## ARTICLE



## Kicking the Habit

I kicked the habit! I am no longer a textbook junkie. I no longer rely on my daily fix of some publisher's bloated curriculum. I am free of my addiction without the help of an arm patch, rehabilitation clinic or twelve-step program. I quit cold turkey. Here's how.

At my school, the students are issued a math book that they leave at home and each teacher is issued a class set. I usually keep one underneath each desk. This year, however, the librarian informed me on the first day of school that we were out of Geometry textbooks. Our student population had grown so large that our library ran short. In fact, for two to three weeks many of my students would not have a book at home either.

There was talk of teachers sharing class sets and photocopying pages for students. I decided to try a different strategy. I took this as a professional challenge to see how long I could teach without a textbook. I knew whatever happened would be a growing experience for me as well as my students.

Well, by no fault of the school library, two to three weeks stretched to seven. By that time, I was well into my "textbook free" strategy, so I just kept the ball rolling...for the rest of the year. I used only 12 assignments from the textbook in those 180 days. Here is how that unique experience of being textbook free has changed my teaching, forever.

Firstly, I am now much more focused on standards. Rather than leafing through the textbook, I looked at my state and district standards, and established my curriculum from those. After all, shouldn't they be determining what we teach? From there, I grouped the topics into units, and then scheduled individual lessons. This process naturally pared down the number of topics that I taught and allowed me to allocate a full week of instruction to each concept, rather than one day to each section of the textbook.

The second big change that has occurred is the structure of my lessons. Everything from my homework to my instruction has radically changed. My typical textbook free lesson was comprised of three to six problems of various difficulty. Oftentimes, I began a lesson with one to three review problems from previously learned material which applied to the current lesson. This is similar to a traditional warm-up with the exceptions that the problems are very relevant to the new lesson, and not simply arbitrary review.

Sometimes, I began with THE big problem from the previous night's assignment, and solicited student responses. It is not hard to see that my old practice of dedicating 20 minutes of class time to questions on how to complete the previous homework disappeared. The intent of the class slowly evolved from getting the answers correct to understanding the mathematical principles behind the question.

These introductory problems served as a terrific assessment tool, also. Previously, it was difficult to know how well the students were doing when only a handful of them were asking questions from a truck-load of exercises. However, when the whole class was engaged on the same few problems, it was easy to walk the room and evaluate their performance and understanding.

The introductory questions naturally lead to the main problem or small set of problems that would drive the lesson. The students were engaged in an investigation, project or activity relating to the concept. Each day my students came to class to solve problems, rather than take notes — a huge change from all the previous "textbook years." This

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## TEXTBOOK FREE (CONTINUED)

process of problem-solving and investigation consumed the full class period. Gone were the days of having the students start homework in class. I taught the entire class period.

The homework assignments were only one to three problems long and were typically extensions of the day's topic, not just practice exercises. I had learned from the international comparisons that America is one of the few countries that pushes the drill-n-kill regime and yet we are at the bottom of the performance pile. So I tried to limit both the number and size of my assignments, and to make them more challenging and contextual.

By doing that, I firmly settled the argument regarding the quantity and frequency of homework that students need to be successful. For the skeptics that are still reluctant to abandon their practice of assigning 30 homework problems a night, I have some strong evidence. My class averages led the district on the district final. With this in mind, I can at least make a case that this new homework philosophy is not hurting my students in anyway.

Another significant change was my lesson planning. Rather than writing examples of how to complete an algorithm or creating cute acronyms to remember esoteric rules, I actually wrote lesson plans. I started planning each lesson by asking: "What do I want the students to know? What is their common misconception of the topic? How can I best get them to understand the topic? How can I challenge them within the context of the topic?" I would then try to create a story/context/scenario and a small set of problems that would best develop understanding of that topic. It was so much fun. This change in my approach to lesson planning was actually a reflection of my new attitude towards teaching. My job description truly shifted from covering material to uncovering knowledge.

Focused, standards-based curriculum; in-depth, problem-solving instruction; short, conceptually-based homework assignments. This experience was so exhilarating that I am now a junkie all over again. I traded my old addiction to the textbook, for a new one — creative lesson planning. This is one habit, though, that I never intend to kick.