

21st Century Skills

by Robin Farmer

As a St. Mark's English teacher, Nathaniel Waters uses the 16th-century works of William Shakespeare as a tool for a 21st-century approach to education. Instead of having his students write an essay after reading one of the Bard's plays, Waters has them take a scene and direct it. Students decide how to stage it, select props to use, and determine which lines to keep or cut, among other directorial decisions.

He recently used the same real-world technique in teaching Nathaniel Hawthorne's *The Scarlet Letter*. After students read the book, they held a mock court.

"We put a character on trial," recalled Waters, who joined the St. Mark's School faculty three years ago. "There were two legal teams, a prosecution and a defense. I said to the students, 'It's up to you what you come up with.' You turn them loose and it's unbelievable. It was a neat thing for me to see."

By getting students to collaborate, problem-solve, and think critically and creatively, Waters infuses "21st-century skills" into his classroom, something he tries to do often.

Under a new Strategic Plan developed at the School, he and the rest of the faculty will learn more innovative educational approaches to empower St. Mark's students to become successful in their careers and as global citizens.

The term "21st-century skills" was coined in 2002 by the Washington, DC-based Partnership for 21st Century Skills (P21). It is an education reform movement that marries the original "3Rs" —reading, writing and arithmetic—to creativity and innovation, critical thinking and problem-solving, collaboration, and communication. Those "4Cs," along with information, media and technology literacy, and life and career skills, are part of a critical skills set endorsed by P21, which advocates 21st-century readiness for every student.

Acknowledging that the world of work has indeed changed, Lillian Kellogg, chair of P21 and vice president of Education Networks of America, also noted that the United States is falling behind its international counterparts in adapting to the changes. What is needed for students to be successful as citizens and workers in the 21st century, suggests Ken Kay, co-founder and former president of P21, is a model that builds upon the old classic education and expands it.

"We had a model based on the jobs of the 1950s and 1960s, which are rote jobs and repetitive jobs," said Kay, chief executive officer of EdLeader21, a coalition of nearly 90 school districts [as of April] working to graduate 21st-century learners.

"We need jobs now that demand global citizenship, that requires complex communication and complex thinking skills. So we need a model of education that both teaches and assesses [those skills] or we are continuing to create students who are ready for the jobs of 50 years ago rather than the jobs of 20 to 30 years from now."

To augment the skills, students will need to flourish. St. Mark's 2020 Strategic Plan is designed to promote that success, drawing from and enhancing its tradition of providing a top-tier education with a focus on leadership and service. The plan requires a more systematic approach to strengthening intellectual skills as well as building character and leadership skills.

The blueprint calls for three strategic initiatives. The foundational initiative will be the Center for Innovation in Teaching and Learning, which will support the intellectual development of faculty and students. Opening in the fall, the Center will provide a home for educational innovation, faculty development, and student enrichment and support.

The other initiatives support building a stronger science, technology, engineering, and math (STEM) program, and improving global citizenship—in part, by deepening intercultural knowledge and competence through exchange programs and summer immersion opportunities.

"What I'm really excited about in the Strategic Plan is that we will have the Center in place starting in 2012," said Head of School John Warren '74. "What the Center will do, among other things, is serve as a real beacon for identifying the best educational innovations and then work very closely with our faculty to figure out the best ways to apply those educational innovations in St. Mark's classrooms."

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Predicting the educational approaches that will transform the classroom eight years from now is difficult, Warren said. Yet he is confident that a great emphasis will be placed on writing, reading, critical thinking, and speaking—in his words, “timeless skills that are necessary.”

All three initiatives will open up a great range of possibilities for students and teachers, said enthusiastic faculty members.

I believe that the Center, staffed by a well-informed and purposeful group of educators, can keep the whole faculty and student body abreast of relevant materials to improve the educational experience at St. Mark’s.”

Millet is also thrilled that all of the disciplines will incorporate a more global perspective into the curriculum. “Synergy across disciplines will make for a more dynamic experience for all of our kids,” she said.

readiness for students and staff. Many high-performing independent schools are content to rest on their laurels, he noted, but “they don’t realize by staying put they are going backwards. I think a lot of districts and schools fall into that category.”

With only a small percentage of the more than 140,000 school districts across the nation working with EdLeader 21 and just 16 states having applied to work in partnership with P21, the reform movement definitely has room to grow.

As Kellogg of P21 observed, however, there are numerous real-world tensions involved in transforming an 18th-century model of education into a model relevant today and for years to come, including the economy, educational funding, education mandates, politics, and outdated policies.

“Our work presents an ongoing challenge. But we are able to face it because of the working partnerships we have established with innovators at the state, federal, and local levels in business, education, and communities at large. I am very optimistic for the future. As an example of our achievements, we have been able to accomplish bipartisan, bicameral support for the 21st Century Readiness Act, even in the toughest of political climates in Washington, DC, as well as secure the ongoing interest of new leadership states, members, and school districts,” Kellogg said.

“I really cannot predict when the United States will be a leader in aligning our education system to the new economy. I only know that we have a growing and committed group of supporters who will continue the work, because it is simply the right thing to do for our students.”

Kay made the point that it’s a mistake to believe, as some leaders of struggling schools do, that the 21st-century skills are too ambitious for students to tackle.

