What is Project-Based Learning?
*Excerpted and adapted from the Buck Institute www.bie.org

Definition of Project-Based Learning

Project-Based Learning is a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to a complex question, problem, or challenge.

Why Project-Based Learning? What the Research is telling us

With more than 40 years of evidence, we know that project-based learning:

- Builds content understanding and prepares students to integrate and explain concepts
- Raises academic achievement, self-mastery, and problem-solving and collaboration skills
- Engages students and promotes motivation to learn

Additionally, studies show that the pedagogical approach is “especially effective with lower-achieving students”, is “more effective in promoting long-term retention, skill development and overall teacher and student satisfaction”, and is “an effective model for whole school reform.”

Additional resources on Project-Based Learning impact and studies at www.bie.org

The Edge Academy’s Bee Project, Vermont

The Edge students spent a year learning about the history of bee keeping and researched why the honey bees are dying. They learned to identify invasive species in the hive. The students also raised money to build their own hive. They built two brood boxes and two honey supers. The students also assembled forty frames. They raised money and purchased a nucleus colony of bees. The students helped construct an electric fence to keep out bears around the bee yard, and inspected and monitored the hive for two years in the spring and fall.

Adapted from the Buck Institute at www.bie.org
www.sustainableschoolsproject.org
Buck Institute’s Essential Elements of Project Based Learning

**Significant Content**  At its core, the project is focused on teaching students important knowledge and skills, derived from standards and key concepts at the heart of academic subjects.

**In-Depth Inquiry**  Students are engaged in a rigorous, extended process of asking questions, using resources, and developing answers.

**Public Audience**  Students present their work to other people, beyond their classmates and teacher.

**Driving Question**  Project work is focused by an open-ended question that students understand and find intriguing, which captures their task or frames their exploration.

**21st Century Competencies**  Students build competencies valuable for today’s world, such as critical thinking/problem solving, collaboration, and communication, and creativity/innovation, which are taught and assessed.

**Need to Know**  Students see the need to gain knowledge, understand concepts, and apply skills in order to answer the Driving Question and create project products, beginning with an Entry Event that generates interest and curiosity.

**Voice and Choice**  Students are allowed to make some choices about the products to be created, how they work, and how they use their time, guided by the teacher and depending on age level and PBL experience.

**Revision and Reflection**  The project includes processes for students to use feedback to consider additions and changes that lead to high-quality products, and think about what and how they are learning.

“Project Based Learning is a transformative teaching method for engaging ALL students in meaningful learning and developing the 21st Century competencies of critical thinking/problem solving, collaboration, creativity and communication.” ~Buck Institute

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