

Curriculum Department:
Summary - Digital Curriculum Materials vs. Traditional
November 2, 2015

The Curriculum Dept. gathered some basic cost comparisons using science curriculum materials, as this is the content area that will be reviewing materials in the spring of 2016.

Please note that, the Curriculum Department has concerns about capacity at the schools for 100% digital content. Additionally, feedback we've received from parents and staff over time indicates that access to technology is not consistent across the district and is an equity issue for students and families.

The biggest consideration when going 100% digital is student access. The following are considerations around this issue:

- To go digital, students need to have access at home as well as at school.
- Cost effective devices for schools/students include Chromebooks which are \$304 each, and iPads which vary from \$350-\$500 depending on the model.
- While many students have internet access at home, going digital requires students / families to have sufficient bandwidth to allow access to the digital content and videos (potentially for multiple students), as well as peripherals like printing. Additionally, not all devices are conducive for school work.
- At the school level, not all schools and classrooms have the same levels of technology available.

Traditional Content:

- Most traditional high school textbook programs (Pearson, McGraw Hill etc.) have online components.
- The cost for a traditional textbook averages around \$100.00 and online textbook and supplemental components are typically included in that price.
- The purchase of an ebook alone also has an average cost of \$100.00.
- The price difference between the ebook/online access only, hardback only, and hardback plus online is a few dollars.
- Teacher's editions and resources are typically provided, although many are now strictly online.
- Historically textbooks and online subscriptions have been on a 6-year replacement cycle within the FNSBSD.

Digital Content:

- During the previous curriculum adoptions (math, social studies and English/language arts) completely online programs were included as part of the materials review process when available.
- At the elementary level, there are fewer completely digital programs available than at high school level.
- Some publishers allow districts to create their own digital textbook by selecting pre-

constructed units or modules and sequencing them into a “program.”

- For example: Discovery Ed Techbook varies from \$45 - \$65 depending on grade level. A traditional textbook is not provided.
- For example: Pearson’s *Interactive Science* for elementary costs \$44.00 per student. It also comes with a traditional textbook.
- Harcourt Houghton Mifflin’s *Science Fusion* provides an ebook and online components with an interactive book and digital labs. Each “book” or science content unit is approximately \$20 per student per “book.” (Cells/Hereditry \$20, Ecosystems \$20, etc.)
- There are examples of completely online programs.
 - For example: Reasoning Mind is a completely online math and test prep curriculum for \$88.00 a student. A traditional textbook is not provided.
- Different programs/ publishers licenses are priced differently, for example a per student license which is non-transferrable vs. an unlimited site license. Additionally the length of the subscription varies.
- A variety of “free” content resources exist in many content areas. It’s important to note that free refers to only the content.
 - Using free digital content would require additional resources (staff time & expertise) to vet/ organize/ sequence the content and align to adopted curriculum.
 - Most free content does not include teacher materials such as ExamView. (Note: ExamView can, often be purchased separately: <https://www.turningtechnologies.com/k-12#assessment-software>)

Examples of free digital content:

- Civics: <http://www.loc.gov/teachers/student-discovery-sets/>
- Math, Science, History - <http://www.ck12.org/browse/>
- Utah OER project - <http://www.uen.org/oer/index.shtml>
- OpenEd - <https://www.opened.com/search>
- OpenStax
College - <https://openstaxcollege.org/>; <https://openstaxcollege.org/books>
- Library of Congress - <http://www.loc.gov/teachers/>
- My OER - <http://www.myoer.org/>
- Utah – this might be the same as the Utah OER Project
- <http://www.schools.utah.gov/CURR/science/OER.aspx>
- <https://www.goorulearning.org>
- Engage New York - <https://www.engageny.org/> - Common Core-aligned math and English/LA for grades K-12.