By Kevin Carney

Think Outside the

The Vail School District in Arizona improved student achievement by taking advantage of free digital resources and relying less on textbooks. Now the district is sharing its curriculum practices with 25 schools across the state.

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Book

Many students are capable of reading a chapter, doing the end-of-chapter questions, studying a little bit, and passing the chapter test. Many teachers are in the habit of using a textbook as a crutch to fall back on when creativity is lacking. Others are capable of teaching incredibly creative lessons based on state standards but are bound by the "adopted textbook." The unfortunate end result: Too many students are not being taught to master state standards, particularly those not covered in their textbooks. Too many are not learning the basics, are not achieving on standardized and ACT tests, and are not leaving school with the skills necessary for success in a worldwide economy. Sadly, this picture is the reality in classrooms across the country.

The Vail School District found a solution to improve student achievement that is significantly more effective than the status quo model of textbooks determining what is taught and when. By inverting the curriculum and taking advantage of digital resources, Vail improved from being an average-performing school district in the 1990s to one of the top-performing school districts in Arizona today. Even more exciting, because of free open source software and a desire to take advantage of free digital resources, Vail is able to share its curriculum practices and is guiding 25 schools and school districts across the state to implement these practices and develop shared resources.

Inverting the Curriculum

Vail started with the standards and used them to select resources. No longer would the textbook drive what and when something was taught. Administrators knew that for this change to occur in classrooms, teachers needed to own the solution. So teachers from each site worked with Vail's Curriculum Department to identify essential state standards that must be taught to mastery and schedule these standards on the calendar for each content area at each grade level based on logical sequences, not chapter numbers. Soon the standards drove curriculum, which encouraged creativity and liberation from the read-a-chapter-and-answer-the-questions rut that didn't encourage higher-level thinking, mastery of skills, or even student achievement. This move earned every school in the district an "excelling school" label, the highest attainable distinction in Arizona, and Vail's test scores skyrocketed, placing the district near the top of the state academically.

Organizing the Content

Hunting for material was still a challenge, however. Although the internet provided an extraordinary amount of free digital content, it was not organized in a manner that promoted teacher efficiency. The solution: Teachers needed to rely on one of education's best practices—collaboration. They had come together to create the curriculum calendars, but now they needed to share their methods to help students achieve mastery. All educators have a passion for at least one curricular area, so if the passionate-about-reading fourth grade teacher could share her methods with the passionate-about-science fourth grade teacher at a different site and vice versa, they would no longer remain in isolation, and students would reap the rewards.

In another neck of the Vail woods, the district was becoming widely acknowledged for its innovative use of technology. It received worldwide press coverage upon opening the first-ever textbook-free, all-laptop school in 2005. Because teachers at Empire

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Vail School District in Arizona won the 2011 Sylvia Charp Award for District Innovation in Technology. Presented jointly by *THE Journal* and ISTE at ISTE's annual conference and exposition, the award recognizes U.S. school districts that exhibit effectiveness and innovation in the application of technology.

Winners demonstrate consistent district effectiveness, use of the NETS or a local or statewide derivative of ISTE's standards, effective and innovative technology implementation, and commitment to participate in dissemination to and support of other districts.

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High School did not have textbooks, and all students and teachers had laptops, the staff was forced to identify digital resources, create their own materials, and share them with colleagues. They proved to be successful. The school received an excelling school label.

After watching this unfold at Empire in 2007, Vail's curriculum and technology departments began brainstorming to further define and improve the district's vision for instruction and student learning. Then, in 2008, Vail gathered principals, tech coordinators, and teachers from each of Vail's schools to meet with the district's curriculum, technology, and special education departments, the superintendent, and members of the governing board. The charge for that day was to exchange ideas about creating digital instructional materials in an efficient format and about using electronic tools to access those materials. From that meeting, Beyond Textbooks was born. Student achievement and teacher collaboration began to reach new levels.

Beyond Textbooks

The name Beyond Textbooks (BT) does not refer to an abandonment of traditional textbooks but rather a philosophy of learning and teaching that transcends textbooks and state standards to strengthen support for communities of teachers, facilitate learning and teaching, and improve student growth and achievement. This comprehensive approach begins with a shoulder-to-shoulder rather than top-down curriculum development process. Vail teachers and the Curriculum Department collaboratively review state content standards to identify core sets of essential standards that establish what students must learn in each content area at each grade level. These will provide students with knowledge beyond just a test date. The documents produced in this process form the foundation of the core subject curricula at each grade level and establish districtwide expectations for what teachers should teach and what students should learn and be able to do in relation to a specific standard.

