



PROFESSIONAL DEVELOPMENT AND INNOVATION REPORT

The PBL Steering Committee at WWJR
presents the conception and
implementation of a Project-Based
Learning Program

Submitted: April 2023 to the LCEEQ

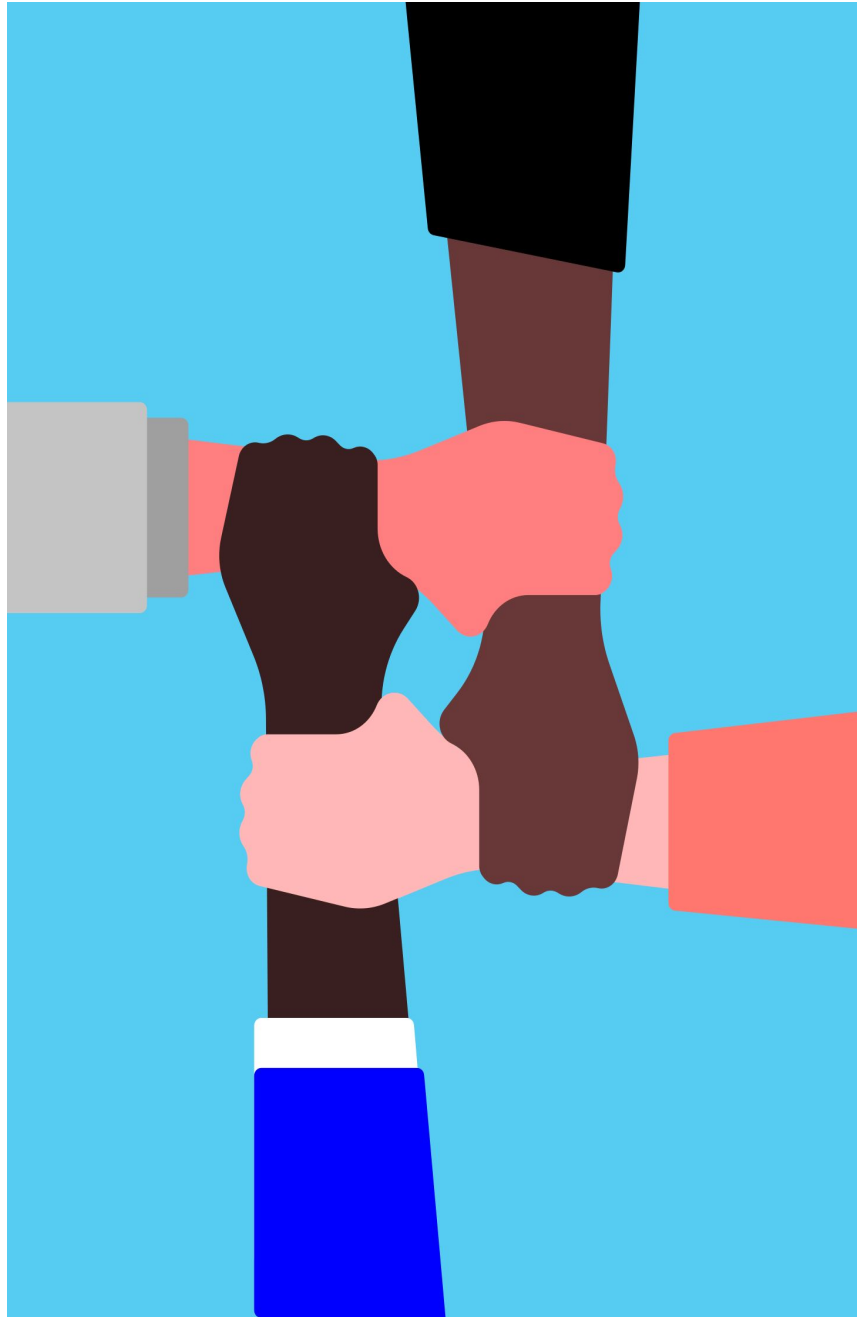
Project Manager: Maria Lanzetta

PBL Coordinator and Trainer: Kelly Roy

PBL Steering Committee: Jennifer Lussier-Price, Gareth Williams, Melissa Abrams, and Barbara Baldino

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AGENDAS



AGENDAS

SCHEDULE FOR PDIG DAY 1

PDIG Day One: PBL Introduction, Learning Outcomes, Vision Agenda

Date: Friday, October 22, 2022

Goal: Customize PBL to fit the needs of WWJR

7:55 - 8:45 - Breakfast and Brainstorm

9:00 - 10:00 - Collective Note-Taking and Meaning-Making

- ★ Need-to-Know Board
- ★ Teachers will share their understanding of PBL and learn the major elements of PBL
- ★ Teacher-specific goals to be discussed (what do we want to change in our classrooms?)
- ★ Student-specific goals (what do we want our students to learn?)
- ★ Identify the differences between PBL and Deep Learning/RTI and how it provides a platform for an instructional reorganization
- ★ Product: Slides with our notes and knowledge organized for future reference

10:00-11:00 - Vision Building

- ★ Our vision for a PBL school and what it looks like
- ★ Decide on our roles, individually, as teachers, in the implementation of PBL across WWJR
- ★ Long-term goals such as evaluation, reporting, awards, ceremonies, vernissages, and exhibitions for full visibility of PBL within the halls and amongst the student body
- ★ Product: Vision statement, table outlining roles and responsibilities, timeline

11:00 - 12:00 - Lunch

12:00 - 1:00 - Disseminating New Instructional Knowledge

- ★ Collaboratively and collectively discuss how to disseminate the success and progress of the PBL Program to parents and the community
- ★ Discuss how to organize new pedagogical knowledge for fellow staff members
- ★ Product: Google Doc to be shared with administrators

1:00 - 2:00 - Journal Writing

- ★ Produce a journal to report our progress, record our thoughts, and reflexively consider what we have learned, what we still do not understand, and what we need to fix
- ★ Product: Ever-evolving, constant-state-of-change, influx Google Doc

2:00 - 2:20 - Conclusion

- ★ Discuss goals for the next PDIG and decided on the date of the next meeting
- ★ Product: Google Doc with agenda

AGENDAS

SCHEDULE FOR PDIG DAY 2

PDIG Day Two: PBL Horizontal Planning

Date: Tuesday, November 22, 2022

Goal: PBL Horizontal Planning

7:55 - 8:45 - Breakfast and Brainstorm

9:00 - 10:00 - Collective Note-Taking and Meaning-Making

- ★ Need-to-know Board
- ★ Discuss the skills, knowledge, and topics that WWJR students to have mastered before moving onto the senior campus
- ★ **Product: Slides with our notes and knowledge organized for future reference**

10:00-11:00 - Vision Building

- ★ Create parallels between PBL and Quebec Curriculum
- ★ **Product: Compare and contrast table**

11:00 - 12:00 - Lunch

12:00 - 1:30 - Subject-specific horizontal planning

- ★ Create horizontal curricula for ELA, Science and Technology, and Physical Education
- ★ Cycle 1: Content and Knowledge from Grade 7 to be achieved by the end of grade 8
- ★ What will formal evaluation look like?
- ★ What are the main skills and knowledge that students must learn for success?
- ★ **Product: Google Sheets outlining the roadmap for student learning**

1:30 - 2:00 - Journal Writing

- ★ Produce a journal to report our progress, record our thoughts, and reflexively consider what we have learned, what we still do not understand, and what we need to fix
- ★ **Product: Ever-evolving, constant-state-of-change, influx Google Doc**

2:00 - 2:20 - Conclusion

- ★ Discuss goals for the next PDIG and decided on the date of the next meeting
- ★ December 16, 2022 - Next Meeting
- ★ January 19, 2023 - The one after that
- ★ **Product: Google Doc with agenda**

AGENDAS

SCHEDULE FOR PDIG DAY 3

PDIG Day Three: Project Design

Date: Friday, January 13, 2023

Goal: Redesign a pre-existing lesson, unit, or project to match PBL Gold Standards, learning goals, or evaluation processes.

7:55 - 8:45 - Breakfast and Brainstorm

- Teachers from ELA, Science, and Technology, and Physical Education will bring a pre-existing project to the table for PBL redesign
- Resources:
 - <https://www.magnifylearningin.org/what-is-project-based-learning>
 - <https://www.thinglink.com/scene/953661363106873347>
 - <https://www.cultofpedagogy.com/project-based-learning-lesson/>

9:00 - 10:00 - Collective Note-Taking and Meaning-Making

- ★ Reconceptualize a project's learning goals
 - From QEP to Gold Standard
- ★ Driving Questions - how are they framed?
 - Inquiry / Need-to-Know Boards
 - <https://www.tubric.com/>
- ★ Develop a project that can assess the process and progress
 - Process, milestones, benchmarks, assessment, and product
- ★ Create opportunities for all subjects to present projects publicly within the school
- ★ Discuss the Vernissage/Portfolio Night for the end
- ★ **Product: Slides with our notes and knowledge organized for future reference**

10:00-11:00 - Pedagogy and Gold Standards

- ★ How can we measure a lesson according to Gold Standards? A unit? An individual assignment? A group project?
- ★ Build a pedagogical understanding of Gold Standards in assessment, beautiful design, and the importance of presenting a product

AGENDAS

SCHEDULE FOR PDIG DAY 3 (CONT'D)

PDIG Day Three: Project Design

- ★ Create opportunities for adaptations, accommodations, and modifications within a PBL project
- ★ Consider students (audience), content, skills, and CONTEXT (this one is good for creating authenticity)
- ★ Build a PBL Assessment/Project/Lesson/Milestone
 - Kelly will coach us with Driving Questions
 - Maria will coach us with Assessments
 - Materials: Templates, Rubrics, Articles
- ★ **Product: Fill-in-the-blanks Project Templates**

11:00 - 12:00 - Lunch

12:00 - 1:30 - Subject-specific horizontal planning

- ★ Before the next date, teachers will experiment with the new project and hopefully acquire new insight as to what a PBL project looks and feels like once it is fully executed and produced
- ★ Key standards, vocabulary, literacy skills, success skills, and major products
- ★ **Product: Bring evidence of learning to the next session (teacher reflections and student work)**

1:30 - 2:00 - Journal Writing

- ★ Produce a journal to report our progress, record our thoughts, and reflexively consider what we have learned, what we still do not understand, and what we need to fix
- ★ **Product: Ever-evolving, constant-state-of-change, influx Google Doc**

2:00 - 2:20 - Conclusion

- ★ Discuss goals for the next PDIG and decided on the date of the next meeting
- ★ - Next Meeting - Thursday, February 9, Day 8
- ★ - The one after that :) - Friday, March 3, Day 4
- ★ **Product: Google Doc with agenda**

AGENDAS

SCHEDULE FOR PDIG DAY 4

PDIG Day Four: PBL Unit Design

Date: Thursday, February 23, 2023

Goal: Construct and design a unit from beginning to end, following a customizable and WWJR-designed template.

7:55 - 8:45 - Breakfast and Brainstorm

- ★ Teachers from ELA, Science, and Technology, and Physical Education will bring forward topics that need to be covered (according to the QEP)
- ★ Begin brainstorming, in departments, the projects that will inform the construction of an entire unit
- ★ Find opportunities for a cross-curricular approach among Social Studies, Mathematics, Ethics, and the Arts (drama, music, visual)

9:00 - 10:00 - Collective Note-Taking and Meaning-Making

- ★ Introduction to the [TEMPLATE](#)
 - Discuss what needs to be changed/adjusted so that it suits the needs of WWJR
 - Teachers will consider curriculum benchmarks that need to be addressed, subject knowledge/content, and employable/21st-century skills and begin inputting our answers into the template
- ★ Review how to change the direction of learning from driving questions to product (come up with a formula)
- ★ Communicate the pedagogical value of process and problem-based learning in our units (through our units)
- ★ **Product: Slides with our notes and knowledge organized for future reference**

10:00-11:00 - Breakout

- ★ Teachers will begin to design their units (either in a subject-specific scenario or cross-curricular)
- ★ Create student voice/choice opportunities within the launching of a new unit
- ★ Create opportunities for adaptations, accommodations, and modifications within a PBL project
- ★ Consider students (audience), content, skills, and CONTEXT (this one is good for creating authenticity)

AGENDAS

SCHEDULE FOR PDIG DAY 4 (CONT'D)

PDIG Day Four: PBL Unit Design

- ★ Include opportunities for students to produce an individual project, a group project, or a class-wide project
- ★ Include possibilities for public presentation
- ★ Experts? New voices?
- ★ **Product: A fully actualized PBL unit with the use of the WWJR PBL Template**

11:00 - 12:00 - Lunch

12:00 - 1:30 - Achieving Gold Standards

- ★ Practice beautiful design for pedagogical purposes and create visually supportive materials that are meant to engage students
- ★ Use a Gold Standards Checklist to make sure that the PBL unit is meeting all the necessary requirements to be considered PBL
- ★ Discuss which aspects of a PBL unit should be emphasized according to our specific needs
- ★ **Product: Present our PBL Units for criticism and constructive feedback**

1:30 - 2:00 - Journal Writing

- ★ Produce a journal to report our progress, record our thoughts, and reflexively consider what we have learned, what we still do not understand, and what we need to fix
- ★ **Product: Ever-evolving, constant-state-of-change, influx Google Doc**

2:00 - 2:20 - Conclusion

- ★ Discuss goals for the next PDIG and decide on the date of the next meeting
- ★ - Next Meeting - Mar 30, 2023 - Day 8
- ★ - The one after that :) - April 14?
- ★ **Product: Google Doc with agenda**

AGENDAS

SCHEDULE FOR PDIG DAY 5

PDIG Day Five: PBL Unit Design

Date: Thursday, March 28, 2023

Goal: PBL Troubleshooting and Building Assessment Tools

7:55 - 8:45 - Breakfast and Brainstorm

- ★ At this point, we have had some experience with teaching using PBL methods and we can collectively pool our insight
- ★ What have we noticed about Need-to-Know boards? Does our teaching direction change from linear to recursive?
- ★ Have we noticed any changes in student engagement? Motivation?
- ★ Have we tried student conferencing? How have we given feedback?

