Saying Goodbye to One Size Fits All

Wisconsin middle school uses technology, data to drive personalized learning

Before the first laptop was even introduced to the school in 2008, Asa Clark Middle School (ACMS) in Pewaukee, WI, had already begun its journey toward establishing a student-centered learning environment. The idea behind the transformation was to make learning, not teaching, the focus of all the school's decisions. This meant enhancing its use of technology and creating an environment in which authentic collaboration, data-driven decision making and continuous improvement processes acted as the school's guide.

In November, Randy Daul, ACMS principal, and Lisa Rettler, ACMS associate principal, will present their efforts to practice 21st century learning at their school at the 2012 National Quality Education Conference (NQEC). Their session, "Personalized Learning Journey: Say Goodbye to One Size Fits All," will focus on how the middle school transformed teaching and learning to provide a student-centered learning environment for self-paced, data-driven achievement.

Using best pedagogical practices, quality processes, student-level plan-do-study-act cycles and technology, the school has created a system responsive to the needs of all students. Their session will showcase actual case studies, including the effective implementation of approaches to math and literacy, blended project and problem-based learning, and a 1:1 laptop teaching and learning program through accountability processes and measures.

Recently, Daul and Rettler sat down with *Primary and Secondary Education Brief* to talk more about how their school has implemented 21st century learning practices and transformed into student-centered learning environment.

Primary and Secondary Education Brief: **Your middle school has transformed teaching and learning to provide a student-centered learning environment. Why did you decide to go that direction?**

Daul: Our decision to move in this direction was centered on our strong desire to meet the district's mission statement and subsequent strategic plan of "Opening the Door to Each Child's Future." In making this commitment, the school district of Pewaukee adopted several core competencies we found to be essential:

- Critical thinking and problem solving.
- Creativity and innovation.
- Collaboration.
- Communication.
- Citizenship.
- Informational technology.
- College and career readiness.

Developing teachers and students to be technologically proficient was deemed to be critical to the future success of our students. The primary focus was the integration of technology into the teaching and learning practices at ACMS, with the ultimate goal of helping all of our students successfully take their place in a global, digital society.

PSEB: When beginning this effort, is there a certain grade level you focused on?

Rettler: It was determined at the district level to focus on the eighth grade due to the innovative culture that was already building at ACMS. Originally, the plan was to expand this effort to grades seven and eight if all measures were successful. But due to the profound success the 1:1 initiative had on teaching and learning, the decision was made the next year to expand to grades seven through 12, and then implement in grades five through 12 in 2012.

PSEB: How do you define personalized learning? Why is it important?

Daul: Personalized learning tailors learning to the unique needs of each individual student through a mixed-ability and student-centered learning environment, student ownership and choice, and proficiency-driven instructional and assessment practices. Within this learning environment, individualized plans are established to authentically engage each student to maximize their academic, social and emotional growth potential to ensure success as a citizen in the 21st century.

PSEB: What role has technology and digital tools played in this transformation?

Rettler: Technology has been a critical tool in our transformation of teaching and learning. As a result of the strategic infusion of digital tools, we've seen a significant shift toward higher levels of authentic problem solving, student cognitive processing and in-depth examination of the content, and student engagement and ownership. Additionally, the increased use of technology also has enhanced the efficiency, effectiveness and transparency within our organization.

PSEB: What specific tools or technology are you using? Can you provide examples of how they're used by students and teachers?

Daul: It is important to note it is never about the tool itself, but rather how you use the tool to increase proficiency. Tools will change and transform over time as new products are developed and improvements occur in the tech world. Some of the tools we are currently using at ACMS are include:

School Fusion. Our website platform offers the opportunity to not only provide information, but also to interact internally and externally. Teachers are required to post all daily learning targets, agendas, homework and calendar of assessments in an effort to maintain 24/7 communication with students and parents. This tool is also used for interactive discussion among students, to provide digital learning resources such as videos and links, and as an open forum.

Blogspot. A blog is a type of interactive writing website used in many classes to discuss various topics and share personal writing.

