

# WHAT IS Project-Based Learning?



# PROJECT-BASED LEARNING (PBL)

Project-based learning is a dynamic, rigorous, student-centered instructional model that blends content, meaningful work, and personal connection to create powerful, authentic learning experiences.

Through PBL, students explore subjects interconnectedly and engage in learning that is deep, long-lasting, and relevant to the challenges of their lives and the world they live in.



# The 7 ESSENTIAL ELEMENTS of PBL



**A Challenging Problem/Question:** Drives the learning



**Inquiry Focused:** Asking questions, seeking information, applying knowledge



**Authentic:** Real-world context that provides interest and relevance



**Student Voice and Choice:** Increases level of relevance & engagement

# PROJECT-BASED LEARNING (continued)



**Reflection:** Teachers and students assess the level of learning by reflecting on successes and challenges, and then establish next steps in the learning process



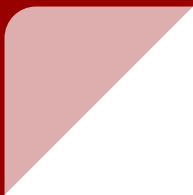
**Critique & Revision:** Students give, receive and use feedback to deepen their learning



**Public Audience:** Students explain, display, and/or present their learning to audiences beyond the classroom



# WHY Project-Based Learning?



## **The GOALs of Project Based Learning are to:**

- Teach academic content knowledge and skills, and develop deeper understanding.
- Build 21st century success skills such as critical thinking, problem solving, communication, collaboration and creativity/innovation.
- Help students become aware of their own academic, personal and social development.
- Help students gain confidence for meeting new challenges in school and in life.



# 21st CENTURY SKILLS

## in 2020

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1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

## in 2015

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1. Complex Problem Solving
2. Coordinating with Others
3. People Management
4. Critical Thinking
5. Negotiation
6. Quality Control
7. Service Orientation
8. Judgment and Decision Making
9. Active Listening
10. Creativity



“**Critical thinking** and **problem-solving** top the list and will grow in prominence in the next five years. These have been consistent since the first report in 2016.”



“Newly emerging in this year’s report are skills in self-management such as **active learning**, **resilience**, **stress tolerance** and **flexibility**.”

# The World Economic Forum states that . . .

**“Traditional learning falls short at equipping young people with the knowledge they need to thrive in today’s society.”**

“To thrive today, people need a different mix of skills than in the past. In addition to foundational literacy and numeracy skills, they need competencies like **collaboration, problem-solving** and **creativity**, and character qualities like **persistence, curiosity** and **initiative**.”



<https://www.youtube.com/watch?v=zJEffG1iMLY&t=17s>

What are  
Parents & Students  
Saying?



## Parents . . .

“Love it. It has drastically increased my son’s engagement and grades. He is much more comfortable and confident in this kind of environment.”

“We have noticed a huge difference in stress levels and my daughter is enjoying this type of learning a lot better.”

“It was an adjustment, but the growth and confidence I have seen in my son makes me think that this learning method may be one of the best things for him.”

“Last year, when the students worked on their government projects, my son learned so much more about our voting system and how our government is structured than he would’ve if he’d just had lectures, notes and a test.”

“I wish I had this opportunity in high school.”

## Students . . .

“I felt like I learned more about the topic through a project than doing worksheets. The test at the end of the unit was always easy for me in grade 8.”

“If a teacher just tells you something you haven’t learned it.”

“This kind of system has pushed me to change my attitude, thoughts about learning and the overall way I learn. My attitude is different because I now strive to be my best in all areas, not just focus on the final grade.”

“The 6 C’s taught me to go deeper and take genuine interest and responsibility in my learning, and they also made me a stronger person.”

“I think I have improved at critical thinking quite a bit and learned to be a deeper thinker. I used to always create work or do stuff that was just good enough but now that I critically think more it has improved my work.”

# Frequently Asked Questions



## **Is PBL rigorous enough to help students learn what they need to know?**

- Projects are built on curricular learning outcomes. Students acquire knowledge, understanding, and skills throughout the project.
- PBL scaffolds learning and aims for students to reach a level of mastery for each project they undertake.
- Project-based learning is engaging, promotes deeper learning, expands student perspectives, extends content knowledge and prepares students with skills for career, post-secondary studies and life.



