actual curriculum content. Our social studies group felt the content was not rigorous enough for the students. However, the math group felt that Carnegie math was nearly too difficult for the general-level students they were working with. - Fairborn City, Director of Curriculum

Districts looking to transition to digital content should take time to carefully vet all the materials that they are interested in using, and be sure that it is a good fit with their curriculum and educational philosophy before making the decision to transition.

Sustaining the Work

In the teacher survey, participants were asked whether they had plans to use digital content beyond the grant. Fifty-six percent of the teachers who responded to the survey said that they were continuing on with the digital content beyond the grant period, 36% said unsure, and only 8% said no. Administrators had similar responses, with 54% saying that they were planning to continue the use of the digital content beyond the grant period, 12% saying no, and 34% saying that they were unsure. A significant portion planned to continue and even expand the usage of digital content. Forty-three percent of the administrators who responded to the survey said that they planned to extend the use of the digital content into other grade levels or subject areas.

The final reports had similarly positive outcomes. Of the schools requesting the content for one year, 63% reported they planned to continue use and would be purchasing the content for the coming year. Nine percent had not yet decided. And 28% percent said they would not be continuing the use of this particular digital content.

Several schools had issues with the specific content selected and not digital content in general. A few mentioned that although they will not continue with this particular content next year, they will look for other digital content.

Cost was mentioned as the primary factor for not continuing. Other reasons for not continuing were: an insufficient number of computing devices; a lack of teacher readiness and/or appropriate professional development; a mismatch of eTextbook content with curriculum and/or standards; and technical challenges (such as login issues).
Canal Winchester shared this experience regarding its efforts to sustain the work from the grant.

*Through this grant, teachers gained confidence using digital content as their primary instructional tool. All newly purchased textbooks are now online. This changes how teachers view their instructional toolbox. Instructional pedagogy was altered by all fourth grade social studies teachers without fear of failure. Blended learning became a norm rather than an occasional occurrence. Students AND teachers were more engaged and excited about the learning that transpired. Canal Winchester Local Schools plans to use significantly more digital content with every new curriculum materials adoption.* – Curriculum Director, Social Studies

**Cost Savings**

This grant provided funds for the purchase of the digital content for schools. Therefore, it is difficult to determine if there would be a cost savings to move to digital content instead of print texts. Moreover the pilot was limited to two-year licenses and the greater cost savings are found in the six- and seven-year licenses similar to print texts. Teachers and administrators reported that one of the biggest differences between digital content and traditional content is that digital content is always up to date, whereas the content in print texts quickly becomes outdated.

Several administrators discussed how they saw cost savings in the use of digital content versus traditional books. The United Preparatory Academy realized cost savings through not having to purchase additional print material and the savings in human capital.

*Because the digital content automatically differentiates for each student, we saved a tremendous amount of human capital time in determining interventions, intervention groups, etc., because it was done for us through the effective reporting feature.* - United Preparatory Academy, School Director, Reading and Math

*We are very grateful to have been selected to participate in the grant and to have been able to “test drive” the content at no cost to the district. When comparing the cost of the digital content to the purchasing of textbooks, we have come to find that it is a wash when projected out 7-10 years. We see the real advantage to the digital content being that, as updates occur, they can be instantly made available to us, where the textbook will not update any of its information.* – Centerburg Local, Principal, Social Studies
Our district decided before this grant to start adopting digital curricula because texts become dated so quickly. This year has proven a success and supported our thinking because it was constantly updated and there was a cost and time savings for our district and teachers. Our teachers weren’t searching for their own materials and they weren’t copying thousands of worksheets to assess their students. - Amanda-Clearcreek Local, Curriculum Supervisor, Math

A few reports and interviews shared information regarding how they planned to pay for the digital content such as General Fund, Title Funds and, in one case, Booster Funds.

According to the Aurora City School Superintendent, “Cost savings is difficult to figure because without the digital content, the one-to-one feedback that the students received through the pilot would be impossible.” He also reported that they “plan to use a combination of district and booster funds to purchase the music program next year.” – Superintendent Pat Ciccantelli, Interview

The Director of Curriculum from the Norwood City School District said that they anticipated “seeing cost savings in the future from not having to update textbooks every few years.” She appreciated that the digital content was continuously updated and felt that the subscription model was much more cost effective, particularly in the sciences. – Kristina Chesson, Interview

The Defiance City Assistant Superintendent reported, “It is our intention to continue using the digital content in grades six through eight and explore the expansion to high school courses. We will absorb the cost through our general fund. We believe that online simulations are an essential part of the science curriculum.” – Sheri Steyer, Interview
Conclusion

The eTextbook Pilot Project utilized $6 million to facilitate the purchase of digital texts, electronic educational content and professional development resources for Ohio schools. Despite hurdles and lessons learned, the majority of schools reported positive experiences and were pleased with their introduction to the use of digital content. Including both one-year and two-year awarded schools, 70% will continue utilizing digital content for the 2015-2016 year. Of those schools that were undecided or not continuing, in many cases they were not unhappy with the digital content but needed to get better prepared by planning for more technology; communicating with parents, teachers and students; spending more time reviewing and testing products; and planning for professional development.