The capstone of the curriculum framework is an online BT wiki, a free web-based tool from Mind Touch, which makes the collection of digital curriculum materials, support materials, and other digital resources accessible to all faculty. Teachers use the wiki to review the curriculum and calendars, locate and share resource materials, and communicate and collaborate with peers across the district who use the same curriculum but who would not otherwise be available to share resources and provide other support.

Partnering with Other Districts

While BT began as a Vail initiative, over the past two years it has evolved into a program that has created partnerships and intergovernmental agreements with more than 25 diverse districts and charter schools to help fund the staff and equipment for the program. BT now reaches more than 2,500 teachers and 50,000 students in schools across Arizona that have adopted it as a framework.

David Woodall, superintendent of partner district Benson Unified School District, is thrilled with the partnership. "When I saw the amount of time Vail had spent unwrapping, prioritizing, and calendaring standards, and the amount of resources they had generated, I knew that it was something that would be very difficult for us to ever produce, and if we could tap into what they've created, it would be very exciting," he says. "In the long run, this could really reshape instruction. It's the ultimate tool for linking instruction and teacher creativity."

With the help of Vail's ongoing professional development, BT partners are trained in the philosophy and practices of the BT curriculum framework, effective implementation strategies, and the technical facilitation of the BT wiki.

The dividends have already started to pay off in a variety of ways. For example, one high school math teacher from a rural district with limited resources and no one to collaborate with was able to share insights and expertise while finding a wealth of new strategies using this system.

"At its core, teaching is a creative endeavor," says Vail's superintendent Calvin Baker. "Within the context of clearly defined expectations, Beyond Textbooks provides teachers with the opportunity to fully engage their creativity and share it with teachers across our state."

Managed by Teachers

BT is designed to honor the professionalism and expertise of teachers. While the objective of inverting

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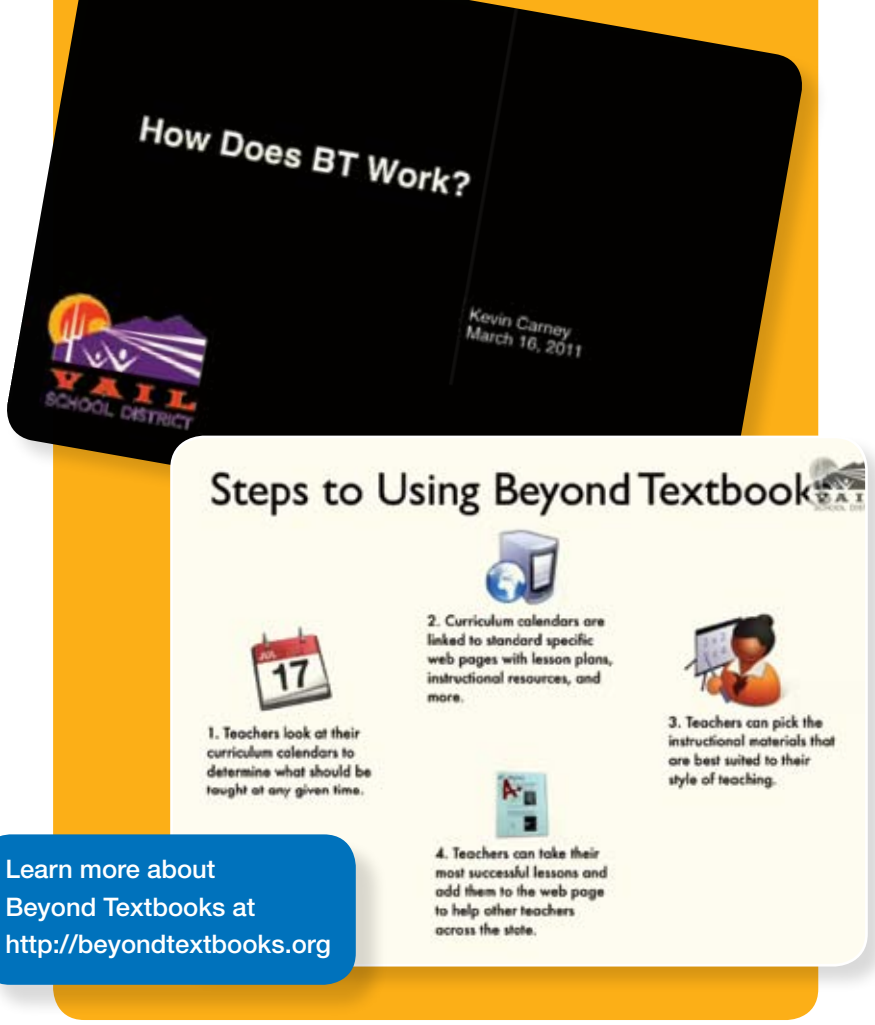
the curriculum to enhance student achievement came from the district, teachers collaborated and agreed on all of the components of the program, and teachers keep it running. Teachers further determined the criteria for populating the site, and teachers, along with one administrator (BT's director) were selected to review all posted materials to verify adherence to those criteria. The program is a district initiative and is overseen by the governing board and curriculum and technology departments, but the program is managed by teachers.