## Do students just research all day?

- Teachers provide students with different tools and experiences to help guide their inquiry and connect to curricular outcomes. This includes:
  - lessons, reflections, class discussions, experiments, independent inquiry, and quizzes/tests (typically tests are used as mid point check ins).
- Students are provided multiple resources, materials, and texts that allow them to **acquire important information, explore interesting problems, and develop their own questions.**
- Teachers chunk and scaffold the learning time to provide structure, variety, and accountability throughout the project.

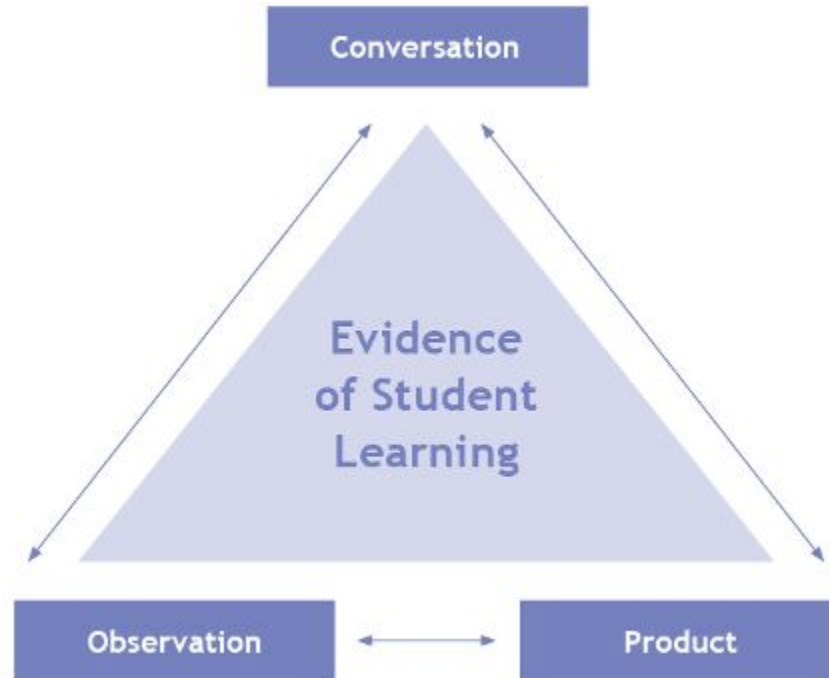
## How are experts involved in projects?

Experts ask students deeper questions to probe their thinking and provide feedback to improve the learning.

Experts also assist students by presenting additional information and may also assist with final products and demonstrations of learning.



# How are students graded?



## **If PBL is so great why aren't more schools doing it?**

It is definitely growing in popularity! It is happening in many schools to varying degrees.

PBL requires teachers to work with students on a more individual basis and this can be difficult to accomplish in schools with large class sizes

- NHS prioritizes small class sizes of 16-18 students in PBL classes

Access to technology is often a barrier but fortunately students at NHS all have their own chromebook!

## Will my child be prepared for post-secondary studies?

Research studies, including The Impact of Project-Based Learning on Collegiate Preparedness (2017, Brandman University), have revealed the positive correlation between project-based learning, college readiness, and future career success.

“Project-based learning is a promising approach that improves student learning in higher education.” (University of Pennsylvania)

“Students in PBL classrooms outperform students in traditional classrooms and on standardized exams.” (Lucas Education Research)

“The truth is that our subjects are full of compelling problems and perplexing puzzles. As teachers, we need to explore authentic problems rather than reduce our subjects down to facts and figures to be memorized ... PBL leads to much deeper learning and essential skill development.” (Harvard)

## What we're hearing from post-secondary institutions . . .

Students are coming to university unprepared for post-secondary studies

- relying on memorization of content and lacking critical thinking skills
- struggle to collaborate and work in teams
- difficulty in planning and navigating their educational and/or career journey

“PBL is the way to go. Colleges and universities are beginning to shift away from exams and are using projects, and we are seeing great success. Exposing your students to this type of learning is a huge advantage for them. As they move into post-secondary, they will see the shift there as well and will have a head start.”

(MB University Instructor)

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**NHS**

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NHS provides a strong comprehensive education over four years ensuring students are able to Connect, Grow & Thrive in the real world.

# Project-Based Learning at Niverville High



<https://nhs.hsd.ca/project-based-learning/>