

## Using Moodle? Dump the Textbook

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While you can certainly read this article in print, I also invite you to read it online at my Web site at <http://romeomarquis.com>. That way you can follow the included hyperlinks.

For ten years now I've been teaching online courses. I've been a teacher for more than forty years, though, and comparing classroom based teaching to online teaching continues to be a fascinating endeavor. During these last ten years I have become a true believer in teaching in the online environment. When I work with my own students, most of them teachers, I usually begin with the question, "What can we achieve online that we cannot achieve as well or as fully in a more traditional setting?" The answers have led me to the following conclusion: *Simply using online tools as add-ons to current approaches is not sufficient. Teaching must be redesigned to take advantage of the capacity of the online tools and resources at our command.* To do this, I suggest several approaches that I emphasize in my own courses. One of the first of these is to *dump the textbook*. After reading this article, please feel free to go to [my blog](#) and click on "Textbooks" to join the discussion.

Requiring a "one size fits all" textbook can actually be unfair to students whose approaches to learning differ from those of the authors. Many authors write within the framework of their own teaching and learning styles. Anyone familiar with the Myers-Briggs Type Indicator and its research in education knows this. So what happens to students who learn in a concrete sequential manner when they read a textbook written by an author who prefers an abstract style? And what happens to an abstract learner who is bored to tears by a concrete sequential textbook?

Teachers who are well aware of various learning styles can take advantage of tools like Moodle to craft content in ways that are simply not possible with textbooks, even those with companion CDs and Web sites. These teachers select Web based content not only in print format but also in multimedia formats that can be heard and seen as often as needed by students of all learning styles and integrate them in seamless ways (as opposed to using a textbook with a CD attached). Some teachers are already doing this, fully aware that no textbook, no matter how well written, can come close to what is available on the Web when the lessons are organized very carefully by reflective teachers.

Luis Chavez is the principal at the [Freedom High School](#) in San Pedro Sula, Honduras. He is an energetic young man who also teaches a course entitled *Socio Economic Development*. This course is an integral part of the curriculum in this growing school in a developing country. I recently visited Honduras and spent some time introducing Moodle to Luis and some of his staff. After some discussion, Luis experienced a bit of an awakening as he asked, “Then why do I need a textbook?” By asking this probing question he made a quantum leap from past practices to the era of digital learning. The rest of our discussion focused on his school’s strategic plan, the integration of online course sites to supplement in-class courses, and the movement of the school toward a wireless laptop environment. This is an exciting time for this growing school on a dirt road a few miles from the center of San Pedro Sula. Indeed, many American schools could follow this example. Some do. Here are some examples.

Margery Waldron has developed a Moodle course site for her *Introduction to Programming* course at [Newton \(MA\) South High School](#). In explaining why she decided to develop a Moodle site for this course she said, “In the past I have used PowerPoint presentations supplied by textbook authors. The students have overwhelmingly voted them as boring, confusing and less than useless (and those were the printable comments). From observing my students I found that they learned particularly well from each other and from cruising the Internet. For this reason, in my Moodle course site I will put up a discussion forum for each module. I’ve also scoured Web sites and YouTube for videos (some created by students) and short tutorials that I hope will carry the message to my students in their own ‘language.’”

In discussing the above by email with Margery, I discussed the need to move away from traditional textbooks. Margery added, “I totally agree. I don’t think a single student of mine ever cracked a textbook with the exception of my BC Calculus students. I hadn’t actually thought of a textbook as ‘one size fits all,’ but you are exactly right about that.”

There is undoubtedly a transition taking place, one that relies more on student centered constructivism than on teacher directed presentations of content. This does *not* mean that content is less important. It *does* mean that a constructivist approach to content development can lead to much higher levels of critical thinking and creativity with students. It also means a very different role for teachers. Read on . . .

Valerie Lechstanski and Jennifer Smith teach chemistry at Hopkinton [\(MA\) High School](#). They are working together to design (actually, to *redesign*) a chemistry course in Moodle. In discussing this topic, Valerie said “We have only been using textbooks as a reference and ditched the lab manuals long before that. The labs didn’t have enough inquiry and did not teach process skills. Jen and I received the OK from the administration not even to pass them out this year. Yes, I think our focus on inquiry and process skills, the incorporation of technology into the lab, the research piece (through science fair) and the addition of Moodle puts us ahead of the curve.”

Jennifer addresses some of the changes that affect students when they are introduced to carefully developed and interactive online environments tools like Moodle. “No kids like change at first. I agree with the point of view that many kids are trained to think the teacher speaks, the students listen, and this is learning. Hopefully with the addition of Moodle to our classes some of these changes will begin to take place.” Jennifer is correct.

Imagine the huge advantage that Margery’s and Valerie’s and Jennifer’s students have as they prepare for higher education. What these students are experiencing is an excellent example of what 21<sup>st</sup> Century skills are all about. By the same token, similar approaches were applied with a group of ten high school educators during “Engineering Epiphany,” a STEM related professional development experience funded by the Commonwealth Information Technology Initiative (CITI) a year ago. The program began with online preparation in a Moodle site, followed by an intense two-week institute at Olin College, and ended with lesson plan development again in Moodle. You can visit the [Engineering Epiphany site online](#). The site includes Web pages and videos, but no textbooks! Yet the integration of content and process, online and in class, was superb.

“Engineering Epiphany is an example of what CITI was intended to promote and produce: new approaches to using technology tools to teach STEM subjects to capture all students’ attention. We need every student to understand how important STEM is to their and our future and that means teaching the way they are living today, with the new technologies,” said Isa Zimmerman who directed CITI K-12.

It’s time to redesign teaching in the digital 21<sup>st</sup> Century so that it reflects and integrates the tools that are available to us rather than hang onto outdated approaches. 21<sup>st</sup> Century skills *do* include online learning. To participate in a discussion about this article please go to my blog and click on “Textbooks.” The link to my blog is on my [Web site](#).

Life is like riding a bicycle.  
To maintain balance you must move forward.  
--- Albert Einstein

Romeo Marquis is the founder of [The Learning Curve](#). He was a high school teacher, principal and associate dean for academic technology and distance education. He is the recipient of MassCUE's Pathfinder Award and Massachusetts Colleges Online's Contributor of Distinction Award. He spends most of his time working with schools and teaching graduate courses in instructional technology and educational leadership. His Web site is at <http://romeomarquis.com> and includes his contact information.