

Action Leadership Project  
Project-Based Learning  
April 28, 2010  
ECI 508  
By: Caroline Baum

## **The Purpose of My Project-Based Learning Professional Development**

The target audience for this project-based learning professional development is preservice teachers. Therefore, I chose to narrow my audience down to the North Carolina State University Teaching Fellows. I wanted to present the Teaching Fellows with an introduction and explanation of what project-based learning entails. I also wanted them to understand the benefits of implementing project-based learning into a classroom such as greater student engagement and higher academic performance. I acknowledge that these preservice teachers have heard about project-based learning before. However, I wanted to show them the benefits of project-based learning because I feel that it is one of the most successful and effective ways to educate and prepare 21<sup>st</sup> century learners. In this professional development, I will give examples of my experiences with project-based learning. I will also provide the preservice teachers with an annotated list of online websites that can be used throughout different project-based learning activities. My hope is that these preservice teachers will see the benefits of project-based learning and use this approach in their future classrooms. Please see attached PowerPoint for an overview of the project-based learning professional development.

### **What is Project-Based Learning?**

According to Bell (2010), author of “Project-Based Learning for the 21<sup>st</sup> Century: Skills for the Future”, project-based learning is “an innovative approach to learning that teaches a multitude of strategies critical for success in the twenty-first century. Students drive their own learning through inquiry, as well as work

collaboratively to research and create projects that reflect their knowledge” (p.39).

Wurdinger (2010) defines project-based learning as:

“Learning that taps into students’ interests by allowing them to create projects that result in meaningful learning experiences. The method requires teacher to identify projects that challenge students to work individually or in groups to create plans, solve problems they encounter, test their ideas and present their projects to peers. (p.150)”

In my opinion, project-based learning is a hands-on approach to learning that allows students to create meaningful artifacts that demonstrate what they have learned. This artifact could be a website, a play, or any type of creative synthesis. The majority of project-based learning activities begin by students being presented with a task. Students must then use their problem-solving skills to develop and implement a plan to actively seek the solution. Once students find a solution then students share their findings with their peers and teacher. Project-based learning requires students to be responsible for their own learning. It is a teaching method where teachers guide students through different types of inquiry capitalizing on each student’s strengths and improving upon their weaknesses. These inquiries tap into students’ engagement and interests. Project-based learning is a key teaching strategy that produces independent and critical thinkers. This approach to learning allows for teachers to obtain a greater understanding of what their students truly know about a subject matter and where their interests lie.

**My Experience with Project-Based Learning:**

Project-based learning is a teaching strategy that I have always found to be interesting and rewarding for the students and the teacher. Even though I do not have years of teaching experience, my undergraduate and graduate coursework has allowed me to participate in many project-based learning opportunities. During my student teaching experience, I taught 6<sup>th</sup> grade Social Studies and successfully implemented a project-based learning activity for my European unit. In North Carolina, the sixth grade Social Studies curriculum outlines the study of Ancient Civilizations and modern Europe. The curriculum lends itself to dividing Europe into four regions: West-Central Europe, Southern Europe, Eastern Europe and Northern Europe. Throughout the entire European unit, I gave each class period one particular region to study. I also assigned each student to a particular group. In these groups, the students were given a particular country in their assigned region to research. This assignment required that students research different aspects about their particular country such as resources, main imports and exports, popular tourist attractions, weather, etc. Once the students gathered all the information they were asked to create some type of artifact that would help demonstrate their knowledge of their country. Once the students were finished with their creations they presented to their peers. After the presentations, the classes planned and hosted a European Faire night where parents, faculty, and community members were invited to come and see the projects that my students created.

