Flipped learning transforms school into a student-centered environment.
Revere High School Overview

Revere High School (RHS), a diverse urban high school in Massachusetts, is located in a transient suburb of Boston. This majority-minority school with a high proportion of linguistically and culturally diverse students, includes a significant population of English language learners and special education students as well as a large percentage of students on free and reduced lunch. Prior to 2011, RHS was consistently labeled a Level 3 school (in the lowest performing 20 percent) by the Department of Elementary and Secondary Education. In 2011 Principal Dr. Lourenço Garcia and his leadership team sought to transform the school to a student-centered learning environment where students would take an active role in constructing their knowledge, become critical consumers of information, and have a voice in and take ownership for their learning.

Challenge

According to Dr. Garcia, it was evident that despite teachers’ and administrators’ efforts to reduce the achievement gap across subgroups and to improve opportunities for students to access college and careers, the school did not have the structures and systems capacity to accelerate that process prior to 2011. Many students, including Hispanics and African Americans, significantly trailed their Caucasian peers academically. The lack of a student-centered learning structure hindered learners from engaging in activities conducive to promoting creativity and higher-order thinking skills.

In addition, although the majority of classrooms were equipped with interactive whiteboards, projectors, and wireless access, technology was not infused into the curriculum. To teach students the technology skills needed for the 21st century as well as engage a generation of students enamored with their smart phones, Dr. Garcia sought a way to incorporate technology into teaching and learning.

Revere’s Tips for Flipping a Classroom

1. Start small with a single lesson or pilot classes.
2. Classes can be flipped without technology or videos.
3. Invest in professional development.
To address these challenges, Revere undertook an ambitious multi-year reform plan. In 2011 the school introduced a Freshman Academy program, an Advisory program, and Professional Learning Group time to improve teacher-student relations and curriculum, planning, assessment, and implementation. The school also created a Newcomers’ Academy program to address the individual needs of ELLs who have had their formal schooling interrupted. In addition, Revere implemented block scheduling, extending class time from 51 to 80 minutes to give teachers more time to delve into deeper, more engaging activities like hands-on labs.

To integrate technology into classrooms, the Freshman Academy piloted a 1:1 iPad initiative in the fall of 2012. Since the faculty received no training, the first semester of the pilot was a trial and error experience, with teachers meeting during lunch to share lessons learned. But by the second semester the pilot teachers chose a single learning management system (LMS), developed a list of standardized apps, and started to experiment with flipped classrooms.

At the end of 2012, Revere was awarded a half a million dollar Nellie Mae planning grant and was able to conduct professional development on flipped learning. The school sent a team of teachers to FlipCon, a national conference for educators interested in flipping their classrooms. The school also hired Pearson to provide a Foundations of Flipped Learning course to 25 teachers. The course explained the theory and pedagogy behind flipping a classroom, gave the staff a common understanding and vision of what their classes would look like flipped, and provided practical tips for flipping a classroom.

The Foundations of Flipped Learning course was so helpful that Revere rolled it out to all teachers in 2013–2014 to coincide with the expansion of the iPad initiative to the rest of the school. Freshman Academy teachers also helped train their peers by developing a seminar course. The school selected six teachers to be flipped learning coaches and created a Genius Bar staffed with students to assist with technology issues.

Professional development has been a critical component of Revere’s student-centered initiative. Dr. Garcia explains, “iPads alone are not the solution. What seems to be the real solution is training, professional development, and a growth mindset, so that you can facilitate the buy-in.”

Although iPads are not necessary for flipped classes, they do make it easy to create videos for lessons that students can watch at home, freeing up class time for the higher-level learning described in Bloom’s taxonomy. Classes now start with a 20-minute summary and check of comprehension, leaving 60 minutes for more challenging and rigorous activities that allow students to apply, analyze, evaluate, and synthesize what they have learned.

With the flipped classroom approach, teaching has changed significantly. “My students are now at the center of the classroom. So when I plan my lessons, I consider how can I make them more accountable for their own learning and knowledge acquisition? How can I turn over some of the ownership of the class to the students and really make them part of it?” explains Charles Willis, 9th grade US History teacher. Jonathan Mitchell, Assistant Principal, elaborates, “The role of teachers becomes more important in a flipped classroom, because it’s tougher to be a coach and juggling a lot of different things going on in your classroom rather than just being the sage on the stage.”
Results

It is too early to measure the full impact of Revere’s iPad and flipped learning initiatives since the school’s transformation of teaching and learning is still in process. Teacher Jon DeMarco does see improvements in his classes: “Engagement has definitely gone up and homework completion is up 75 percent or more.” Attendance is high at 95 percent, indicating that students are engaged and want to come to school.

Academically, RHS is meeting the achievement gap narrowing goals set by the Massachusetts Department of Elementary and Secondary Education and was elevated to Levels 1 and 2 in 2013 and 2014 respectively. English language arts, math, and science & technology test scores have increased since 2011, although there was a slight decrease in 2014 as the state tests were updated to include more Common Core content (see Figure 1). The adjusted graduation rate in 2013 increased to 94.3 percent, the dropout rate decreased by 2.6 points to .7 percent, and 85 percent of graduates enrolled in higher education (see Figure 2).

Awareness and acceptance of this new student-centered model are growing. RHS has received various awards, including a Silver Medal from US News & World Report (2014), a Gold Award and the Best Urban High School in the United States award (2014) from the National Center for Urban Transformation, and the Gateway Cities Innovation Award for creating a meaningful advisory program, providing a testament to the school’s culture of innovation and excellence.

“If you put iPads in the hands of teachers and students without professional development, without training, you’re wasting your money and you’re wasting your time.”

– Dr. Lourenço Garcia, Principal