BLENDED LEARNING + DEEP CONCEPTUAL LEARNING = SUCCESS FOR ELLs

By

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At Madison Park School of Dynamic Interactive Learning in Phoenix, Ariz., 60 percent of our students are Hispanic, 17 percent are English language learners (ELLs), and 74 percent are economically disadvantaged. Our Title I middle school uses a blended learning model to promote the achievement of ELLs, and to improve teaching and learning for all students. With this model, we combine teacher-led instruction and online learning to extend students beyond the limits of traditional learning, and prepare them for success in the global marketplace. All students receive a laptop computer they use daily at school.

Our school also employs a science, technology, engineering, and math (STEM) focus. Yet, many students, regardless of their native language, struggle with math and science because they don't understand the concepts that underlie these sometimes complicated subjects. Further, for many students including ELLs, abstract concepts can be difficult to grasp with traditional tools like textbooks.

To help students build a deep understanding of core math and science concepts and skills, we used grant and Title monies to purchase a web-based concept mastery program called Adaptive Curriculum (http://www.adaptivecurriculum.com/us). The program, which is designed for grades 6-12, includes activities in English and Spanish. Using technology allows us to customize learning to fit each student's individual level and pace, and provide immediate feedback and assessment.

In our school, all students in grades 5-8 use Adaptive Curriculum in math and science. Students work on Adaptive Curriculum at least twice a week during the school day to receive individualized instruction in math and science. Students can also access the program from home using their laptop computers. For ELLs, the self-paced, online lessons allow learners to repeat an activity as many times as needed to ensure understanding, or to accelerate their learning if they master concepts more quickly than their peers.

In addition, teachers use the program for whole group instruction to introduce a concept or for practice, assessment, review or remediation. Teachers also use it to provide extension projects for high-performing students.

Our teachers and students like that Adaptive Curriculum uses mixed modalities, which helps ELLs and students with diverse learning styles increase their understanding. Activities incorporate auditory, visual and kinesthetic modalities, with multiple language supports, to help students develop deeper connections between the English language and math and science content.

However, I believe what sets Adaptive Curriculum apart from other technology programs are the real-world scenarios, animations, videos and 3D models it uses to help ELLs improve their understanding of difficult or abstract concepts. These scenarios allow ELLs to tap their prior knowledge and take conceptual development to a higher level.

Teachers have received on-going training on the use and integration of Adaptive Curriculum. They have met at ASU SkySong facility for a weeklong training for the past two summers on new modules, their integration/use into general lessons and their integration among different area contents including: math, science, lang. arts and social studies.

We have also had onsite trainings, which provide the opportunity for team teaching and reflection. Full day site-based training by content was provided as well. Additionally, a designated Coach works with teachers on campus on a weekly basis on the use/integration of Adaptive Curriculum. As a result we have a number of teachers who excel in using the online program to enhance their instruction. Many of the students have also become mini-experts in using Adaptive Curriculum. Some students have, with guidance from their teacher, built their own discovery units using Adaptive modules.

As with any new program it's important that we be able to measure its impact. Adaptive Curriculum's online assessments and reports enable teachers to easily monitor student progress, identify areas of concern, and keep students on task. The data helps them to differentiate instruction and interventions to address immediate needs.

We believe having a blended learning model has helped teachers meet the needs of ELLs more quickly and effectively than traditional instruction alone. With this model and online learning programs like Adaptive Curriculum, we are bridging the digital divide, individualizing learning, and helping students develop a deeper understanding of core math and science concepts and skills. As a result, students are more excited about learning, more confident, and we're seeing improved attendance and achievement.