During my graduate work, I was also able to plan and implement different types of project-based learning activities. During ECI 546 New Literacies and Media, I was able to work with a kindergarten teacher on a project to enhance student comprehension of story elements. This project-based learning activity began with students listening to the oral reading of the well-known children's book The Three Little Pigs. The students were then asked to draw three different pictures that represented the beginning, middle and end of the story. Once the students were done with their illustrations, each student's voice was recorded explaining their pictures of what happened at each point in the story. The recordings were then played for the class to hear. Based upon their explanations of what happened in the beginning, middle and end of the story, the class was then asked to plan and perform a puppet show. The students performed their puppet show for their peers demonstrating a higher level of understanding and greater depth of knowledge. By creating a puppet show, these students proved not only that they understood the story in its entirety, but also that they could re-tell the story through a different medium, which is a vital step in reading comprehension that only project-based learning would be able to demonstrate.

In all of my experiences with project-based learning I have found that this learning approach engages students on a more significant level and motivates them to learn new material. Since they are responsible for their own learning their application and retention of knowledge learned greatly increases. Project-based learning allows students to make personal and meaningful connections to content and learning that otherwise would go untouched.

### **What are the benefits of Project-Based Learning?**

Project-based learning is a teaching strategy with numerous benefits for students, teachers, and education as a whole. Some of these benefits include critical/independent thinking, higher student engagement, increased student motivation and application, and retention of information. Project-based learning allows for students to develop into critical and independent thinkers and learners. Since this approach to learning is centered on inquiry, students need to use problem-solving skills to plan and participate in the activity. Project-based learning cultivates independent thinkers because this approach to learning is student-driven while teachers act as facilitators, guiding their students through their learning and the assignment. The development of critical and independent thinkers is crucial for preparing students to be 21<sup>st</sup> century learners.

In today's society, people are expected to be creative and formulate new and innovative ways to solve and address issues and problems. Project-based learning is a way for students to gain experience and confidence in their abilities to work through problems and create solutions. When students are responsible for their own learning, they are going to be more engaged and more personally motivated because project-based learning allows for information to become meaningful and personal for students. When students are the ones actively seeking and finding out information, the application, transformation, and retention of this knowledge becomes easier. Project-based learning "is active not passive, it is interesting and relevant to the student; it allows for autonomy and self-directed learning; it increases communication skills and it enhances motivation to learn" says Wurdinger

(2007) when asked to explain some of the important benefits of project-based learning (p.151). Bell (2010) summarizes the benefits and importance of project-based learning by stating:

“[Project-based learning] is a key strategy for creating independent thinkers and learners. Children solve real-world problems by designing their own inquiries, planning their learning organizing their research, and implementing a multitude of learning strategies. Students flourish under this child drive, motivating approach to learning and gain valuable skills that will build a strong foundation for their future in our global economy. (p. 39)”

Project-based learning is a way to prepare students for their future. The benefits of this approach to learning are similar to the outcomes and expectations for student achievement in our education system. Project-based learning allows for students to be creative and innovative while learning new material and yielding higher student performance and greater academic achievement.

### **What did I learn about myself as a Teacher Leader?**

Throughout this action leadership project I have been able to reflect upon and analyze myself as a teacher leader. Even though I was not given the opportunity to implement my professional development, the planning process has shown me glimpses of myself as a future teacher leader. One of the things that I learned about myself through this process was that I am a very hands-on and detailed oriented

leader. I was very meticulous in outlining and creating my professional development. I wanted my presentation to be very concise and effective. I believed that the presentation needed to be to the point so that I could keep the attention of the preservice teachers.

Also, I did not want to overload the Teaching Fellows with too much information that might mask my ultimate goal of the professional development. Transferring this experience into my future teacher leader roles, I understand that I will probably be the type of leader that has to be involved in every part of the team, board, committee etc. I understand that this may prove to be a downfall because I already know that I will have an issue in delegating different roles/jobs. However, being aware of this potential issue now can allow me to work on becoming a stronger teacher leader. A good leader is one who is constantly tweaking their different leadership skills. Once I am able to delegate roles/jobs more efficiently I will be able to become a more effective leader.