9:00 - 10:00 - Collective Note-Taking and Meaning-Making

- ★ Refer back to the [TEMPLATE](#) and consider the different methods of evaluation (see last page)
 - Discuss evaluation and feedback
 - What different forms and shapes do we already use? What do we find effective? How do we reduce correcting but still give regular feedback? How to communicate this to parents?
- ★ **Product: Slides with our notes and knowledge organized for future reference**

10:00-11:00 - Teaching Student Autonomy and Accountability

- ★ Create opportunities within a pre-existing unit for the development of organizational skills
- ★ Consider ways in which to increase student accountability and autonomy
- ★ Consider how to create PBL reports for students to increase motivation for self-improvement
- ★ **Product: Generic checklists or examples of convenient moments for subject teachers to include collaboration, organization, and reflection in their rubrics**

11:00 - 12:00 - Lunch

AGENDAS

SCHEDULE FOR PDIG DAY 5 (CONT'D)

PDIG Day Five: PBL Unit Design

12:00 - 1:30 - Assessment Tools and Data Visualization

- ★ Redesign assessment tools so that they evaluate process, progress, and product
- ★ Converting assessment to percentage grades (creating a table for conversion)
- ★ Build WWJR-specific assessment tools
- ★ Reconsider how data is presented, create a visual data form for students to follow, and check for progress
- ★ **Product: PBL Specific Evaluation for WWJR (Academic Excellence Checklists)**

1:30 - 2:00 - Journal Writing

- ★ Produce a journal to report our progress, record our thoughts, and reflexively consider what we have learned, what we still do not understand, and what we need to fix
- ★ **Product: Ever-evolving, constant-state-of-change, influx Google Doc**

2:00 - 2:20 - Conclusion

- ★ Discuss goals for the next PDIG and decide on the date of the next meeting
- ★ Next Meeting - Thursday, Apr 20, 2023- Day 2
- ★ **Product: Google Doc with agenda**

AGENDAS

SCHEDULE FOR PDIG DAY 6

PDIG Day Six: PBL Implementation

Date: Thursday, April 20, 2023

Goal: PBL On the Walls and in the Classrooms

7:55 - 8:45 - Breakfast and Brainstorm

- ★ Begin assembling projects for PBL Project Exhibition and Vernissage
- ★ Discuss how projects should be presented

9:00 - 10:00 - Collective Note-Taking and Meaning-Making

- ★ Discuss what constitutes a PBL student and how success is to be redesigned and re-written according to our vision at the beginning of the pilot program
 - Create a “profile”
- ★ Plan of action for making contact with community members and partners
 - Correspondence template
- ★ How to include “subject-matter experts” in our instructional design
- ★ **Product: Docs with a student profile and “letter” template**

10:00-11:00 - PBL Toolkit Planning

- ★ Build WWJR-specific planners, templates, assessment tools, and a repertoire of materials for all subjects
- ★ **Product: An easily accessible and “one-stop-shop” collection of resources for teachers to use in the 2023-2023 school year**

11:00 - 12:00 - Lunch

12:00 - 1:30 - Assessment Tools and Data Visualization

- ★ Pave the way for the new school year (2023-2024) so that PBL can be fully implemented across all subjects
- ★ Create promotional material to make PBL a marketable program at WWJR
- ★ **Product: Timeline of PBL implementation for 2023-2024 (month-by-month “roll out”)**

AGENDAS

SCHEDULE FOR PDIG DAY 6 (CONT'D)

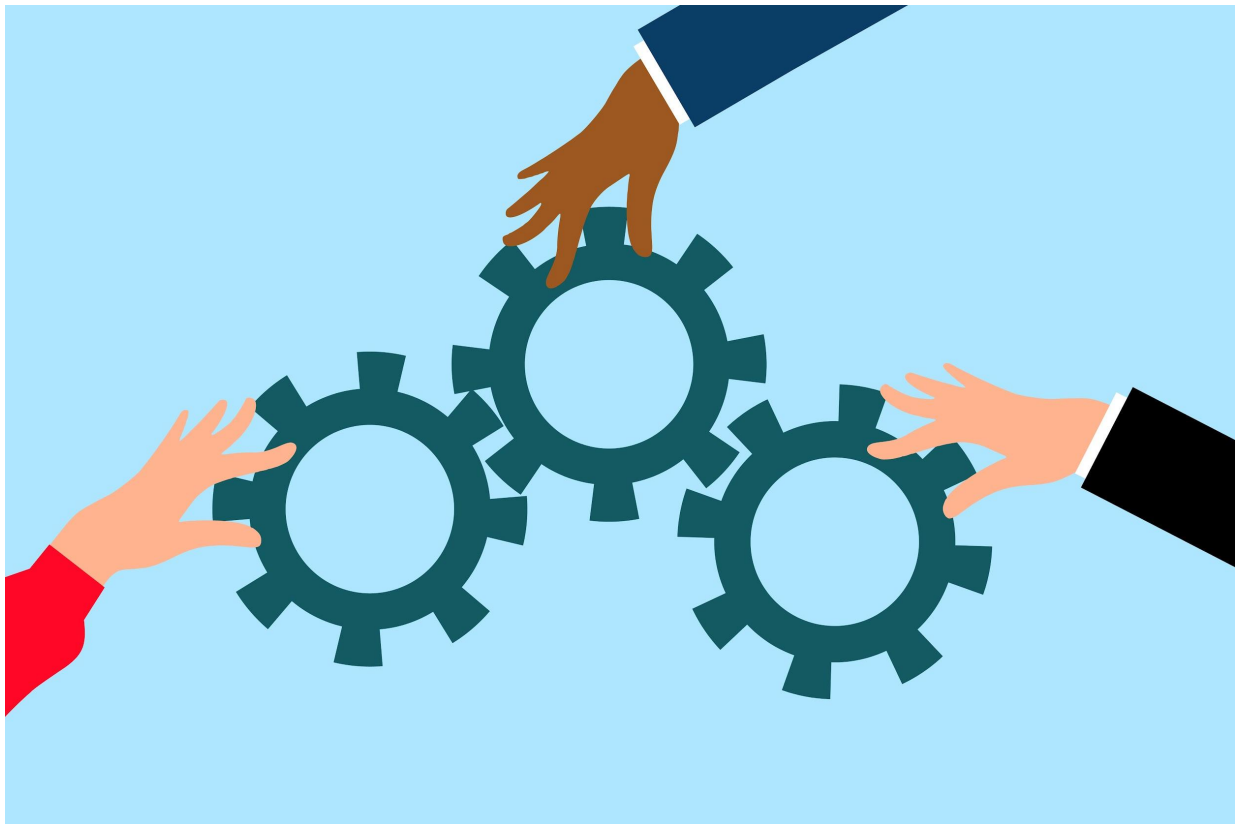
PDIG Day Six: PBL Implementation

1:30 - 2:00 - Journal Writing

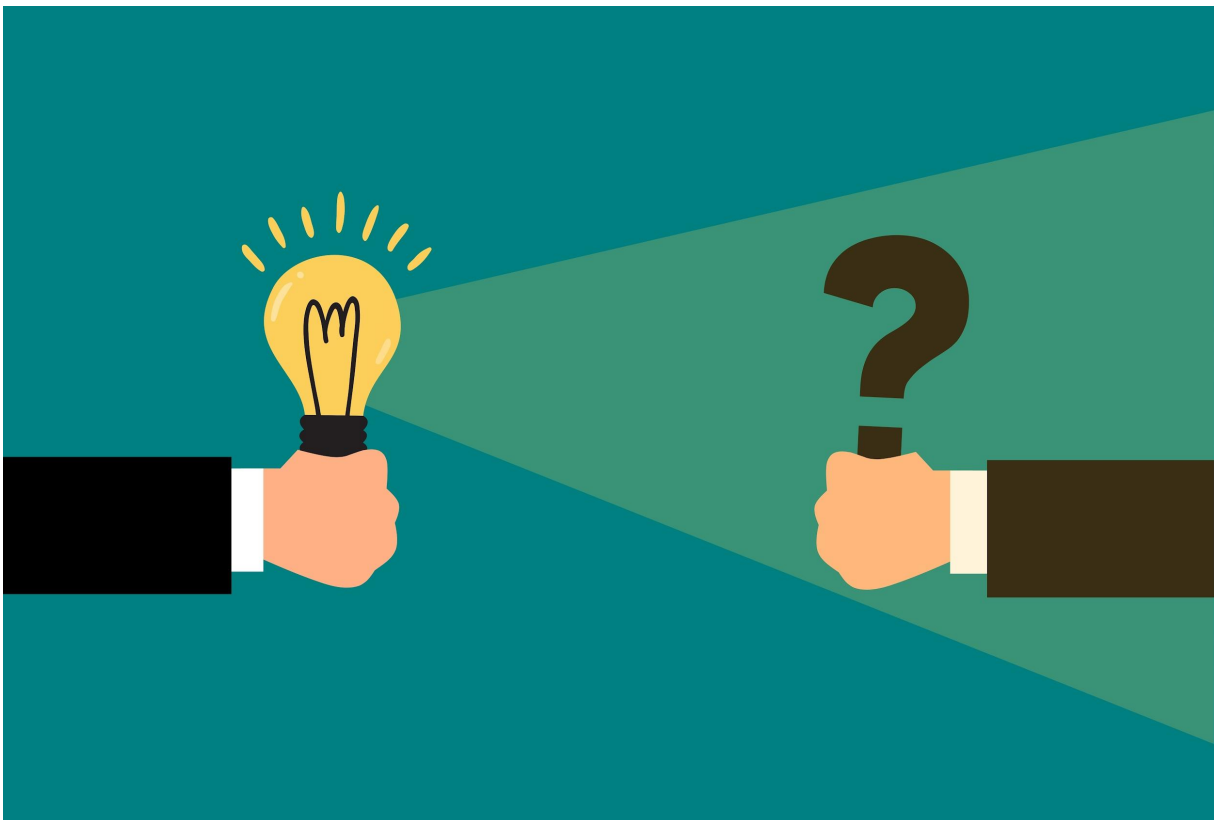
- ★ Produce a journal to report our progress, record our thoughts, and reflexively consider what we have learned, what we still do not understand, and what we need to fix
- ★ **Product: Ever-evolving, constant-state-of-change, influx Google Doc**

2:00 - 2:20 - Conclusion

- ★ Discuss goals for applying for a new PDIG
- ★ Submit a report to **LCEEQ by April 30, 2023**
- ★ PBL World in Napa Valley, California application and submission to PIC
- ★ **Product: Google Doc with agenda**



VISION AND MISSION



VISION AND MISSION STATEMENTS

The why, the how and
when we plan to execute
our plan

PBL at WWJR

Our Vision: To promote the development of autonomous and self-motivated learners capable of adaptation and problem-solving, through project-based learning opportunities.

Our Mission: To execute PBL at WWJR through student-driven and inquiry-based education.

