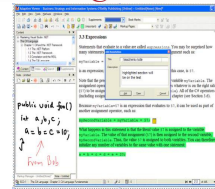


Adaptive Book Project

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PROJECT ABSTRACT: HP mobile technologies enable textbooks to be delivered in a format that is highly interactive, collaborative, engaging and smart. Adaptive Book technology is a content delivery platform that can help students understand, analyze and apply the concepts they learn. Collaborative reading and measuring reading comprehension are the keys to Adaptive Book's promise and its future potential.



Impact on Student Learning

Reading is fundamental to learning. However, students don't read textbooks nor know what to read or how to ask questions.

One Year Ago – Only 25% of the students thought textbook is a useful part of their learning

Today – Students believe textbooks can be more interactive and can allow collaboration and be more smart. 68% of the students believe textbook is important to their success.

One Year From Now – Textbook will be tightly integrated and customized to the course students are taking. Success in our project is delivering content in clustered formats to help students understand concepts faster. Our goal is making the connection between reading comprehension and application of concepts learned in a course. Our goal is to measure the effectiveness of the lecture by analyzing the pre and post lecture markups.

Impact on Learning

Reading is the key to success. Reading can be fun and effective when students can read collaboratively and measure their reading comprehension. Pre and post lecture reading will become a key component of the course. Adaptive book technology contains smart algorithms that is able to automatically measure reading comprehension of students compared to expert readers. Scores from reading assignments will become part of the course assessment. Learning will be more collaborative and outcome measurable. Students pre and post lecture understanding will be compared against their performance in assessment instruments. Success is transforming education using smart reading comprehension tools. Success is allowing students to instantly access markups generated by other students. Success is students collaboratively developing markups.

Technology Implementation

Adaptive Book thin client allows all books to be stored in student Tablet PC's in a highly interactive format. Student can access a library of pre-existing markups and develop their markups and share with others. Students can measure their markup against an expert markup. Adaptive Book technology platform is developed by TextCentric with a smart markup analysis tools developed at CMU.



Keywords: reading comprehension, ebooks, markup, ink annotations, textbook, collaboration