## Annotated Bibliography:

Bell, S. (2010). Project-Based Learning for the 21st Century: Skills for the Future.

Clearing House: A Journal of Educational Strategies, Issues and Ideas, 83(2),  
39-43. Retrieved from ERIC database.

This article speaks to the effectiveness of project-based learning ability to prepare students for the 21<sup>st</sup> century. The author defines project-based learning and outlines the benefits of using this approach to learning.

Cifuentes, L., & And, O. (1996). From Sages to Guides: A Professional Development  
Study. Retrieved from ERIC database.

This study examined preservice teachers trend of leaning more towards implanting more student-centered activities versus lecture driven instruction. This study also stressed the importance of expanding preservice teachers' teaching methods beyond lecture -based practices.

Ellis, K. (2009). An Introduction to Project Learning. Retrieved Apr. 20, 2010, from  
The George Lucas Educational Foundation, San Rafael, CA. Web site:  
<http://www.noaanews.noaa.gov/stories/s1119.htm>.

This video provides a brief overview of project-based learning. The video shares the benefits of this approach to learning as well as give an example of a project-based learning activity.

Grant, M., & Branch, R. (2005). Project-Based Learning in a Middle School: Tracing  
Abilities through the Artifacts of Learning. Journal of Research on Technology  
in Education, 38(1), 65-98. Retrieved from ERIC database.

This study focused on ways to explore individual differences while working within a project-based learning environment. The study stressed how the project-based learning environment allowed for participants to make their own decisions, resources and plans. This study outlines recommendations and implications for teachers/educators when using the project-based learning approach.

Hernandez-Ramos, P., & De La Paz, S. (2009). Learning History in Middle School by Designing Multimedia in a Project-Based Learning Experience. *Journal of Research on Technology in Education*, 42(2), 151-173. Retrieved from ERIC database.

This article described a study in which eighth grade students participated in two different learning environments; one project-based and one more traditional. The article discusses how students' content knowledge greatly increased for participants in the project-based learning environment as compared to students participating in the more traditional approach to learning.

Holubova, R. (2008). Effective Teaching Methods--Project-based Learning in Physics. Online Submission, Retrieved from ERIC database.

This paper discussed the results of effective teaching methods in physics and science. The paper stressed how it is important to educate preservice teachers in methods such as project-based learning.

Mitchell, S., Foulger, T., Wetzel, K., & Rathkey, C. (2009). The Negotiated Project Approach: Project-Based Learning without Leaving the Standards Behind. *Early Childhood Education Journal*, 36(4), 339-346. Retrieved from ERIC database.

This study examined a veteran first grade teacher's implementation of a project-based learning assignment while addressing grade level standards. The data from this study explains how the teacher was successful in the implementation of this assignment and the student's learning outcomes because of the specific approach to learning used by the teacher.

Nation, M. (2008). Project-Based Learning for Sustainable Development. *Journal of Geography*, 107(3), 102-111. Retrieved from ERIC database.

This article defines project-based learning and its importance in the classroom. The article explains how project-based learning was implemented in geography to involved students in authentic research.

Papastergiou, M. (2005). Learning to Design and Implement Educational Web Sites within Pre-Service Training: a Project-Based Learning Environment and its Impact on Student Teachers. *Learning, Media & Technology*, 30(3), 263-279. Retrieved from ERIC database.

This paper explains how project-based learning environment were introduced to student teachers by asking them to design and develop educational websites. This paper speaks to the benefits of project-based learning for the student teachers.

Wurdinger, S., Haar, J., Hugg, R., & Bezon, J. (2007). A Qualitative Study Using Project-Based Learning in a Mainstream Middle School. *Improving Schools*, 10(2), 150-161. Retrieved from ERIC database.

This article defines project-based learning as well as discusses the lessons learned when the project-based learning approached was implemented in the context of a middle school classroom. The article speaks to the benefits and effectiveness of project-based learning.