

Today's students have spent their entire lives surrounded by information in a variety of mediums. Tech4Learning's tools and professional development support 21st century student outcomes by providing tools for project exploration and discovery and professional development opportunities that transform classrooms from teachers telling to students doing.

"I'm calling on our nation's governors and state education chiefs to develop standards and assessments that don't simply measure whether students can fill in a bubble on a test, but whether they possess 21st century skills like problem-solving and critical thinking and entrepreneurship and creativity."

President Barack Obama, speech **March 10, 2009**

CORE SUBJECTS AND 21st CENTURY THEMES

A focus on 21st century outcomes begins with strong foundations in the core subjects. Exploring curriculum topics using a multimedia approach leads to knowledge that is "richer, better connected, and more applicable to subsequent learning and events."¹ Studies have shown a positive impact on learning when students are required to engage in inquiry, analyze content, construct knowledge, and effectively communicate their learning.²

Creating their own products engages students in their learning, motivating them to master difficult concepts. All of Tech4Learning's tools are designed with a consistent, familiar, and easy-to-use interface so students are able to immediately build high-level projects in the content classroom.

For example, students can use:

Pixie or **Wixie** to practice writing and fluency as they retell stories, explain abstract concepts and illustrate word problems.

Frames to write and narrate historical biographies, develop news broadcasts, and demonstrate complex science processes.

Share to develop digital portfolios documenting learning performances and reflections.

LEARNING AND INNOVATION SKILLS

In order for students to be prepared for a more complex life and work environment a focus on creativity, critical thinking, communication and collaboration is essential. Constructing content through a project requires student to move beyond basic content mastery to metacognition. Using technology tools during this process that allow students to create with video, audio, text, and images provide students an opportunity to enhance higher-order thinking skills.³

Tech4Learning's open-ended tools require student to employ *creativity and innovation* as they develop, implement, and communicate ideas and demonstrate originality and inventiveness; *critical thinking and problem solving* as they frame, analyze, and synthesize information to solve problems and answer questions; and *communication and collaboration* as they articulate thoughts and ideas clearly and effectively and share responsibility for collaborative work.

For example, students can use:

Pixie or **Wixie** to write, illustrate, narrate and share their ideas for a new invention.

Frames to develop public service announcements on current social and cultural issues.

Share to participate in civic discussions through a web-based position paper.

1. Lehrer, R. (1993). Authors of knowledge: Patterns of hypermedia design. In S. P. Lajoie & S. J. Derry (Eds.), *Computers as Cognitive Tools* (pp. 197-227). Hillsdale, NJ: Lawrence Erlbaum.

2. Newmann, F. M. (1996). *Authentic achievement: Restructuring schools for intellectual quality*. San Francisco: Jossey-Bass.

3. Jonassen, D. H., & Reeves, T. C. (1996). Learning with technology: Using computers as cognitive tools. In D. H. Jonassen (Ed.), *Handbook of research for educational communications and technology* (pp. 693-719). New York: Macmillan.

INFORMATION, MEDIA AND TECHNOLOGY SKILLS

To succeed in a 21st century marketplace, students must have a “range of functional and critical thinking skills related to information, media and technology” according to the Partnership for 21st Century Skills.¹ Students today are “digital natives” who have grown up surrounded by sophisticated information and communication tools.² Research shows that using technology tools engages students and connects them to their learning, demonstrating the relevance of school and its importance to their future success.³

Tech4Learning develops creativity and productivity tools for students to use to showcase their content knowledge and understanding of abstract concepts. Using Tech4Learning tools, students manage their Information while creating a rich media product giving them skills to evaluate and communicate their information effectively. Students become media producers, not just consumers.

For example, students can use:

Pixie or **Wixie** to share their ideas through comics, trading cards, ebooks, and digital stories.

Frames to develop digital videos, podcasts, Flash animations, and cel animations.

Share to develop interactive presentations, digital portfolios, and web sites.

LIFE AND CAREER SKILLS

In order to successfully navigate today’s workplace, students need to develop skills that help them work without supervision, in diverse groups, and be productive members of society. Project learning not only increases students’ active engagement with content, but also their capacity for self-directed learning, collaboration, and social interaction.⁴

Project learning with Tech4Learning tools requires students to employ flexibility and adaptability as they reevaluate their work throughout the project process, becoming self-directed learners and producing results. Working in diverse teams to complete a project on time and meeting assessment requirements helps to build leadership, responsibility, social and cultural-awareness issues.

ProjectLearn Academies help educators successfully implement 21st century outcomes through project learning. Project learning supports 21st century student outcomes, but requires a significant investment in teacher preparation and training. Tech4Learning’s **ProjectLearn Academy** is designed to provide a strong foundation in designing technology-infused project-learning into the classroom. A ProjectLearn Academy immerses participants in a project-learning environment where they learn to successfully design, manage, and implement project work in the classroom.

Tech4Learning is a professional development affiliate of the Partnership for 21st Century Skills, an advocacy group working to ensure every child’s success as citizens and workers in the 21st century.

1. Partnership for 21st Century Skills. P21 Framework Definitions Document. http://www.21stcenturyskills.org/index.php?option=com_content&task=view&id=82&Itemid=185

2. Prensky, M. (2001a, September/October). Digital natives, digital immigrants. On the Horizon, 9(5), 1-6.

3. Means, B., Blando, J., Olson, K., Middleton, T., Morocco, C.C., Remz, A.R., & Zorfass, J. (1993, September). Using technology to support education reform. Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. Available on-line: <http://www.ed.gov/pubs/EdReformStudies/TechReforms/>

4. Knowlton, D. (2003). “Preparing Students for Educated Living” in Knowlton, D. & Sharp, D., Eds. (2003). Problem-based Learning for the Information Age. San Francisco: Jossey Bass.