Timeline:

2022-2023 → Using our vision to begin building PBL units to be implemented by steering committee members, shifting instruction among individuals

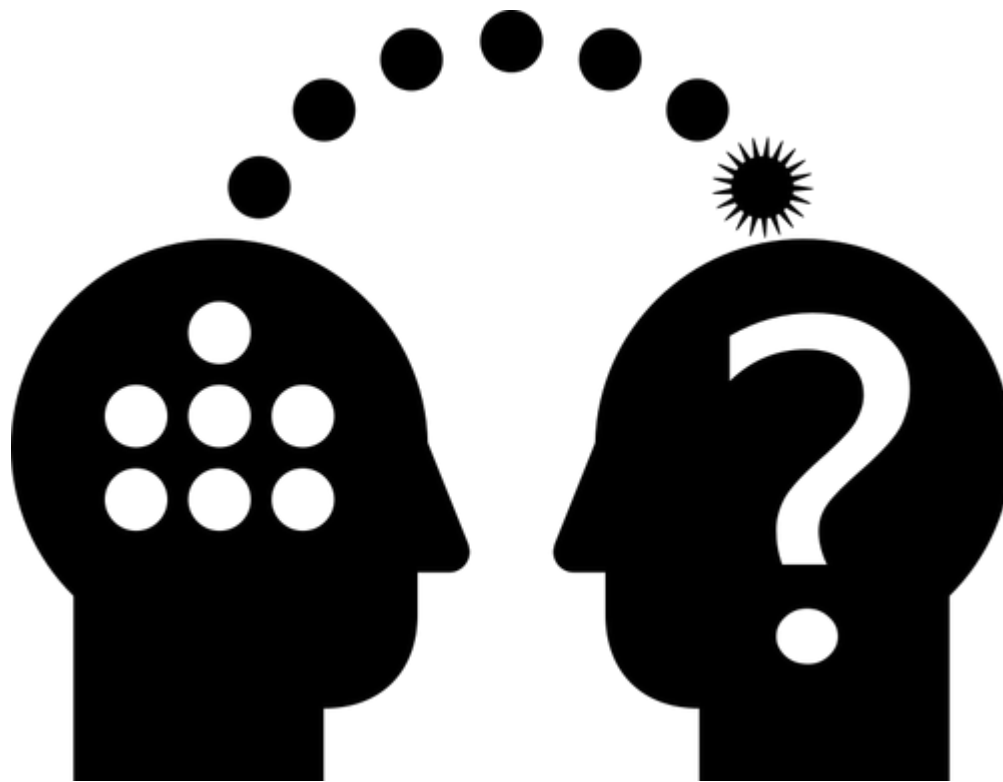
2023-2024 → Coaching and supporting staff in the full implementation of PBL throughout the school, shifting instruction across departments, programs, and support staff

2024-2025 → PBL School-Wide, extending our reach to the community, and creating impact through projects, shifting the perception of education across larger/wider landscapes

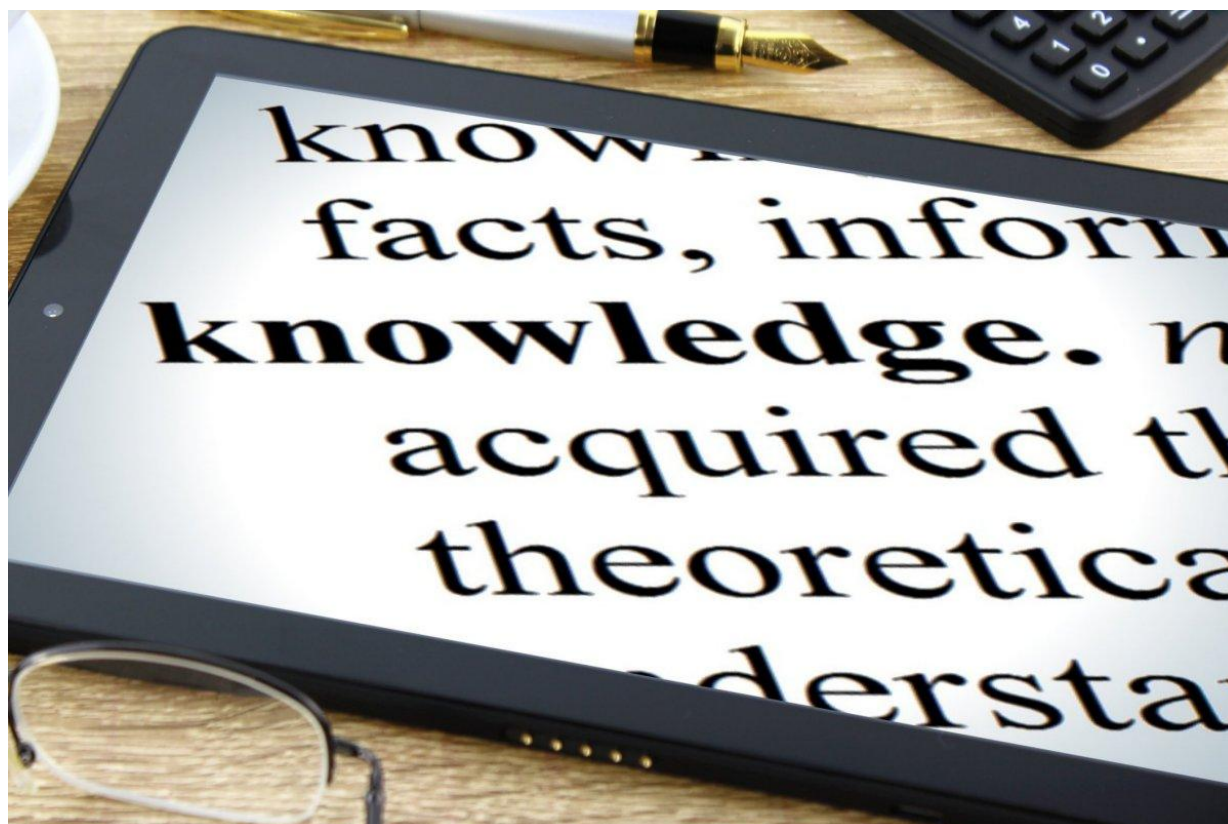
OUR ROLES

Our Roles	
Maria Caterina Lanzetta	Project Manager
Kelly Roy	Creative Director
Barbara Baldino	Mathematics Coordinator
Melissa Abrams	ELA and Ethics Coordinator
Gareth Huw Williams	Science and Technology Coordinator
Jennifer Lussier-Price	Physical Education and Leadership Coordinator





COLLECTIVE INTELLIGENCE AND NOTE-TAKING



PBL NEED-TO-KNOW

The following definitions and knowledge were written based on a collective thought-process. The PBL Steering Committee aimed to define pedagogical terms based on their own understanding, through the perspective of an educational practitioner.

What is PBL?

- Project (Process and Problem) Based Learning (PBL) is a teaching method in which students learn by actively engaging in real-world and personally meaningful projects.



PBL NEED-TO-KNOW

PBL Breakdown

- Initiation into the project through the “Driving Question”
 - How can we increase the bee population in Saint Lazare?
- Identification of Milestones – what skills or knowledge do students need along the way to accomplish their, and your goals?
 - Use tests and evaluations you already have here!
- Student Voice and Choice: What will they do?
 - Podcast, Article, Experiment, Essay...
 - You have control here too. Do you want to allow for many different products or just one? Are students working together or separately?
- Use of Expert to Inform and Learn
 - Local farmer? Entomologist? You?

What you already know about PBL	Need-to-Know
<p>I already do project based learning to some extent</p> <p>Guiding questions and milestones</p> <p>I already use a process-oriented approach</p> <p>Most of my major evaluations are in the project format</p> <p>I already expect excellence</p>	<p>Do we have money for materials or guests?</p> <p>How do you ensure that you are gathering enough material to meet the current report card requirements?</p> <p>How do you build a guiding question?</p> <p>How to assess using PBL?</p> <p>How to prepare for Ministry Exams?</p> <p>What do students need to know?</p> <p>How to increase autonomy?</p> <p>What spaces can we use in the school?</p>

APPLICATION OF THE NEED-TO-KNOW BOARD IN OUR OWN PRACTICE

PBL NEED-TO-KNOW

PBL Breakdown

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 - You have control here too. Do you want to allow for many different products or just one? Are students working together or separately?
- Use of Expert to Inform and Learn
 - Local farmer? Entomologist? You?
- Conferencing & Clarification and Creative Process
 - Discussions with teacher and other students
 - Ongoing questions
 - Allowing for adaptations, plan changes & new inspiration
- Share Work With the Community
 - Class, WWJR, Saint Lazare, Local Newspaper...

WHY PBL AT WESTWOOD JUNIOR HIGH SCHOOL?

- Increase student engagement
- Develop critical thinking skills
- Increase student autonomy
- Approaches to learning,
- Guide as a teacher vs. disciplinarian
- Preparation for later grades, ministry exams, real life
- Teacher motivation, joy of teaching
- Reinvigorate teaching practice
- Reduce corrections
- Create a marketable option targeted to regular/immersion streams



WHAT SHOULD PBL LOOK LIKE AT WWJR?

Goals:

- To implement one PBL project/unit per subject this year
- To increase teacher awareness of PBL across the faculty
- To identify needs to move forward with PBL next year
- To share what we have accomplished with the community in some way
- Add PBL to school success plan

Challenges:

- Time (meeting, planning, finding resources)
- Dept cohesiveness
- Resources
- Instructional shift in faculty
- Teacher buy in
- Momentum and progress – trying to keep it going
- Classroom design
- Continue at WWSR?

WHAT DOES A GRADUATE OF WESTWOOD JUNIOR LOOK LIKE?

- Global citizenship; have an understanding of others and recognizing others
- Ability to read and write
- Critical thinkers
- Autonomous
- Open minded
- Adaptable
- Capable of self-reflection
- Well-rounded students
- Recognition of nuance
- Recognition of past, present and future
- How to cope, find answers
- Self- awareness, self-regulation, co-regulations
- Being able to reach out for assistance when needed for self or others



HOW CAN WE EFFECTIVELY SHARE PBL WITH THE COMMUNITY?

- Open house
- Vernissage
- School website
- Newsletter
- Social Media
- Meet the teacher



GOLD STANDARDS

QEP ➤ PBL

Gold Standard PBL

Seven Essential Project
Design Elements



SECONDARY ELA QEP » PBL

QEP English Language Arts	PBL Gold Standard
Competency 1 - Speaking Spoken Language Media Language Representation	Key Knowledge <ul style="list-style-type: none"> - Vocabulary - Grammar - Presentation - Use diction to communicate an idea effectively Understanding <ul style="list-style-type: none"> - Punctuation - Spelling - Syntax - Verb conjugation - Word choice - Proper nouns - Adjectives - Adverbs - Tone - Articulation - Clarity of voice - Personality - Delivery of ideas Success Skills <ul style="list-style-type: none"> - Presentation skills, public speaking, production and presentation of written text into oral communication
Competency 2 - Reading Reading Process <ul style="list-style-type: none"> - Interpreting Texts - Reading Profile - First reading Research Process <ul style="list-style-type: none"> - Inquiry - Strategies 	Key Knowledge <ul style="list-style-type: none"> - Interpretation - Inference/retrieval - Inquiry - "Reading between the lines" Understanding <ul style="list-style-type: none"> - Characterization - Figurative Language - Literary and Poetic Devices - Literary Elements - Purpose and audience - Data and information - Genres - Plot triangle - Theme/meaning/message - Comprehension (surface and layered) - Textual Evidence Success Skills <ul style="list-style-type: none"> - Research - Close Reading - Annotations - Highlighting - Identifying literary elements within a text - In-text citations/reference lists - Making connections - Reflection and discussion - Appreciation of text - Graphic organizers (ex. Character maps) - Identifying genres

SECONDARY ELA QEP » PBL

Competency 3 - Writing

Production Process

- Pre-production
- Production
- Post-production

Structures, Codes, and Conventions

Organization

Syntax and Mechanics

Word Choice

Types of Texts

- Planning texts
- Reflective Text
- Narrative Texts
- Explanatory Texts
- Reports
- Expository Texts
- Persuasive Texts

Key Knowledge

- Writing/production process
- Power of the written word

Understanding

- Outlining
- Critical revision/proofreading
- Purpose and audience
- Types of texts
- Different presentations/delivery
- Visual and written combinations
- Plagiarism

Success Skills

- Structure
- Organization
- Syntax, mechanics, and word choice
- Production of texts on multimodal and multimedia platforms/applications
- Paragraph writing
- Elaboration and extending ideas
- Feedback
- Self-evaluation
- Supporting ideas and opinions
- Paraphrasing

Formal Evaluation

Reading Response to Literature

Formal Evaluation

Start with driving question - how can a response demonstrate your understanding of a text?

