Phillips Academy is one of the most prestigious private schools in the country. The new Tang Institute on campus offers creative ways of learning.

Think Tank

The Tang Institute at Phillips Academy explores an innovative approach to secondary education.

By Robert G. Pushkar

Learning isn't what it used to be. And neither is teaching. The goals are the same: acquiring—or imparting—knowledge for a useful, often tangible purpose. Yet in a world where human knowledge, according to one estimate, doubles every 13 months on average, the learning-teaching process must change. Human survival depends on it. Innovation requires both out-of-the-box thinking and educators willing to reconceptualize the box.

Enter the recently established Tang Institute at Phillips Academy Andover, with its mission to be a physical and virtual hub shaping the future of secondary education.

Launched in autumn 2014, the
in-depth
PLACES

Institute capitalizes on Andover’s 237-year tradition of teaching and learning. Head of School John Palfrey says, “The Tang Institute will drive us to explore new possibilities for our education systems, while also strengthening the experiences of our own students and faculty.” He describes the vision as “something akin to a Bell Labs for secondary education.”

Former president of the school’s board of trustees Oscar Tang, class of ’56 and now a New York–based investor and global philanthropist, provided seed funding with a $15 million grant. Other funds were secured from the John D. and Catherine T. MacArthur Foundation in addition to other benefactors.

So how does an institute change traditional teaching and learning methods that have been around for over two centuries? By exploring new possibilities and strengthening students’ and faculty’s current practices.

Innovation begins with Institute Fellows—faculty who generate new ways of communicating, given both the physical realities of the campus and the virtual world of cyberspace. The Institute “encourages experimentation, interdisciplinary collaboration, new partnerships, connected learning, and ongoing assessment.” Institute director Caroline Nolan says, “This is really a hub for new ideas, and we can offer the instructors the support and partnership to help them build something tangible that we can share with other members of the school. You give us your ideas and we’ll give you the time to do it.”

The Tang Institute studies three thematic areas: Connected Learning, Innovation in Partnerships, and Learning in the World.

Connected Learning, defined by
Palfrey, “means that we focus on the interconnected learning experience of our students in a vibrant, diverse residential community.” Students are encouraged to transcend learning in the traditional classroom and to reach out to communities they are engaged in, such as sports teams or online social media groups. The idea is “to draw meaningful connections between and among those experiences.”

Eric Roland, precourt director of partnerships, says, “What’s been energizing is to [exchange this idea]

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with other schools and organizations to hear what others are doing and to share what we are doing.”

Innovation in Partnerships involves outreach to other communities, internally across disciplines and externally beyond the campus. The idea is to bring the best information about teaching and learning, culled from the various projects, and share it with others. Successful collaboration between Phillips’ Math Department and the Khan Academy—a nonprofit, educational organization committed to presenting “a free world-class education for anyone anywhere” via the Internet—has resulted in the posting of almost 1,300 calculus problems for solvers worldwide. It’s the first partnership for Khan Academy that drives a lot of core content, according to founder Sal Khan.

Learning in the World builds on off-campus learning programs. Phillips Academy has a long history of faculty-led programs, according to Carmen Munoz-Fernandez, Spanish instructor and coordinator of the program. During the last academic year, 240 students have participated in immersion experiences. According to Munoz-Fernandez, “We wanted to emphasize that in these travels our students are learning from other cultures in contrast to ‘touring’ other cultures.”

“For us, it is also important to include all kinds of experiences and locations: global experiences like the ones in Brazil, China, and France, but also domestic ones like the American Civil Rights program and the New Mexico program as well as a local one in the city of Lawrence,” says Munoz-Fernandez.

A new program, Berlin Week, added in the spring, joined the Ger-
Carmen Munoz-Fernandez directs the Learning in the World program. 

man and History departments to explore Germany’s art, architecture, and design. Day-to-day life in Berlin immerses students in the language. The goal is to equip students with skills to navigate in a global and interconnected world. “Our students gain transferable skills essential for their future success, but [they] are also a key to shaping citizens of the world.”

The Human Understanding through Archaeology and Cultural Awareness project (H.U.A.C.A.) allows students with an interest in archaeology and Spanish to be immersed in Peru’s culture while conducting archaeological explorations. Another program,
Pecos Pathways, in place since 1998, allows students to research ancestral and contemporary native communities in New Mexico through collaboration with Pueblo of Jemez. BASK in ASK partners three Chinese schools with Phillips Academy. In an intensive three-week summer program, students focus on two issues critical to both China and the United States: climate change and water resources. The intersection of science, economics, social philosophy, language, and culture allows for the examination of multiple perspectives.

Institute fellow Noah Rachlin focuses on learning disposition, and is part of a new generation of research-
ers and educators who believe that the qualities that matter most have more to do with character. Learning is hard, Rachlin says, whether tackling a complex mathematical proof, preparing for a piano recital, or perfecting a jump shot in basketball. An instructor in history and social science, he has attempted to reframe "the way that young people think about challenge and struggle" in the achievement-focused culture of high school. His "I Can’t Do That...Yet: Cultivating a Learning Disposition" program encourages reflection on process, motivation, persistence, and focus rather than outcome. "It’s not that we want kids to think about process instead of outcome, but rather...by provid-
ing kids with a greater understanding of and focus on process, they will ultimately achieve more and will be more able to persist in the face of challenge." The goal is to offer ways to see challenge and struggle as opportunities for growth and development.

"I always believed teachers could be a tremendous resource in helping to cultivate what we refer to as a ‘learning disposition’ in students. But what I have been most surprised by is the voracious appetite that students have had for this work. The response has been incredibly positive," says Rachlin.

As in any lab, hypotheses must be tested and progress measured. One of the Institute’s guiding principles is “tolerate failure.” In short, assess ideas that don’t work and learn from them. “It’s difficult to be a lab for ideas,” Nolan says. “In any lab, the interesting learning often...comes from the things that don’t work very well. So as these projects get off the ground, the idea is to feel comfortable with chasing down and trying to develop things, but also being honest about whether or not they’re working. Sometimes that is hard for schools to do.”

Still, if new ways of teaching and learning must be discovered, the Tang Institute is poised to be a strong voice in the conversation.