ALEKS (**A**ssessment and **LE**arning in **K**nowledge **S**paces). This is a research-based, online math program used to facilitate student learning and assessment individually. It is one of

the components of the ACMS Math Learning Center, a personalized learning environment serving the individualized learning needs of students in a mixed-ability, mixed-age level setting. Students work at their own pace while ALEKS measures their progress. In learning mode, students will practice new concepts and be provided tutorial support. Assessments occur regularly to provide the student, teacher and parent with a detailed description of what the student knows and is ready to learn.

Google Docs. This is a free, web-based office suite and data storage service offered by Google. It allows users to create and edit documents online while collaborating in real time with other users. In various classes, students may do the following:

- Upload and convert Word documents or create documents from scratch.
- Invite others by email to edit or view documents.
- Collaborate online in real time and chat with other collaborators.
- View documents' revision history and roll back to any version.
- Publish documents online to the world as webpages or post documents to a blog.
- Download documents to desktop as Word, OpenOffice, RTF, PDF, HTML or zip.
- Email documents as attachments.

We also use other web 2.0 tools frequently, including prezi, a cloud-based presentation software; wikis websites that allow users to add, modify or delete content via a web browser; and animoto, a video slideshow maker.

PSEB: You mentioned this transformation has fostered self-paced, data-driven achievement. What kind of data are you collecting and have you seen an improvement in achievement since implementing this change?

Rettler: We have used the following data to formatively and summatively measure teacher and student proficiency relative to personalized learning and digital literacy:

- Next generation assessment based on International Society for Technology in Education's National Educational Technology Standards for Students.
- Classroom walkthroughs based on internal district criteria.
- The Levels of Teaching Innovation survey.
- Internally designed Core Competency rubrics.
- Measures of Academic Progress (MAP) data.
- ACMS-developed math and literacy data wall.

PSEB: How does ACMS view 21st century learning? What is it, why is it important, and how is it achieved in the classroom?

Daul: Aside from our goal of helping students achieve academic success, the Pewaukee School District (PSD) recognizes that equipping students for success in the future also involves the mastering of non-content related skills. Our PSD Core Competencies, as shown in the table below, were identified as essential skills necessary for success in the 21st century

PSD's Core Competencies	
Critical Thinking and Problem Solving	Analyzing information, researching and drawing appropriate conclusions and solutions
Creativity and Innovation	Generating or recognizing new alternatives or possibilities; creating new knowledge
Collaboration	Working productively with others to reach a goal by reaching consensus, finding compromise or building community
Citizenship	Respecting diversity, understanding context & connectedness and fostering interdependence demonstrating the ideals and behaviors of citizenship at the local, regional and global level
Communication (Oral, Written and Visual)	Effectively creating, delivering and receiving messages using verbal, written and symbolic modes
Information Technology	Using electronic information & knowledge tools to interpret, analyze, compose and communicate
College and Career Readiness	Mastering relevant academic content and employability skills so students will thrive in college-level courses or skilled workforce opportunities upon graduation from high school

*Derived from a number of different efforts including Partnership for 21st Century, Bernie Trilling, Neil Howe, William Strauss, Tony Wagner

Through the previously mentioned assessment tools, we have been able to systematically tend to student growth in these critical learning domains.

PSEB: In general, is integrating technology into the classroom important today? Why?

Daul: The use of technology is essential as a means of learning because it best mirrors how students will learn and work in our digital and global society. Retaining information is not as valuable as being able to find information, process it through critical thinking and collaboration, and the ability to communicate in a variety of platforms to different audiences.

PSEB: Is the school or district working on any new developments or project for the future to further integrate 21st century learning into the classroom?

Daul: At ACMS, we are currently in the process of scaling out successful pilots relative to personalized learning through developing learning centers in the areas of literacy, math and technology. In addition, we will be entering into our third year of Academy 21, a program that fully integrates the concept of personalized learning for students across grade levels and subject areas through project-based and problem-based format. With all of our innovative developments, technology is an essential and integrated component of our efforts.

Rettler: Much of our past success and continued desire to improve is based on a strategically aligned culture that embeds best practices in collaboration, shared leadership, systems thinking and the use of quality process tools. This is how we've achieved what we have so far, and we will work to continuously improve in the future.

Don't miss Daul and Rettler's session at NQEC 2012, A Personalized Learning Journey: Say Good-Bye to One Size Fits All *and* Continuous School Improvement: The Baldrige Way!