- Reading Response to Literature - beautifully designed and produce
- Sustained inquiry and research - world connections to literature
- Student-conferencing and critical revision - group revision and editing
- Extended editing process
- Public production - convert to speech/debate
- Self-reflection
- Teacher-student evaluation

SECONDARY PHYS ED. QEP ➤ PBL

QEP Physical Education and Health	PBL Gold Standard
<p>Competency 1-Skill Acquisition</p> <ul style="list-style-type: none"> - Balance - Synchronization - Coordination - (non) & Locomotor skills - Manipulation Skills 	<p>Key Knowledge Applying individual locomotor and non-locomotor skill in a game setting</p> <p>Understanding Why and how the movement and strategies are applied in different settings</p> <p>Success Skills Walking, running (at different speeds), throwing/catching different types of equipment,</p>
<p>Competency 2- Cooperation</p> <ul style="list-style-type: none"> - Communication - Synchronization of movement - Locomotor & non - Understanding your role, spatial awareness, offensive and defensive roles. 	<p>Key Knowledge Using clear and proper communication (body and oral) in different activity settings.</p> <p>Understanding When to get open, call a team mate, ask for help...</p> <p>Success Skills</p>
<p>Competency 3- Healthy & Active Lifestyle</p> <ul style="list-style-type: none"> - Physiology - Fitness (cardio, strength, flexibility) - Active Lifestyle - Nutrition - Sleep - Hygiene - Stress Management - Substance abuse - Excessive use of technology 	<p>Key Knowledge How to create and implement a healthy and active lifestyle. What does it mean to do so</p> <p>Understanding</p> <p>Success Skills</p>
<p>Formal Evaluation</p>	<p>Formal Evaluation: Through play, participation, and duo tang/log book for health and fitness.</p>

SECONDARY MATH QEP ➤ PBL

QEP Mathematics	PBL Gold Standard
<p>Competency 1-Solves a Situational Problem</p> <ul style="list-style-type: none"> -To model the situational problem -To apply different strategies to work out a solution -To validate the solution -To share information related to the solution -To decode the elements of the situational problem 	<p>Key Understanding: Make use of the various types of representations to organize information presented.</p> <p>Learning Goals: Anticipate the result, work out a solution that may involve several steps, and associate the presentation of the problem with that of similar problems.</p> <p>Success Skills: Validate the solution (procedure and final answer) and explain it orally or in writing using exact mathematical language.</p>
<p>Competency 2-Uses Mathematical Knowledge</p> <ul style="list-style-type: none"> -To define the elements of the mathematical situation -To mobilize mathematical concepts and processes appropriate to the given situation -To apply mathematical processes appropriate to the given situation -To justify actions or statements by referring to mathematical concepts and processes 	<p>Key Understanding:</p> <ul style="list-style-type: none"> -Apprehending the situation -Mobilizing relevant concepts and processes -Making connections <p>Learning Goals:</p> <ul style="list-style-type: none"> -Become familiar with mathematical language -Construct the meaning of mathematical concepts and processes and establish links between them -Use mathematical instruments <p>Success Skills:</p> <ul style="list-style-type: none"> -In arithmetic, the students construct the meaning of numbers, number systems and operations. -In geometry, they discover the characteristics of plane figures and solids and establish spatial relationships. -With regard to measurement, they study what measurements, units of measure and their interrelationships mean. -In probability, they examine random events by, for example, formulating their conclusions in terms of whether these events are certainties, possibilities or impossibilities. -In statistics, they interpret and draw graphs representing various aspects of everyday life.
Formal Evaluation	<p>Formal Evaluation: Google forms, exit tickets, quizzes, tests, exam</p>

SECONDARY SCIENCES QEP » PBL

QEP Science and Technology	PBL Gold Standard
<p>Competency 1</p> <ul style="list-style-type: none"> Seek answers or solutions to scientific and technological problems 	<p>Key Knowledge</p> <ul style="list-style-type: none"> Become familiar with strategies <ul style="list-style-type: none"> Research, experiment, design Acquire conceptual and technical knowledge <p>Understanding</p> <ul style="list-style-type: none"> Define problems and appropriate methodology <ul style="list-style-type: none"> Identifying, purpose and problem question <p>Success Skills</p> <ul style="list-style-type: none"> Justify their methodological choices and results <ul style="list-style-type: none"> Creating sound and complete conclusions
<p>Competency 2</p> <ul style="list-style-type: none"> Use scientific and technological knowledge 	<p>Key Knowledge</p> <ul style="list-style-type: none"> Understand phenomena <p>Understand</p> <ul style="list-style-type: none"> Explain the operation of objects or form an opinion <ul style="list-style-type: none"> Analyze and intercept technical objects and operations <p>Success Skills</p> <ul style="list-style-type: none"> Make the most of their scientific and technological knowledge to design or solve a problem <ul style="list-style-type: none"> Design and create technical objects with a specific goal in mind
<p>Competency 3 Communicates</p> <ul style="list-style-type: none"> Communicate in the languages used in science and technology 	<p>Key Knowledge</p> <ul style="list-style-type: none"> Have knowledge that will enable them to interpret and convey messages <ul style="list-style-type: none"> Understand key terms and theories (scientific method and design process) <p>Understanding</p> <ul style="list-style-type: none"> Justify their methodological choices and result via the appropriate methodology <ul style="list-style-type: none"> Identifying key variables and design requirements <p>Success Skills</p> <ul style="list-style-type: none"> Using the languages and types of representation associated with science and technology. <ul style="list-style-type: none"> Creating procedures and technical diagrams

SECONDARY QUEBEC CULTURE AND CITIZENSHIP QEP » PBL

QEP Quebec Culture and Citizenship	PBL Gold Standard
<p>Competency 1-Studies a Cultural Reality</p> <ul style="list-style-type: none"> • Define culture identity • Analyze social relations • Evaluate understanding • Be able to compare and interpret 	<p>Key Knowledge</p> <ul style="list-style-type: none"> • People, groups, bias, interpretations, institutions, perspectives <p>Understanding</p> <ul style="list-style-type: none"> • Defining social hierarchy. Social order, what components define culture <p>Success Skills</p> <ul style="list-style-type: none"> • Reflection, research and presentation
<p>Competency 2-Reflects on an Ethical Question</p> <ul style="list-style-type: none"> • Find the ethical conclusion in a situation • Examine a diverse point of view • Elaborate on a point of view • Dialogue 	<p>Key Knowledge</p> <ul style="list-style-type: none"> • Steps in an ethical reflection, the concept of the greater good, seeing a situation from a different perspective <p>Understanding</p> <ul style="list-style-type: none"> • Making an ethical decision that is multifaceted, reflecting on an ethical issue, discussing and debating different opinion on an ethical topic <p>Success Skills</p> <ul style="list-style-type: none"> • Presenting an ethical standpoint clearly with examples, opinion, what the experts say, what is best of society as a whole

SECONDARY VISUAL ARTS QEP » PBL

QEP Visual Arts	PBL Gold Standard
<p>Competency 1 - Creates Personal Images</p> <p>Uses ideas to plan and find inspiration</p> <p>Uses transforming gestures</p> <p>Uses elements of visual arts language</p> <p>Uses ideas to create a media production</p> <p>Uses ideas to create a media production</p> <p>Uses transforming gestures and elements of visual arts language according to the target audience</p> <p>Uses transforming gestures and elements of media language</p> <p>Organizes his/her media production</p>	<p>Key Knowledge</p> <p>Artistic genres/movements, themes, mood, audience, creative process, various tools and materials. Colour theory.</p> <p>Understanding</p> <p>Ability to select and use appropriate materials, communicate clear messages, ability to describe choices.</p> <p>Success Skills</p> <p>Proper use and application of tools and materials, ability to plan, ability to connect choices with meaning.</p>
<p>Competency 2 - Appreciates Images</p> <p>Organizes his/her visual arts production</p> <p>Analyzes a work or production</p> <p>Analyzes an image</p> <p>Interprets the meaning of the work or production</p> <p>Constructs his/her interpretation of the image</p> <p>Makes critical and aesthetic judgments</p> <p>Shares his/her appreciation experience</p>	<p>Key Knowledge</p> <p>Understanding of artistic genres in Art and Art History, messages and meaning.</p> <p>Understanding</p> <p>Ability to identify works of art from various genres, tools and materials.</p> <p>Success Skills</p> <p>Ability to discuss works and comment on messaging, audience, theme, mood etc.</p>
<p>Formal Evaluation</p>	<p>Formal Evaluation</p> <p>Through group and one on one critique students will make connections between inspiration and personal choice.</p>



FROM LAUNCH TO PRODUCT



LAUNCHING A PBL UNIT AND PROJECT

Goals:

- Practice driving questions
- Develop a culture of inquiry – start with Need-to-Know (make this a part of your practice)
- Create an entry event? Redesign a milestone?
- Implement student voice and choice



PBL PEDAGOGY IN PRACTICE

Top 3 Aspects

1. Authenticity
2. Student Design
3. Skills Focus

Top 3 Learning Strategies

1. Reflections
2. Feedback
3. Student Products
 - a. Individual
 - b. Team
 - c. Public
4. Entry Events
5. Driving Questions
6. Expert Participation

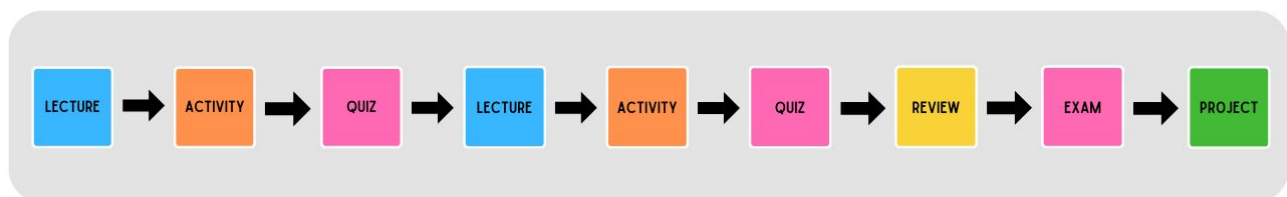


PROJECT PATH

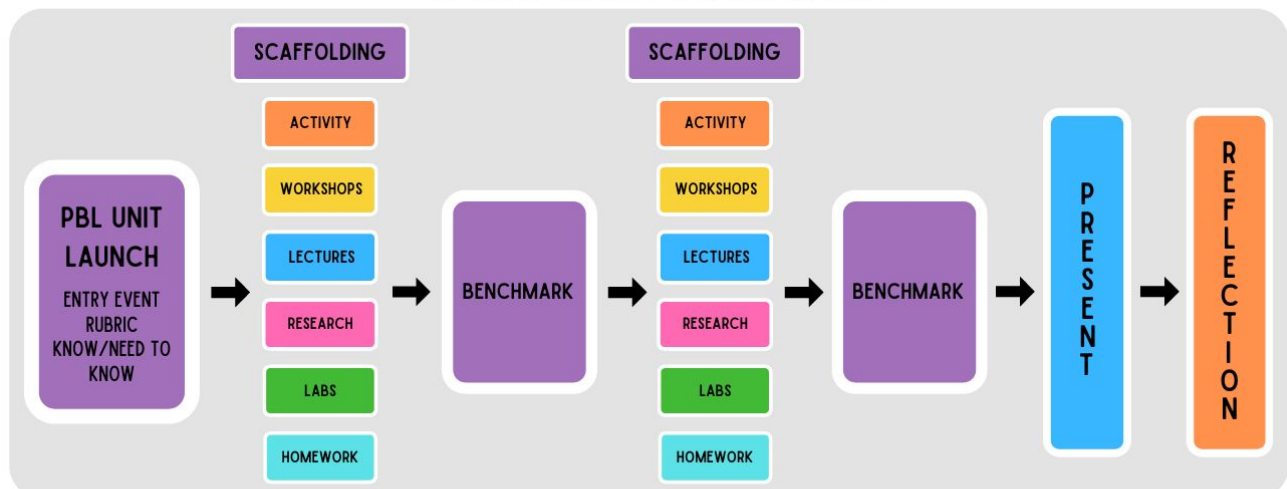
- The project is the unit – however we can split it up into different benchmarks or milestones. In these “knowledge checks” you are highly encouraged to use material that is “traditional” – tests, quizzes, journal entries, etc.
- Project Path
- Project Planner
- Driving Questions

PROJECT BASED LEARNING VS. PROJECTS*

TRADITIONAL UNIT WITH A CULMINATING PROJECT



PROJECT BASED LEARNING UNIT



DRIVING QUESTIONS

- Identifying what you want the kids to do (broad and puts them in a role)
- Frame the project with an open-ended question that can be answered in many ways (end goal in mind)
 - Science (Gareth) - Rube Goldberg machine (chain-reaction machine)
 - **Question: How can we as engineers and scientists, design a system of reactions and movements that demonstrates the 4 worlds of science from the curriculum covered in class?**
 - Competencies: practical and theoretical
 - Curriculum: All.
 - English (Kelly) - reading a poem from an Indigenous artist
 - Find poems, creates images and recordings with tech and imbedded links
 - **Question: How can we as reciters and writers of poetry create a digital space that helps others understand the impact of Residential School System has had on Indigenous families?**
 - ERC (Mel) - a fully re-designed template/plan/rendering with budget of a building restoration
 - **Question: How can we repurpose a church in Quebec to fit the needs of our community?**
 - Phys Ed. (Jenn) - design a yoga routine and record a video
 - **Question: As yoga instructors, how can we build a routine to address the health concerns of our clients?**

STUDENTS AT THE CENTRE OF EVERY PROJECT

What do students
Need-to-Know?



