Flipping and Gaming Into the Digital Age

When I joined Des Moines, Iowa's Oak Park Elementary School as principal in 2011, I stepped into a school with strong academic models and high-quality teachers. What was lacking at the school and where I thought I could take our achievement to the next level, however, was technology. When implemented strategically, game-based, adaptive learning really does have a place in the classroom.

Start With a Cohesive Plan

If there is one thing I have learned in my years in education, it is that when asking individuals to do something new, it is important to include them from the beginning to have universal buy-in and acceptance. When implementing new technologies, you can't just say, "Here it is; now use it." You have to make sure you are meeting teachers' needs, addressing their concerns, and providing opportunities for them to be innovative and successful.

So in light of this, I involved all stakeholders in the process of choosing and implementing new technologies. I started the process by bringing together our leadership team, community partners, and the PTA to get the support and funding we needed to make technology innovation and implementation a reality in our school. The PTA was able to provide $10,000 to support our technology initiative. In addition, a local business partner, the Bridgestone/Firestone tire plant, donated $2,500 toward our efforts.

When we started this initiative, we had a real inequity of technology in classrooms, so we determined the best thing to do was to standardize technologies so all teachers would have the same opportunities for innovative teaching. With our initial funding, we purchased seven iPads for each classroom. Then, in 2014, our district took technology integration to the next level by installing Epson BrightLink 595Wi interactive projectors in every general education classroom. This type of interactivity, which allows multiple students to work collaboratively with the content being projected by using either finger-touch or the supplied pens, really opened up the opportunity for our teachers to incorporate technology into their lessons.

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Prepare Teachers Well

As the school moved into more technology-infused teaching, teachers were empowered to find the programs and structures necessary to engage students with the technology. One of our fourth-grade teachers, Shelley Kloppenborg, was instrumental in identifying programs that support the Common Core State Standards. Because of this, we implemented several adaptive software programs building-wide, including Lexia Core 5, FASST Math, and Front Row.

Our district created the Knowledge for Integrating Technology in Education (KITE) project, which is an online gamified learning platform that offers flipped professional development courses to educators. KITE provides differentiated learning opportunities around key district technology initiatives that educators can take at their leisure. At Oak Park Elementary, the KITE project provides educators with internal online resources that are wrapped around a fun, game-like structure that includes a learning board for easy navigation of courses, a leaderboard to compare teachers' standings, a discussion board on each course, and a news feed with updates on who has earned which badges.

Courses within KITE include Administering the IOWA Assessment, Office 2013 PowerPoint, Standards Referenced Grading, and SMART Notebook 1, among others. And each course offers multiple video tutorials on using the technology.

Another nice feature of KITE is that our educators can go to "Flight School" to become KITE trained and certified. When they complete the training and pass the test, certified teachers are recognized in staff meetings and serve as built-in tech support at the building level.

Meeting Students' Needs

With the addition of new hardware and software, we have been much better at meeting the diverse needs of our student body. Where before our core instruction was focused on teaching an entire class of 20-25 students, we are more equipped to differentiate instruction based on students' abilities. For instance, in our math block teachers now deliver 20-minute lessons to smaller groups of students based on skill level. When students are not meeting directly with the teacher, they are being challenged at their instructional level through the use of the adaptive learning software.

Our students are thriving in the game-based atmosphere that many of our programs provide. Just like when students play web-based video games at home, they are motivated to move up the leaderboards and beat

their friends. Our teachers capitalize on this aspect by creating displays on their walls that show students' names as they pass levels.

The game-based atmosphere of the programs has motivated our students to want to show their mastery of levels. We are now seeing more student engagement when they are working with teachers, and when they are working independently on iPads they are engrossed in the content. In addition, with the Epson BrightLinks we are seeing much more student-led instruction up at the board. The addition of the Epson projectors has enhanced the ability of our students to show their work, model their use of manipulatives, and teach their peers throughout the learning process. All of this is leading to a deeper understanding of core concepts.

One of the key aspects we have found to be necessary in any software program we use in the classroom is the ability to monitor student progress. The data need to be generated so that both the teacher and I can see where a particular student is at any given time. Having access to these data has provided the opportunity for improvements in something as significant as our master schedule. We now offer an additional 30 minutes each day for targeted instruction based on the data generated by the programs.

Improved Learning

I am truly excited to see the transformation taking place in the teaching and learning at Oak Park Elementary. I don't think it would have been possible without the implementation of technology and the flipped and gamified professional development offered to our educators. In addition, my staff has been instrumental in ensuring that the tools we are implementing are grounded in sound academic principles, while providing the kind of motivation to which our students respond. P

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