Chapter 3
Implementing Common Core State Standards using Digital Curriculum

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ABSTRACT

Teachers and educators transitioning to the Common Core State Standards face a significant challenge of creating new lessons and resources, as well as formative assessments that match the increased rigor required. Teachers must ensure that each student achieves and demonstrates higher levels of understanding. Many aspects of this transition can be mitigated, supported, and enhanced through blended learning. Blended learning leverages digital curriculum to assist teachers in creating a student-centered learning experience while providing a curriculum that meets the new standards. Students receive individualized instruction at their own pace, achieve mastery, and experience success in high school. They are equipped with a deeper level of understanding and the critical thinking and problem solving skills needed to succeed in college and work.

INTRODUCTION

The new Common Core State Standards require all students to achieve at higher levels, with more challenging content and new assessments. Public schools implementing the Common Core State Standards face a significant challenge in providing a curriculum with lessons and activities that teach students to apply mathematical thinking to real-world situations, and specifically increase their skills in problem solving, reasoning, and modeling. In addition to requiring a new curriculum, new formative assessments are needed to evaluate student progress toward competency in each Standard.

Educators and teachers are charged with overcoming these implementation challenges. The new Common Core State Standards for

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Mathematics change the grade level at which certain content is introduced and are more rigorous than many current state Standards. Although they reduce the breadth of Standards coverage, they require students to demonstrate and apply conceptual understanding in greater depth. Educators implementing the Common Core State Standards for Mathematics must create new lessons and resources to address the Standards, as well as assessments to match the increased rigor required. In addition, teachers must ensure that each student achieves and demonstrates higher levels of understanding. While implementation may seem daunting, districts leveraging digital curriculum specifically developed for the Common Core State Standards for Mathematics are well positioned for a smooth transition.

THE CHALLENGE OF TEACHING IN TODAY'S CLASSROOM

In the traditional classroom, teachers are tasked with a multitude of duties: lesson planning, presentation of course content, creation, delivery and scoring of assessments, classroom management, and communicating with parents, all while ensuring that each student achieves to his or her highest level. Traditional classroom teachers receive a set of Standards for each course they teach, and are often required to follow a common district pacing guide that governs the scope and sequence for the delivery of lessons that address the Standards throughout the course.

Even before the adoption of the Common Core State Standards, educators faced the challenge of how best to address the diverse learning needs of all students and ensure that each one achieves to his or her potential. The typical classroom teacher teaches 180 students per day, in 5 or 6 classes with an average of 30 students in each class. Teachers are held accountable for ensuring that every student masters the content Standards on the same schedule. This is an enormous task for even the best teachers.

At the same time, students come to school with distinct learning styles, different strengths and weaknesses, and varied levels of competency in prerequisite skills needed for grade-level success. Traditional classroom pacing assumes all students will achieve mastery of course content at the same time, using the same lessons and activities. Traditional assessments are summative in nature and are used to deliver a grade, not as significant formative data points a teacher can use to direct and differentiate instruction to ensure the greatest learning outcomes. The traditional approach to instruction does not account for the differing abilities of students and the individualized support teachers must provide to address each student's needs.

For example, consider that 70% of American high school students currently read below grade level and that 15-year-olds in the United States rank 25th out of 30 countries in math performance (National Center for Education Statistics, 2011). These students already require special intervention and support, so it will be necessary to develop new learner-centered strategies to assist struggling students in meeting the new Standards and bridging the knowledge gap between current state Standards and the Common Core State Standards. Every student does not learn in the same way or on the same day (Costa & Callick, 2008). On average, a handful of students are capable of accelerating, yet they are held to the same pace as the average student. Consequently, those accelerating students often lose interest, get bored, and perform poorly. With the higher expectations of the Common Core State Standards, teachers will face even greater challenges in supporting an entire classroom of students. Blended learning, combining face-to-face instruction with digital curriculum is a method for making it possible.