Key Knowledge

- Content knowledge
- Theory
- What do they need to know? Learn?
The BASICS

Understanding

- Conceptual understanding
- Practical/Application
- What do they need to learn?

Success Skills

- Tools
- What do they need to produce?

LONG-TERM GOALS FOR HORIZONTAL PLANNING

What skills and knowledge should students acquire at every stage, for every chapters, for every subject?

What should students be able to do before entering the Senior campus?

- Content and skills come together
- Students can have content knowledge and know how to apply it
- They need to be able to invest the knowledge they acquire at junior and use it for senior
- Regularly learn and apply the knowledge at every stage
- Formal evaluation should reflect the learning goals over the course of cycle (should not be isolated to a unit)
- Students should learn to treat their learning as progressive
- Emphasize the importance of progress and critical revision

LITERACY SKILLS

Literacy Skills



information



media



technology

Where are students getting information? Where are they presenting it?

- Videos
- Podcasts
- Documentary
- Infographics

How are students acquiring information? How are they organizing it?

- Texts/textbooks/novels
- Tables
- Paragraphs

What hardware are students using? What devices are they using? How are they using it for effective communication?

- Chromebooks
- Microphones
- 3D Printers



PROJECT TEMPLATE CUSTOMIZED TO WWJR





Westwood
High School

STRONG IN TRADITIONS
COMMITTED TO SUCCESS

PBL Project Design Template

WWJR PBL Units

Teacher(s):

Subject(s):

Significant Content

	Key Knowledge	Understanding	Success Skills
Competency 1 <ul style="list-style-type: none"> Spoken Language Media Language Representation 	<ul style="list-style-type: none"> Vocabulary Grammar Presentation Use diction to communicate an idea effectively 	<ul style="list-style-type: none"> Punctuation Spelling Syntax Verb conjugation Word choice Proper nouns Adjectives Adverbs Tone Articulation Clarity of voice Personality Delivery of ideas 	<ul style="list-style-type: none"> Presentation skills Public speaking Production and presentation of written text into oral communication
Competency 2 <ul style="list-style-type: none"> Reading Process <ul style="list-style-type: none"> Interpreting Texts Reading Profile First reading Research Process <ul style="list-style-type: none"> Inquiry Strategies 	<ul style="list-style-type: none"> Interpretation Inference/retrieval Inquiry “Reading between the lines” 	<ul style="list-style-type: none"> Characterization Figurative Language Literary and Poetic Devices Literary Elements Purpose and audience Data and information Genres Plot triangle Theme/meaning/ message Comprehension (surface and layered) Textual Evidence 	<ul style="list-style-type: none"> Research Close Reading Annotations Highlighting Identifying literary elements within a text In-text citations/ reference lists Making connections Reflection and discussion Appreciation of text Graphic organizers (ex. Character maps) Identifying genres

Significant Content

Competency 3

- ☐ Production Process
 - Pre-production
 - Production
 - Post-production
- ☐ Structures, Codes, and Conventions
- ☐ Organization
- ☐ Syntax and Mechanics
- ☐ Word Choice
- ☐ Types of Texts
 - Planning texts
 - Reflective Text
 - Narrative Texts
 - Explanatory Texts
 - Reports
 - Expository Texts
 - Persuasive Texts

- ☐ Writing/production process
- ☐ Power of the written word

- ☐ Outlining
- ☐ Critical revision/proofreading
- ☐ Purpose and audience
- ☐ Types of texts
- ☐ Different presentations/delivery
- ☐ Visual and written combinations
- ☐ Plagiarism

- ☐ Structure
- ☐ Organization
- ☐ Syntax, mechanics, and word choice
- ☐ Production of texts on multimodal and multimedia platforms/applications
- ☐ Paragraph writing
- ☐ Elaboration and extending ideas
- ☐ Feedback
- ☐ Self-evaluation
- ☐ Supporting ideas and opinions
- ☐ Paraphrasing

Literacy*:

21st Century Competencies (check one):

- ☐ Collaboration
- ☐ Creativity/Innovation
- ☐ Communication
- ☐ Critical Thinking
- ☐ Community and Citizenship
- ☐ Character

Project Description

Authentic Problem/Learning Situation:

Goal/Learning Outcome:

Product:

Individual →

Group →

Class →

Reflection Methods/Knowledge Checks (check one):

☐ Journal/Learning Log

☐ Class Discussion

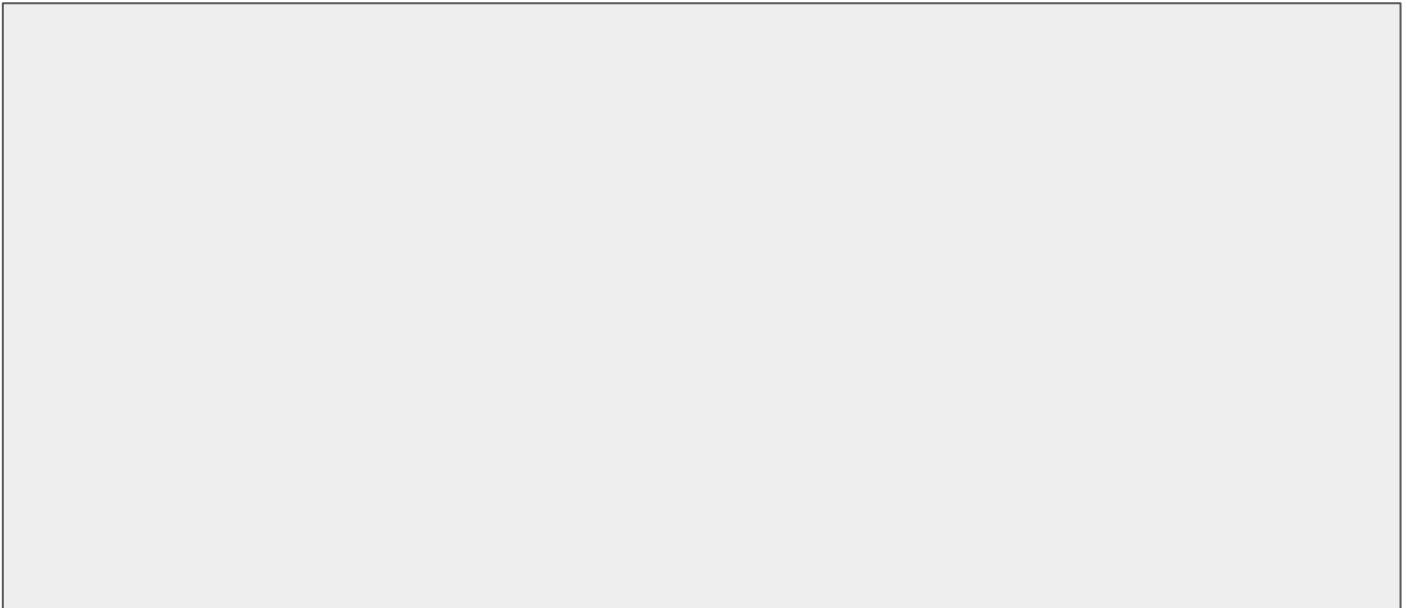
☐ Survey

☐ Focus Group

Driving Question

1. Start with: How? Should? What? Could?
2. Make it authentic
3. Make it impactful
4. Give it scope for sustained inquiry

Driving Question:



Creating Authenticity:

- ☐ Student Generated Questions
- ☐ Community Experts
- ☐ Staff Involvement

Entry Event

Prior Knowledge Check (check one)

- ☐ Need-to-Know Board*
- ☐ Diagnostic Test
- ☐ Mind-mapping and Brainstorming
- ☐ Anticipation Guide
- ☐ Product Development
- ☐ Introduction to Key Concepts

Key Vocabulary:

Subject-Specific Content Knowledge:

Tools and Resources:

- ☐ Facilities:
- ☐ Technology and Equipment:
- ☐ Materials:
- ☐ Literary Tools:
- ☐ Technical skills:
- ☐ Mathematical equations:

Process

Checkpoints/Milestones/Formative Assessments:

Instructional Strategies for All Learners:

Product

Final Product Description:

Public Presentation:

List of Final Products:



Westwood
High School

STRONG IN TRADITIONS
COMMITTED TO SUCCESS

PBL Project Planner

WWJR PBL Units

Topic:

Grade Level:

Project Calendar

Milestone #1 (Entry Event)	Milestone #2-4 (Scaffolding /Skills Building)	Milestone #5 (Final Product)	Milestone #6 (Public Presentation)	Milestone #7 (Reflection)
Driving Question (Student Question)				
Formative Assessment				

Pedagogical Reflection

Reflection:

Anticipated and unanticipated outcomes:

Assessments (see next slide)

Gold Standards Checklist:

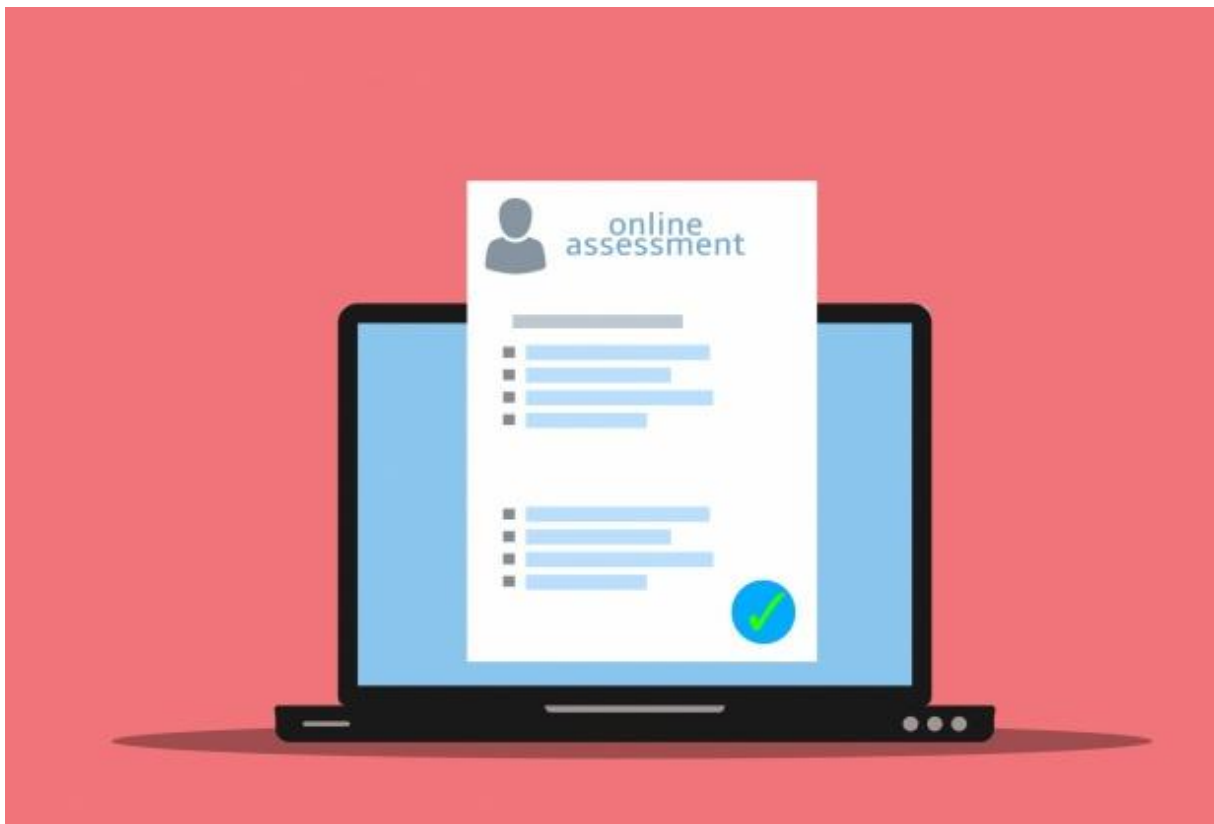
Does the project meet the following criteria?

