The Benefits of Write-In Textbooks

A New England primer. A McGuffey reader. A "Dick and Jane" reader. These titles conjure up images of early textbooks with pages and pages of text. These books reflect a different time in our education history. So many practices and theories in our education system have changed drastically since these books were used in the classroom. But the truth is, traditional textbooks have basically remained the same since our introduction to the McGuffey Readers back in 1833. With the exception of colorful photos and images, very little has changed in education textbooks until now. We cannot keep the same classroom practices and use the same resources in education and expect a different outcome. For students to be effective in the 21st century, we have to make alterations.

The vehicles used to deliver information to students are changing every day with the increased use and availability of technology in the classroom. The textbook—the traditional channel by which information is transferred from the content expert (the author) to the learner (the student). Students are often asked to respond to questions that were written by someone who totally understands the content and then read and graded by someone with a great deal of content knowledge, the classroom teacher. This places the student at a disadvantage because they are the link in this chain needing to acquire and understand the information.

Textbooks have required students to read and extract key words and phrases that often contain the actual definition of the word. This is incredibly challenging for most students especially in the areas of science and mathematics, but for struggling readers, it is next to impossible.

Preparing students for tomorrow's workplace is the challenge facing today's educator. With the prevalence of technology in the world, a student walking into the classroom expects to be engaged in the content, to have the material presented in a fast-paced, entertaining manner, and to see the relevancy of the subject matter they are being taught to their real world experiences. These students are technology natives who have always had the ability to obtain and to research information at lightning speed at their very fingertips. And they are incredibly connected with their peers through social media, sharing their every move and thought. But, the increasing pressure to perform well in a global marketplace challenges these same students to be able to communicate thoughts and ideas effectively, to solve problems both independently and collaboratively, and to master challenging areas of study such as the sciences, technology, engineering, and mathematics.

"To successfully operate in college and in the workplace, now and in the future, adolescents will need to master cognitive strategies for reading, writing, and thinking in complex situations where texts, skills, or requisite knowledge are fluid and not always clearly understood" (Conley 2008).

Research supports a change from a read-only, read-about it book, to a more interactive format—one where students actually interact with the content. A format where they are able to highlight key concepts, write image captions to summarize key points, underline vocabulary words and their definitions, answer questions, ask questions, and write notes or draw diagrams to summarize a concepts.

Personalized Ownership and Engagement

Write-in texts give students opportunities to create a personal recording of their thinking and learning by encouraging them to write down their ideas and questions, by asking them to share a point of view or to defend their thinking on a particular point. The text provides a scaffold for learning by providing writing prompts, guided questions, graphic organizers, chapter outlines, and so on. This interactivity with the textbook makes the information more like a living document, bringing the content to life and making it the student's own work.

"Writing to learn engages students, extends thinking, deepens understanding, and continues the meaning-making process" (Knipper & Duggan 2006). Students move from learning to write to writing to learn. When you write about something, a concept or idea, you have to think about how you think or what you think (Baker et al., 2008; Pohlman, 2009).

Making the Connections

"Integrating writing with reading enhances comprehension because the two are reciprocal processes. Therefore, teachers who implement a variety of writing strategies help students better understand content area texts" (Knipper & Duggan, 2006). Writing directly in the books allows students to reflect on a concept or question right at the point of use; no need to transfer thoughts and responses. Then they can return to them at a future time to reflect on and revise their thinking.

Prompts and questions sprinkled throughout the text teach students how to analyze and interact with content as they read. Students are engaged with each page and become active readers as they interact with the content being presented. Throughout the write-in text they are asked to circle, underline, and/or highlight main ideas and key concepts. These are all examples of a type of cognitive literacy strategy called annotation. They help students visualize structure or relationships, gain meaning or definition, and dissect and probe ideas (Conley, 2008; Pressley, 2006).

The use of annotations helps students develop independent learning skills. We have found "that consistent use of annotation in science classrooms helps students read more carefully and reflectively and build on their independent learning skills. We know that the reading-to-

learn tolls, like annotation, must be carefully tied to the intended science learning and not haphazardly or inconsistently applied" (Zywica & Gomez, 2008).

In write-in texts the use of illustrations and graphic organizers helps students comprehend connections and relationships visually. As they read, students summarize and organize their ideas in graphic organizers such as Foldables®, word webs, flowcharts, and other such graphic organizers

When students interact with the illustrations and text on every page, they develop their ability to read and to extract the meaning from expository text. It helps develop critical thinking skills as well as communication skills. A student's ability to think and problem solve independently and to communicate those thoughts effectively are skills crucial for success in the 21st century (Yore et al.,1997).

In Science and Mathematics

In science, the use of a consumable, write-in textbook allows students to record their thoughts, questions, observations, and data. They can use the book to think and work like a scientist uses a log. Students record hypotheses, jot down notes, make sketches or diagrams, suggest ways to change a variable in an experiment, or just note changes they have observed. Similarly, in mathematics, students can record data, ask questions, write responses, or indicate steps taken to solve a particular problem. It saves the student time from re-copying problems from a traditional, hardcover textbook to a separate piece of paper where errors are made in transposing numbers or misaligning numbers for computation and makes the connection by placing the answer or steps with the actual problem.

Self-Assessment

Students stay more organized in a write-in format by marking their responses directly beside the questions. This helps them make a connection between the question and the response better than writing the responses separately on a piece of paper totally void from the question. A write-in textbook allows students a place to read, write, answer, question, illustrate, graph, and self-assess all in one place. This interactive format helps students stay organized. This is true for all students but especially students who are acquiring the English language. The textbook becomes a personal study guide that captures students' thinking and understanding. It provides a resource for students to use for review and for teachers to monitor the knowledge and skills students have learned.

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