“A lot of low-performing or moderately performing schools look at our work and go ‘Holy mackerel, we can’t get kids to read and write, so why are we going to focus on critical thinking and problem-solving, communication, collaboration, and creativity? We’ve got to stick with

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The Reverend Barbara Talcott, Head Chaplain and Director of the Religion Department, believes the plan will bring new life, ideas, and energy into the curriculum. “We had become a bit stale,” she said, and this is not only catching up with other schools but leapfrogging them. I can feel creative thought and excitement about possibility going on all around me.”

An educator for 12 years, Talcott is “eager to learn more about my students’ various learning styles, to play with new pedagogies, to follow their lead into the future. I already do this to some extent, but I could afford to learn a lot more about where technology and hands-on experience can enter the picture.”

Says Katharine Millet, a history and social sciences teacher: “Every year, new research emerges that can inform our pedagogy, new perspectives on content are published that can revise our syllabus, and new technologies become available that can engage our students with learning in fantastic ways.

Christopher Roche, a computer science and physics teacher who joined the faculty this year, said the initiatives “bring a great intellectual vibe to St. Mark’s, which really excites me” as well as his students. Roche, also an attorney who has practiced law, said his teaching will evolve with the upcoming changes.

“St. Mark’s is attempting to implement an innovative, project-based learning approach with science and technology, and I am excited to be working on this initiative,” he remarked. “In computer science, where I teach, a lot of the work is project-based, but the STEM initiative will allow me to collaborate with other science and math teachers. I am really looking forward to teaching computer science applications that will also be vehicles to allow students to learn other disciplines such as physics, chemistry, biology, statistics, or math.”

Kay, a leading voice for 21st-century education since 2001, applauded St. Mark’s plan to improve 21st-century

the basics until we get the basics right.’ That’s a huge mistake. . . . If they taught using the 4Cs, the kids would be more engaged,” Kay said.

There are also critics who dismiss the movement as another educational fad. Some of those critics include parents. And even high-performing private schools are not immune to a pushback against new instructional changes, said Charles Fadel, an education expert and co-author of the bestselling book *21st Century Skills: Learning for Life in Our Times*. The book is being translated into Russian, Mandarin Chinese, and Korean.

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“Private schools can be surprisingly conservative . . . in how they teach, because parents may not want instruction to change too much from what they are familiar with and may be concerned their kids won’t get into prestigious universities,” said Fadel, the founder and chairman of the Center for Curriculum Design and a visiting practitioner at Harvard’s Graduate School of Education.

“It’s not a given that just because it is an exclusive private school that instruction is automatically done differently or better. I can speak on both sides of the experience because my daughter went to both private and public schools. It’s much more teacher-dependent than it is school-dependent,” Fadel said.

To critics, particularly parents who believe the way they learned in school is good enough for their children, Fadel said they should “reflect on what they do in a normal day. Every single day they are collaborating, communicating, creating, and thinking creatively. Why wouldn’t they want their children to know how to do that?”

These are more challenging times. The workplace is far less forgiving, the requirements have been ramped up for everyone, Fadel said. Many parents grew up at a time when companies were more willing to teach them the skills they needed to know.

Parents at St. Mark’s are excited about the Strategic Plan, but they want to see enough meaningful changes for the students currently enrolled as well as the ones who will arrive in 2020 when the plan is fully implemented, said Michael Wirtz, Assistant Head of School and Dean of Faculty.

When Wirtz envisions St. Mark’s in 2020, “I see students as producers of information and content. They will be engaged with faculty as partners in learning, and faculty will direct this process by helping students tap into different learning communities that are both locally and globally based.”

Wirtz explained that the Center will serve as the backbone of the Strategic Plan and will focus on how St. Mark’s teaches and trains its faculty and engages students in their own learning. Next year, there will be new space for the Center, which will eventually house activities ranging from training faculty on how to use technology to serving students by setting up opportunities so they pursue work they are passionate about through summer internships or working with an outside mentor.

The upcoming changes on campus inspire Waters, the English teacher. He is looking forward to learning more educational approaches and technology to encourage students to take ownership of their education by creatively demonstrating what they know. Using a stand-and-deliver approach can

make students passive learners. Asking students to “take center stage in the classroom is more meaningful instead of just having them replicate a series of facts,” he said.

For students unable to compete in the global economy, the outlook is bleak for them as well as for society.

“Every day you hear reports of high-tech or manufacturing jobs that go unfilled because of lack of skills,” said Kellogg. “Just recently a report published by the Council on Foreign Relations revealed that 75 percent of Americans ages 17 to 24 are unfit to join the military in large part due to a lack of 21st-century skills. Our ability to compete in a global economy as well as our national security are two critical reasons why 21st-century skills are so important.”

While much work remains to be done, Kellogg said P21 is launching a new initiative to identify exemplar schools nationwide that are successfully using the P21 framework. A school such as St. Mark’s, where 21st-century skills are being embraced in a systemic way, can serve as a model. The program is open to all schools, and she hopes that more private schools will choose to participate.

Added Kay, “Everywhere I go in the business community, when I ask folks ‘Do kids mostly need to memorize content or do they mostly need to be effective critical thinkers, problem solvers, collaborators, and innovators?’ they don’t tell me they need to primarily master content. They say, ‘We can teach them the content, we can’t teach them collaborate.’

“They also tell me when they fire people it’s not over knowledge problems, but because those employees can’t work in teams, can’t adequately problem-solve and aren’t self-directed. They will tell you they can’t hire people like that anymore. I had an executive at Apple say to me, ‘We’re at the point in Apple that if they need to be managed, they are no longer employable.’”

Surely Shakespeare or Hawthorne has something compelling to say about this