- ☐ Key Knowledge, Understanding, and Success Skills
- ☐ Challenging Problem or Question
- ☐ Sustained Inquiry
- ☐ Authenticity
- ☐ Student Voice and Choice
- ☐ Reflection
- ☐ Critique and Revision
- ☐ Public Product

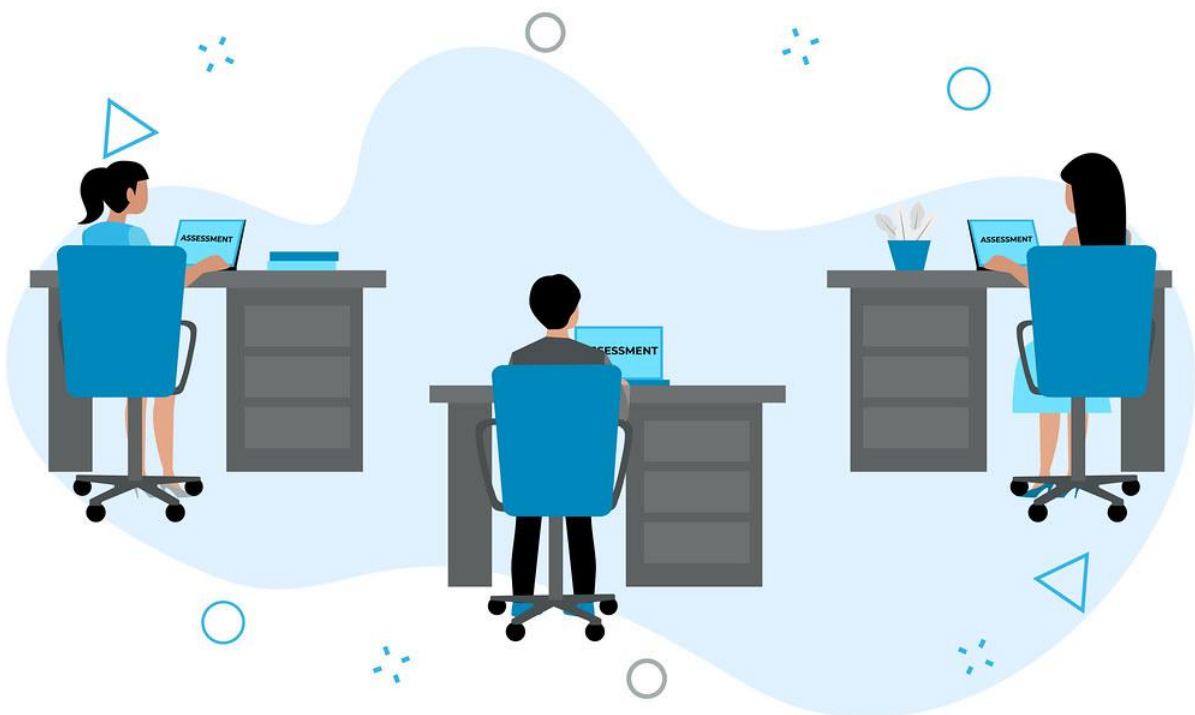
Assessment

Check all rubrics that apply (we'll be building these in PDIG Day 5):

- ☐ Entry Event Rubrics
- ☐ Formative Assessment Rubrics
- ☐ Knowledge and Concept Checking Rubric
- ☐ Summative Assessment Rubrics
- ☐ Project Rubrics
- ☐ Subject-Specific Content Rubrics
- ☐ Subject-Specific Skills Rubrics
- ☐ 21st Century Skills Rubrics
- ☐ Focus Group and Group Talk Rubrics
- ☐ Milestone Trackers

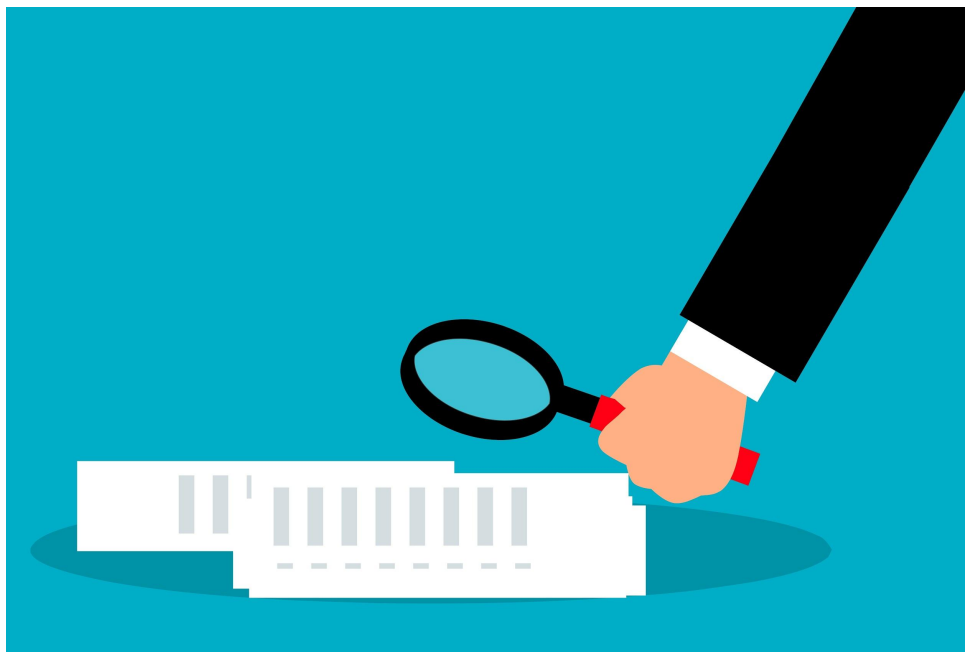


STUDENT ASSESSMENT AND EVALUATION TOOLS



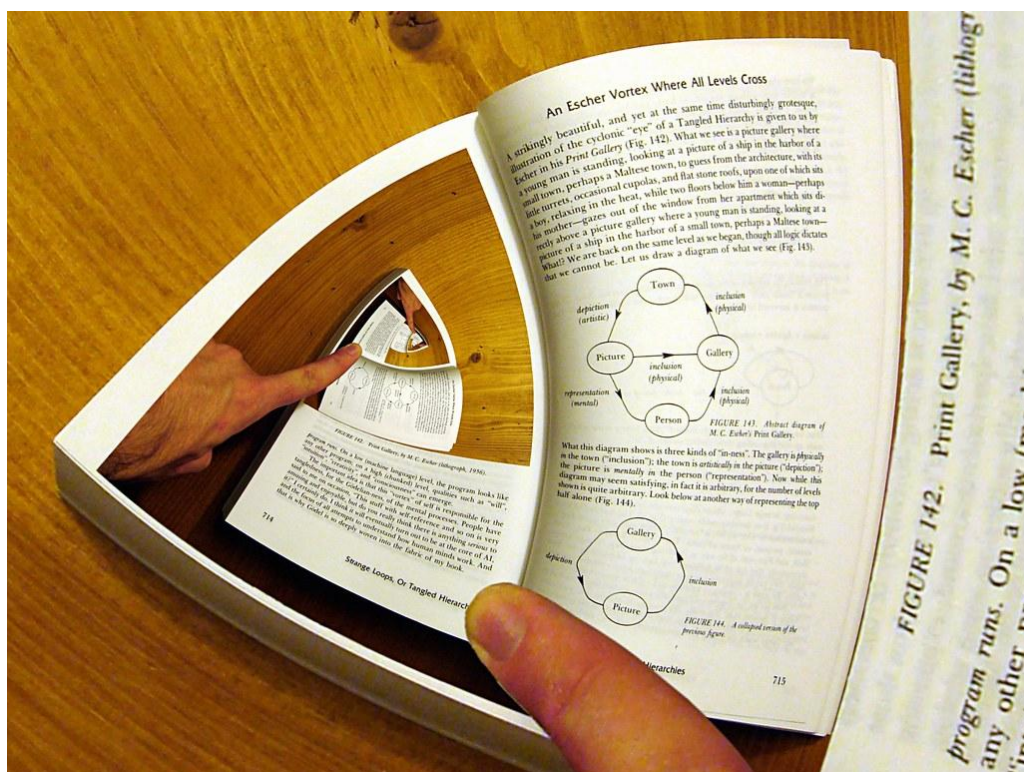
PBL RUBRICS: WHAT SHOULD THEY MEASURE?

- The “final product”
- Other sources of evidence: What are these?
- Individual contribution and team efforts
- Formative assessments should be regular and frequent
 - These should be checkpoints (why not use checklists!?)
- Feedback should inform instructional decisions » students’ actions
- Balanced assessments
 - For implementing projects
 - Knowledge and discipline
 - Traditional and 21st century
- Don’t forget standards/competencies (see QEP » PBL)



RECURSIVE FEEDBACK: DIRECTION OF LEARNING SHOULD BE CYCLICAL

- Currently, there's a what now? Attitude about feedback
 - Kids throw away their tests or their rubric
 - There's no going back to see what they did wrong
- Sustaining inquiry - what does this look like?
- Assess more, grade less - what does this mean?
- Process is important (what are you grading when?)
- Student voice-and-choice
- Critical thinking and problem-solving should be evaluated too
- Help parents shift their expectations about what assessment information is shared with them
- “Assessment voices”



PROMOTE SUSTAINED INQUIRY

- Student generated materials
- Student-created checklists and rubrics
- Building notes together instead of being given notes by the teacher
- Creating a memory aide as a team instead of for individual purposes



INCREASE ACCOUNTABILITY AND AUTONOMY

Sustained inquiry = autonomous students

ELA

- What opportunities can this subject create for independent student work?
 - Independent reading
 - Journalling
 - Reading logs
- What are more student-friendly ways to assess their own learning? To understand how they are measured?
 - Check lists
 - Pre-submission rubrics
 - Re-visiting initial goals/milestones
 - Rough draft submissions
 - Peer editing paired with checklists

SCIENCE AND TECHNOLOGY

- What opportunities can this subject create for independent student work?
 - Students can participate in prelab research, and design activities where they are encouraged to search out ideas and methodologies that will help them complete the required tasks.
 - Completing labs or builds and solving problems or challenges encountered during these activities.
- What are more student-friendly ways to assess their own learning? To understand how they are measured?
 - Checking in with students to ensure the necessary milestones have been achieved before they move onto more complex tasks
 - Introducing rubrics and checklists at the beginning of the task to ensure students have a clear vision of the path ahead.

INCREASE ACCOUNTABILITY AND AUTONOMY

Sustained inquiry = autonomous students

VISUAL ARTS

- What opportunities can this subject create for independent student work?

Game play, small sided games, drills, free play with few pieces of equipment.

- What are more student-friendly ways to assess their own learning? To understand how they are measured?

QUEBEC CULTURE AND CITIZENSHIP

- What opportunities can this subject create for independent student work?
 - Independent critical thinking during ethical reflection period at the beginning of class. They have the opportunity to reflection and respond to the question or dilemma of the day and determine what they think, how they feel, or how they would like to fix this situation.
- What are more student-friendly ways to assess their own learning? To understand how they are measured?
 - Checking in with students once they have completed milestones.
 - Using checklists on project guidelines/rubrics
 - Guidelines and rubrics are clear and accessible to students at all times

PBL EVALUATION IS SQUISHY

- On the outside, it seems like nothing is being assessed
- It happens all at once
- Process should be prioritized – if the process worked, the product will be a success
- It's important to explain to parents – especially – that evaluation is only a form of feedback





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THE ROLL-OUT PBL FOR 2023-2024



MONTH-BY-MONTH PLAN

September - is there an anchoring project we can start with? How can we use "back to school" activities as projects or vice versa

- Possible year-long projects that can start at this point
 - Science rube goldberg project(grade 8)
- Tactile learning with composting and beautifying school grounds
- Stakeholders - involve the city, the various clubs and after school activities
- Curriculum night should give parents an idea of classroom procedures and student expectations when syllabus/evaluations can be easily posted or communicated online

October - this is Open house, how do we change the look and feel of Open House so that it breaks conventions and makes our community see that what we are doing is "different"?

