

Chapter 11

“Need to Know”: Partnerships in Project-Based Learning

Rhonda Huisman

Indiana University-Purdue University Indianapolis, USA

ABSTRACT

This chapter outlines, defines, and illustrates examples of project-based learning, while focusing on how librarians can offer support to teachers when creating and leading project-based learning programs. Various disciplines and grade level (K-12 and higher education) examples of projects are discussed, pointing to strategic methods of intervention from school librarians, as well as ideas on how to collaborate and build relationships through project-based learning opportunities.

INTRODUCTION

In project-based learning “students go through an extended process of inquiry in response to a complex question, problem, or challenge. Rigorous projects help students learn key academic content and practice 21st Century Skills (such as collaboration, communication & critical thinking)” (Buck Institute, 2011). The structure of Project-Based Learning (PBL) utilizes detailed phases of project development, beginning with the authentic project idea and the driving question (what is the main idea or problem), entry events” (launch of the project), formative and summative assessments, content standards including Common Core and 21st Century Skills, and reflection methods through journaling, surveys, etc.. During many of the PBL phases, library resources

and librarian support can be crucial in fulfilling learning outcomes, standards, research, citations, space, or technology integration. The framework of PBL allows for the use of new, creative technologies, as well as community partnerships, an emphasis on integrated content standards, and key interdisciplinary collaborations.

This chapter will outline, define, and show examples of project-based learning projects; in addition, it will focus on how librarians can not only offer support to teachers and faculty, but also create their own project-based learning programs. Finally, suggestions on units at various grade levels and disciplinary subjects will also be explored, pointing out strategic points of intervention from school librarians, and how to collaborate and build relationships with teachers through project-based learning.

DOI: 10.4018/978-1-4666-4361-1.ch011

BACKGROUND

Engaging students in the classroom, regardless of age, grade, skill level, or content area has presented challenges for educators for decades, despite advances in understanding learning styles, multiple intelligences, curricular design and assessment measures, and access to technology-rich and information-excess environments. Students and teachers alike are hungry for an atmosphere that capitalizes on the talents and interests of students, while driving them forward to meet both intrinsic and extrinsic goals in their classes and beyond: “Since learning is inherently human, and since we never really stop learning, how can anyone object to policy attempts designed to provide everyone opportunities to learning throughout their life?” (Rizvi, 2007, p. 114).

This is also the case with information literacy skills (or fluencies) that students begin to acquire and explore in their very early years, even before formalized schooling starts. Who do I go to for information? How do I sort out this information into something that is meaningful? And, do I know that there is more out there for me to explore? Often it is the parent or caregiver, or sibling that the child seeks in answering these questions, but once schooling starts, many of these questions are posed to teachers or peers in the classroom. Children are naturally curious, and librarians can capitalize on this curiosity by offering countless resources and opportunities to encourage questioning, evaluation, enlightenment, and, hopefully, demand for more information. Schools that develop curriculum models that also encourage these innate traits through choices, research, creativity, consultation, collaboration, and presentation through project-based learning models see significant changes in the ways they perceive their education as well as having an impact on how they connect with and perceive others in their class, community, and world (Tracey & Mandel, 2012).

Summers and Dickinson (2012) examined and compared achievement scores of students in a rural high school in Minnesota that participated in either a traditional school model or a classroom built around Project-Based Instruction (PBI). They found that “PBI students outperformed peers who learned from a traditional curriculum in both social studies achievement” (p. 82) and were better prepared to for application and entry into college. Additionally, a study conducted by Geier et al. (2008) showed that students in 7th and 8th grade science classes that were part of a large-scale curriculum reform that included the adoption of project-based inquiry models “presented increases in science content understanding and process skills over their peers, and significantly higher pass rates on the statewide test” (p.922). Wiggins and McTighe (2005) point out that the challenge and pressure for most teachers is to cover materials in drilling and lock-step methods, but they question that this is neither teaching, nor learning: students need to play, investigate, and work with key ideas and explore points of connection.

What does project-based learning (or inquiry) mean for educators and librarians? Project-based learning is an interactive, student-driven means for exploring a topic or problem centered on real-world issues, rather than on a teacher-driven, textbook created curriculum model. The projects should be motivating for the students, built on what they know. They are encouraged to create and develop with a project, through engaging activities, questions, choices, and group collaboration. At the end of the unit, the teacher makes arrangements with a community member to serve as the “authentic audience”, who may also take part in the evaluation of the project idea and solution, and can provide feedback through a rubric. Teachers are encouraged to work with and consult with “critical friends” in their school or teaching community, for advice, feedback, or possibly making cross-disciplinary connections through research and resources.

9 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/need-to-know/82614

Related Content

Analysis of Students' Difficulties in Learning Forced Electrical Oscillations: A Qualitative Approach to Teaching Practices

Ahlem Oueslati and Rym Naija (2025). *Qualitative Approaches to Pedagogical Engineering* (pp. 341-358).

www.irma-international.org/chapter/analysis-of-students-difficulties-in-learning-forced-electrical-oscillations/360842

Exploring Effective Online-Teaching Transition of College Teachers During COVID-19

GS Prakasha and Aparna Benoy (2022). *International Journal of Online Pedagogy and Course Design* (pp. 1-18).

www.irma-international.org/article/exploring-effective-online-teaching-transition-of-college-teachers-during-covid-19/302087

Knowledge in the Shrinking Commons: Libraries and Open Access in a Market-Driven World

Luke Bassuener (2016). *Handbook of Research on Applied Learning Theory and Design in Modern Education* (pp. 358-379).

www.irma-international.org/chapter/knowledge-in-the-shrinking-commons/140752

Dimensions of Culturally-Intensive STEM Education: Looking to the Source

Jonathan Baker, Kahoalii Keahi, Jolene Tarnay Cogbill, Chrystie Naeole, Gail Grabowsky, RaeDeen Keahiolalo, Alex J. Stokes and Helen Turner (2022). *Learning and Reconciliation Through Indigenous Education in Oceania* (pp. 150-169).

www.irma-international.org/chapter/dimensions-of-culturally-intensive-stem-education/291311

The Web-Supported Negotiation Game "Surfing Global Change": Rules, History and Experiences

Gilbert Ahamer (2012). *International Journal of Online Pedagogy and Course Design* (pp. 60-85).

www.irma-international.org/article/web-supported-negotiation-game-surfing/65741