Teachers, administrators, district officials, the governing board, and parents frequently discuss BT's success. But the true accountability is to students. With a district goal of providing a guaranteed and viable curriculum to students based on standards—not textbooks—the community goal became a promise to students that they will be successful.



Learn more about Beyond Textbooks at http://beyondtextbooks.org

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Grade	Subject	Improvement
3	reading	5%
	writing	no data
5	reading	no data
	writing	5%
7	reading	11%
	writing	5%
8	reading	6%
	writing	5%
10	reading	5%
	writing	5%

Professional Development Is Key

Teachers have quick and easily accessible technical support. A goal of Beyond Textbooks is to make sure new and existing staff get professional development on an ongoing basis. First, each teacher is well trained on the system, including standards of uploads, how to upload, how to download, etc. New teachers to the district receive training in the New Teacher Induction professional development program during their first two years in the district. BT also offers a help-desk feature that allows teachers to pose questions or concerns to directors of BT and receive speedy responses. Further, each school site has a BT designee for technical support.

Student Achievement

While Vail had made it to the "excelling" level before BT, the program has taken the district to new levels and is now providing an opportunity for students in other districts to follow suit. Even with the implementation of new and more challenging math standards for the 2009–10 school year, every school in Vail was able to maintain its excelling labels last year while 33% of excelling schools across the state lost that status. The framework was already established, so simple electronic adjustments to online calendars, creation of new wiki pages for the new standards, and uploads of new digital materials created a smooth transition. Further, most Arizona Instrument to Measure Standards (AIMS) scores went from terrible in the early 2000s to good after the curriculum changes before BT (Vail students averaged 20 percentage points higher than state averages), to incredible in 2010.

While numbers show the student success of BT, testimonials provide another view. Rookie Vail teacher Nicole Buchheit said:

> As a brand-new teacher, BT kept me alive and sane during my first year of teaching and continues to do so during my second. I can ask for help, get guidance on how to teach something, or just get some general guidance on the learning objectives. I can look up lessons on BT that I know have been successful in other classrooms and make them my own in little or no time. BT is an invaluable resource that allows for the highest level of collaboration and student success.

Reducing the Budget

Not only is BT helping to increase student achievement, it has helped Vail reduce the districtwide instructional materials budget for 10,000+ students from $53 per student to less than $9. Due to the creation, acquisition, and aggregation of digital resources on the BT wiki, Vail is no longer purchasing new textbooks. Those savings have made it possible to preserve other vital programs.

Dubbed as a "Glimpse of the Future" by *Education Week's* blog Digital Directions, BT is increasing public perception of Arizona education. Recently Vail's superintendent presented the BT program at a conference for school administrators in New York City. He witnessed "big-league educators" respond with comments such as, "Wow, you do *that* in Arizona? How?"

Beyond Textbooks is good for Arizona, its teachers, and students!

Kevin Carney is director of Beyond Textbooks at Vail School District in Arizona. Prior to that assignment, he was a middle school principal for nine years and an elementary school teacher for seven years.

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