- Another kind of vernissage
- Indigenous studies project
- Ottawa (Remembrance day outing) to prep for Nov 11th
- Student Life Activities/ Leadership

November - End of Term/portfolio night

- Re-evaluate parent-teacher interviews - consider new ways of communicating and corresponding (more effective than

December- Exams

- Produce a Gold Standards project
- Evaluate major evaluations using Gold Standards

January- Long-term projects/school-wide begin

- Knowledge building begins now
- Subject-specific classes can begin to apply for funding
- Implicating stakeholders/community members
- Due this during evaluations and correspondence with parents

February- End of Term

- See November
- Digital portfolios?

March - Product Phase

- Students have been learning and gaining knowledge and skills
- Begin applying to the production of large-scale projects
- Pratico-pratique
- Milestones/Benchmarks are being evaluated/established (checklists and recursive feedback/conferencing)

April - Funding for Next Year/Professional Development

- Teachers come together for project sharing/brainstorming (what worked/what didn't)
- Any reports needed for money granted this year would be completed
- Close PDIGs and other grants
- Apply for next year's funding

May- Vernissage, Talent Show

- Reading Rumble
- Completion of school-wide or long-term projects
- Collaboration/Innovation/Presentation rubrics are used

June- Final Evaluations

- See December
- Connect Gold Standards to Ministry PoL
- Experiment with different ways of displaying/visualizing evidence of learning

CONSIDERATIONS

PBL Pitfalls

- 7Cs competencies, RTI, Something new every year, and reinventing the wheel
- In every other class there should be “check-ins” or feedback loops (is this too much?)
- In Phys Ed. marks every day
- Everything at the end of the year is like a giant bomb
 - Staff would need to work together to organise due dates and major milestone dates
- Technology-wise - we need to finesse our goals and our devices
- Students are on board and have responded positively (they quickly mirror us and reflect our work habits back to us), however, there is still hesitation about student behaviour when a teacher positions themselves differently in a classroom (how to overcome this? How to train for this? Is more professional development even necessary?)
- Transition from WWJR to WWSR

Issues with Investment

- Buy-in - value is going to come once our brains have been re-wired
- Building capacity - human capital
- We want parents to line up to get the results that we have been producing as a staff
- Cross-curricular issues - is it effective to work simultaneously on a project (in two subjects)?

CREATING A COMMUNITY

Subject-Matter Experts, Parents, and Contacts

Who would we include, next year, in our “community”? Can we implicate others and have stakeholders? Is there someplace for which/where students can continuously produce projects for display? How will WWJR create an impact on its community?

- Positive school image
 - How can PBL create a less institutional feel?
- Workshop with parents
 - Give information about new evaluations and assessment
 - Explain how Google Classroom works towards tracking progress/projects
 - Explain how “homework” might simply be students developing their projects (or skills/knowledge for projects)
 - Give examples of feedback (evaluation is just another form of feedback)
- Collaboration Projects with the community
- Community Service at school and with various organisation in the area
- Cooperative projects with our feeder schools
- Prepare teacher-parent correspondence for teachers to use in case of problematic students that fits the authentic teaching/learning style of PBL
- Parent-newsletter (updates on classroom/school-wide projects)



PBL STUDENT PROFILE

What does a PBL student look like? What qualities and attributes would we be looking for? How would you integrate the development of these soft skills into your curriculum?

- Autonomous worker
 - Encourage failure, reduce the fear of mistakes, and teach them that they learn more from mistakes than from simply getting the answer right.
- Cooperative learner
 - Set up groups and show them how to assign equal tasks amongst group members.
 - Use peer evaluations to ensure everyone is pulling their weight.
- Curious and engaged
 - Allow for students to create their own guiding questions, by providing projects with multiple avenues of investigation.
- Seeking high standards and excellence
 - Students need to want to produce good work, how to bridge the gap between doing minimal work (or nothing at all) to producing beautiful projects?
 - Vernissages, regular project display, including stakeholders - this might force students to put more effort into their work if they know that they are being judged from multiple angles
- All teachers need to help build the future kids
- Coming from the teachers - a culture of rigorous academics and high standards, expectations
- Similar to private schools - every school can offer the same academics, who/what is it that we produce? How does our student stand out and what particular skills do they have that set them apart in society when they leave WWJR?



PBL COMMITTEE BRAINSTORMING FOR FUTURE PROFESSIONAL DEVELOPMENT AND INNOVATION

Insight about how PBL can be continuously felt in the halls and classrooms. Also - what possible grants should we apply for? What kind of projects can we think about in advance that could use entrepreneurship funds?

Courses offered

- Change drama into a leadership class? Take a bit of the pressure off of Student Life and unqualified English teachers. This course could give students new "skills" for the 21st-century workforce - soft skills like autonomy, self-advocacy, self-marketing, and responsible online behaviour (what is digital behaviour anyway!?)

Grant Applications

- Create a Doc to add to the WWJR folder that includes all possible grants offered
- This will make teachers more aware of what funds are available
- Alongside it, create a file for a teacher wish list
- PBL Committee and Coordinators can refer to these lists and grants, offer PBL project learning opportunities and coaching, and then help with grant funding
- In the past there was a home and school grant for \$1000 that we used to fund the rocketry project and other tech projects in science.(didn't hear about it this year)

New schedule? One that matches our goals more effectively

- Can we remove a tumbling cycle schedule? Can we start planning and organising changes to make it a Monday to Friday?
- Can we have shorter periods...students have a difficult time staying on task or focusing for 75 minutes (many need walks and breaks)
- Can a study period be incorporated in the schedule
- For example
- Difficulties staff and students might have with longer/shorter periods (will kids feel uncomfortable with a teacher for longer periods?)

Project Week - NEW CONCEPT

- Testing the schedule
- PBL Steering Committee plays with the 9-day cycle for a week
- Field trips/community outreach



PDIG JOURNALS



PDIG DAY 1 - OCT 22., 2022 - JOURNAL ENTRY

At the beginning of our meeting, we began our session by modeling a PBL-style entry event that involves a Need-to-know board. We discussed what we already know about PBL and what we need to learn in order to use its pedagogical methods effectively. We recognized that the team members involve already use many strategies and techniques in their classroom that include PBL elements. As professionals, we are reflexively acknowledging our own effectiveness and hoping to gain visibility and use PBL as a framework under which we can succeed. Following that, we began to talk about PBL in general, then our collective note-taking began, in which we started to customize PBL to our school, Westwood Junior High School. We produced a slideshow that organized our thoughts, ideas, opinions, and information that we hope to share with our staff and administrators. Our notes include why we have chosen PBL to define our learning goals, we discussed what it should look like at WWJR, we talked about what a grade 8 graduate, going into the senior campus, should achieve, and finally how we plan to share our professional development. Then we created a vision statement, followed by a mission statement, and defined our own roles and responsibilities (for each member), with a timeline to outline the future of this project. One of the positive outcomes of our release day was that we got a chance to talk amongst ourselves about how we want to change the educational landscape. For example, we shared our thoughts about how we want to change our roles as educators. We do not want to be disciplinarians anymore, lecturing at the front of the classroom, we want to shift the focus of what is considered valuable in education from grades to skills and real-life, meaningful, opportunities. Indeed, there was electricity amongst the group members, today, we felt invigorated, we had a shared enthusiasm and we feel that everything we put down from a place of collegiality - a shared goal and vision. We imagined a space for ourselves in the school, in education, where we actively change our roles and put effort and energy into redesigning our classrooms, our curriculum, our relationship with our students, and our impact on the world (collective efficacy). Tangentially, we began to reorganize our space in the school, wondering how we could effectively use the classroom spaces, shared spaces, create a design lab, etc. All in all, today was a collaborative vision and mission building, and the products we finished the day include a comprehensive set of notes that detail the "why" and the "how" we will implement PBL at WWJR, a document outlining our vision/mission and our roles and responsibilities and we have also planned for our next PDIG session in which we will bring our curriculum roadmaps to the meeting so that we can do some horizontal planning where we superimpose PBL onto the Quebec curriculum to show how transferable (and transformative) this program can be. This was the first step towards making PBL a marketable option for our school and also a new pathway for education that other educators can follow in our lead.

PDIG DAY 2 - NOV. 22, 2022 - JOURNAL ENTRY

We began the day admitting that we rarely consult our Progression of Learning since most teachers on the team have not had the opportunity to review our pedagogy. Our first goal was to refer our QEPs for each subject to familiarize ourselves with the learning outcomes. Next, we considered the learning goals for PBL which are 1) Key Knowledge 2) Understanding and 3) Learning Goals. Knowing that the QEP and Learning Goals align organically, we decide to define the learning goals in a way that can be easily understood and explained. Following the PBL unit design process, we started with a Need-to-Know board as pedagogues and defined the learning goals using keywords and questions that we can ask ourselves. Need-to-Know boards allow us to identify where we have gaps in our own knowledge. Oftentimes, concepts such as knowledge and understanding are difficult to define concretely and we wanted to categorize the different elements of the QEP according to the PBL learning goals to show how we can create parallels. After this, we decided, on cross-curricular what qualities a student should possess before leaving WWJR in order to succeed not only in Senior, but in the 21st century in general. Unlike the personal qualities we discussed in the previous meeting to help us with our vision and for equipping students to have the right attitude and approach for success, we considered what tools and skills students need to not only produce PBL projects but to meet the standards and requirements of formal ministry evaluations in the senior grades. We built a compare and contrast table for each of our subjects and on the left-hand column, we wrote in point form the learning goals as outlined by the QEP and then we simplified it according to PBL learning goals (stated above). What we wanted to produce was an easy-to-read file for teachers to see at a glance what content and skills are to be achieved by the end of cycle one. We agreed that compared to the QEP which is a large document (useful when details are needed or if we needed to see the nuances for each subject competency) is not as user-friendly when a teacher is building a PBL project that is multi-faceted and in which many competencies and skills can be evaluated at once. Upon discussion, we realized that we already have an instinctual knowledge of the QEP but for new teachers, something more digestible can be helpful while they become more proficient. Finally, we finished the day by discussing the horizontal planning and we decided that the compare and contrast table acts as a to-do list for cycle 1 teachers and that we will reproduce it horizontally. This will become a progressive and gradual document that we will continue to edit once we start building projects. Our cycle one year one and two will be divided not only by content and skills but by the public product as well. We will need to return to these documents produced today for our next session in December where we will create a PBL project or remix an older project which will inform our own process and then we will create as a team a PBL Project template for all teachers at WWJR. The Gold Standards of PBL projects that are informed by the learning goals will be discussed in the next meeting since we will be using them to develop and design the projects.

PDIG DAY 3 - JAN. 13, 2023 - JOURNAL ENTRY

The goals for our ever-evolving and developing PBL program went from big visionary ideas to the nitty-gritty today. We began designing PBL units starting with the end in mind. Teachers came together with pre-existing projects and units that we want to reframe according to the PBL model. As part of our knowledge building, as professionals, we began defining the relationship with projects and PBL units. Ultimately, the two are one and the same in PBL. The project is the unit and vice versa. In this situation, nothing can be planned without the end product being carefully designed by the teacher. From there the teacher thinks about what learning goals, success skills, literacy skills, and competencies must be addressed in order to give curriculum-aligned assessments. After that, it is crucial to make considerations about several aspects of a unit and the people involved - teachers must consider their students (what accommodations are necessary?), the context (what subject or what current life/community events frame the learning?) and finally what content and skills need to be developed by the students. Once the project is designed - and this is the part that greatly excites the teacher - then the driving question must be generated. We played around a lot with wording and decided that the best way to create an authentic and skills-focused question for junior high school students is to place in them a role. This entices them and allows for creativity and imagination - not to mention it enables the teacher to create real-life situations. For example, the Ethics and Yoga teacher designed a project/unit in which students have to create a yoga routine - the question placed the students as yoga instructors who will need to meet with their clients (i.e. teachers) and develop a yoga routine that meets their health needs. When following the main aspects of PBL projects, this example demonstrates authenticity, student design, and also skills focus. It requires students to deliver their knowledge in a creative way with higher stakes - it ends the traditional (and also useless) transaction between student and teacher when after they finish an assignment, it goes into the hands of the teacher where it is evaluated and returned with little interaction and collaborative reflexivity. Including other teachers in the evaluation process allows for a community of learning to grow within the walls of the school and also promotes cross-pollination among teachers and subjects. We were genuinely enjoying the prospect of following our students' yoga routines and found ourselves having fun - a sentiment often not encouraged amongst professionals that can so greatly affect the impact they have on their teaching and how they position themselves as adults, mentors, and coaches. Finally, the topic of assessment arose since there is always a concern with validating any activity with our students - what measurable feedback are they getting out of it? We realized that when the process is informed by the end product, then the formative assessments naturally take on a scaffolding approach that slowly equips the students with all the tools and knowledge they need to complete the project. With that said, each step - or milestone as it is commonly used in PBL vernacular - can test, quiz, evaluate, or assess a success skill that we want our students to develop. However, not every activity in class needs to be tied to a grade. Indeed, an evaluation is a singular form of feedback. Other types of feedback can look like student conferencing, journal entries, classroom discussions, etc...and they can be measured with checkmarks and comments that signal a successful completion of each step. Not everything needs to be dissected with a red pen. Therefore, assessment is more natural, and progressive, and leaves room for students to make mistakes and ultimately improve - with the goal in mind to complete the project. For the next meeting, we want to discuss further the idea of a public product. This increases the stakes of a project but also, creates visibility for our community and allows parents and other stakeholders to take note of our pedagogy and the results we are getting. Today, we gave ourselves the time to reinvigorate our pedagogy, and for the next meeting, we want it to take shape. My colleagues will be sending me their PBL lessons/units and I will use their formats and their unique roadmaps or lesson patterns to help me build a PBL project template that matches the practices we already employ so that our own teaching material reflects our process and vice versa. Now that it is taking shape and that it is informing our process, our confidence in PBL grows with every session, and coincidentally, so does our confidence in ourselves and our ability to teach effectively and impactfully.

PDIG DAY 4 - FEB. 23, 2023 - JOURNAL ENTRY

After sharing our current, pre-existing units that we have been using (for perhaps a little long), we decided to reorganize how we plan our units and lessons so that it follows the PBL model but is also injected with WWJR-specific needs. In the end, over the last few weeks between PDIG Day 3 and Day 4, I designed a template in which we can easily plan our PBL units while also meeting all the PBL standards and requirements. This is the beginning of our own personal summative assessment of what we've done. We spent the day, using our own customized template, to create new and authentic units that are inquiry-based - all the while going back to the materials we have created so far, as a team, such as our horizontal planning and our conversion of QEP competencies to PBL key knowledge, understanding, and success skills. We also found ways to make planning more professional and to keep us accountable by making QEP competencies and elements of the Profession of Learning available to us on the template so that we can mentally and physically check off the learning goals that we want to achieve for our students. It was remarked that this exercise helps us hold our profession accountable, with dignity, and integrity. Forever reevaluating how we approach our own teaching topics and how else we can enlarge the scope of our subject so that students can give subject-specific skills and also other desirable 21st-century skills. After discussing the usability of our template and how we will fill it, we broke out into teams. Two of us worked on an ELA unit, another team of two combined Ethics and Phys Ed., there was a Visual Arts unit being created and finally, Math and Science broke apart to build their own individual units as well. It was an incredibly productive two hours in which we planned the scope of our units, then planned our formative assessments, and finally mapped out our teaching according to a PBL Project calendar. All the while returning to the driving questions that we all built for our own topics (using the guidelines for driving questions from our previous meeting). One teacher exclaimed that she had just planned 6 weeks of teaching and felt that the learning outcome and the original driving question seemed to come together, or full circle, so seamlessly. After our independent working sessions, we came together and shared our units for constructive criticism and feedback. We used a Gold Standards checklist to ensure that the PBL markers of excellence were being met...such as whether or not inquiry was sustained or if there were opportunities for critical revision, etc. While we recognized that perhaps what we were doing is not particularly innovative - indeed we discussed if it was necessary, as educators, to be continuously innovative - it was still rigorous. We are evaluating the quality of our lessons, the authenticity of our topics, and the relevance of what we're teaching for our 21st-century learners. Whether it is unique perhaps doesn't matter so long as it shows organized thinking and reflection - an opportunity we rarely get as professionals. We are excited about our next PDIG because we will be developing progress and assessment tools. Our goal is to make evaluation another form of feedback and to add more variety to our measurement tools so that they are more authentic while always maintaining academic excellence and rigor.

PDIG DAY 5 - MAR. 30, 2023 - JOURNAL ENTRY

At this point, we have had some experience with teaching using PBL methods and we can collectively pool our insight. Today, the sequence or the direction of our teaching was heavily discussed. For example, the idea that education has a linear approach was criticized because after an evaluation is given, it is also forgotten. Therefore, the concept of measurement, when to assess, and how to assess was discussed through traditional perspectives and now with a PBL lean. While PBL has a more cyclical and recursive pattern of learning and assessment, which is commendable, we also saw some possible pitfalls. To begin, the idea that there needs to be work time built into a unit for project production is an important one however, we need to workshop the "reconnection time" - a point when and where a teacher has to give feedback. We agreed that any evaluation (traditional or otherwise) is a form of feedback and that we should be assessing more, though, and grading less. Now, one of the problems we identified is that with more project-based products, academic rigor and standards may fall through the crack. Naturally, this is problematic because there are ministry competencies and other standards to assess. So we came up with ways to have a final product evaluation that was preceded by smaller sources of evidence of learning. We also discussed sustained inquiry and we agreed that student investment is necessary for something to be sustainable. We proposed possible situations in which students can generate their learning and consequently their assessment. It is important for students to have ownership in creating a list of their tasks and measurable criteria which fits in quite neatly into the idea of student voice and choice, one of the tenets of PBL. Another major component of PBL is the Need-to-Know board and we've come to a point in our program development when we could talk about this from a more informed place. Firstly, we appreciate the transferability of this method from subject to subject (as in it doesn't favour one over the other and oftentimes, the more creative subjects see the benefits more). However, we said that in the cycle or looping of education that should happen in this rinse-and-repeat PBL approach, there should be more opportunities for the Need-to-Know board to check for learning. It would be a way for teachers to be given insight into their instructional decisions while at the same point influencing students' actions going forward with a project. The Need-to-know board has also allowed us to sharpen the curriculum. For example, in an ELA unit plan, understanding a novel should not be the end-all evaluation. A novel should inform a larger PBL purpose - in that it should provide insight or information for a larger product/project. Conceptually, a novel should be understood and its different elements can be used to explore a larger theme. All in all, the effects PBL is having on teachers and students alike is that it is helping us manage, not just our time, but our work. Students are also - through individual and group reflection, in these moments of reconnection and creative assessment - learning not to hoard knowledge and they are engaging in the process more. The knowledge that is shared can lead to success on a wider scale. Consequently, the PBL Steering Committee is also feeling the benefits of sharing our expertise. We are getting the chance to think of each other's practice and there were many moments today when an Arts teacher was able to give a Math teacher advice about how to structure a memory aide. This kind of collaborative effort is something we had envisioned building in our students but we are also experiencing the positive outcome of project-based, problem-based, or inquiry-based learning because we are recognizing the issues in education and creatively finding ways of using restrictions and turning them into enabling constraints. One of my goals for this PDIG was to increase our self and collective efficacy and today was one of those days when I saw it happening in action. I believe we have discussed and begun building ways of assessing students more effectively because we see ourselves as effective pedagogues. We have been reinforcing our practices, thinking about others' practices, and coming together to a round table to talk about our personal accomplishments as well as our team's.

PDIG DAY 6 - APR. 20, 2023 - JOURNAL ENTRY

Today was the final day of our professional development project. For the last few months we have been acquainting ourselves with the needs of our students, our staff, and what was missing in the educational landscape, and every time, we felt the answers lay in the pedagogical model that is PBL. Often, we felt ourselves saying the same thing over and over - "It's just good pedagogy", it's simply common sense. Issues with achievement and motivation on the part of students seem to be improved whereas, for the educator, problems we encounter with knowledge delivery, lesson planning, correcting, and having an effective impact on the students seem also to have shifted. Our goal for this PDIG was to become experts at developing a PBL curriculum and it all started with the "why?". The why was that we felt ineffective and our students' "results" also showed that much needed to change in the direction of education. So why not flip it around all together? The idea that a project can be a unit and the unit is itself the project is not a novel idea but like we've discussed...it's just common sense to receive an objective from the get-go so that one be invested in the long-term if the process is being informed by a tangible and achievable end goal. For many of us, this was the most significant shift - for others, it was the idea that all assessments, all evaluations, whether it is a test or a science lab are all forms of feedback, and feedback needs to be regular, frequent, and meaningful. We pushed ourselves to change the way we tracked our students' progress and success and it was to our benefit and to their advantage as well. Concepts like student-conferencing allowed us to have an immediate impact on our students' processes while also building meaningful relationships. As for the outcome? Students have been producing beautiful, Gold Standards projects. What about standardization and formal evaluations? These skills were integrated into our PBL units and truthfully - the high-expectations projects that demanded excellence from all students regardless of their abilities and were more challenging and rewarding than a ministry exam. We are confident that if faced with ministry exams, our students will be more equipped due to the level of flexibility we have fostered in them. We have helped them develop self-regulation, self-monitoring, and self-evaluation through the integration of these soft skills or 21st-century competencies within the journey of our learning experiences. Indeed, the very nature of our instructional design has changed because instead of asking what standards we have to meet, we've been asking ourselves what problems can students solve through the creation of a project - while applying the necessary competencies prescribed to us by government documents. Because our why is self-motivated, ambitious, and pushes the boundaries of traditional learning, we've noticed a growth in ourselves as professionals. Today, we couldn't help but go over what stopped us from achieving our goals - though to be honest, we achieved them nevertheless. We wanted to reinvent ourselves and our curriculum, and we did. It was a lot of background work, a lot of thinking and reflection, and putting our ideas down on a Doc or Slide and then executing these small but significant shifts throughout the course of a teaching experiment but it was done collaboratively with recursive loops of thinking and doing. If we haven't had the opportunity to become reflexive practitioners before, these last 6 days have allowed us to plan differently but effectively because the demands of professional development and innovation required us to push ourselves. With all that said...one of our biggest challenges, one of the pitfalls of PBL is time. The development of a project is stunted by the tumbling schedule that is so typical of an institution like secondary education. As we were planning our vernissage and implementing PBL further and more widespread across our school, we noticed that our biggest and most constraining barrier was our own teaching schedules. From the concluding activities of this last PDIG day, we have fruitfully created a plan for next year's PDIG. If we want students to solve problems with projects - I think it's important that we do too. So what's our problem? The schedule. What are we going to do to fix it? Make a new one. Stay tuned.



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FINAL REPORT AND ANALYSIS



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Project Description

Describe/show to what degree the project was carried out as planned. Include what went well and what proved to be a challenge. Include a synthesis of your journal entries.

Through a spirit of collaboration, active reflection, and project/unit redesign, we believe the PBL Program Committee has gained better insight into strong and solid pedagogical practices that can benefit our WWJR community. We believe the project was carried out as planned (as witnessed the preceding slides) that we collectively pooled our knowledge and problem-solved as a team thus reinforcing our collective efficacy. By organizing our knowledge into tables, notes, and even a fully formed template, I think our expertise in PBL has increased and so has our human capital as educational professionals and practitioners. We also believe that this information is now more accessible to our own staff and others who wish to follow our approach because of how organically it was achieved.

The teachers in the PBL Program, often explained how difficult it was to recognize the impact of our work in the larger structure of education and that while we may be productive in our workday, we often wonder if we are equally effective.

PBL has provided, for us, a unified vision and approach. We had a shared goal, which was to reduce the achievement gap and increase motivation for students. In the process, though we were also able to discuss important skills, topics, and knowledge needed for a PBL Program to be successful. We planned projects from conception up to the production and we think our approach has demonstrated the depth and breadth of PBL education can look like at WWJR.

Moreover, our process informed our own practice in this PDIG, as in the teachers' methods and students' work provided practical examples to other staff members and the community at large (which will be celebrated during our Vernissage coming up on May 4, 2023). Based on the previous slides, we have tangible evidence that when education has a PBL approach, the learning outcomes can be seen and appreciated by all - particularly the teaching professionals.

Though many of us have come into this project with invaluable experience, we still struggled with the institutional demands and how we felt they were prescribed to us, taking away our ability to explore new teaching methods with Ministry restraints on the curriculum. PBL allowed us to tweak our pedagogy creatively (instead of decreasing the difficulty which is often the approach with weaker, low-performing students) by enabling these constraints and giving us a new outcome or direction of education that still uploads standards while demanding academic excellence through a more authentic approach.

Indeed, our approach as professional was equally authentic, often coming from the heart and from our own frustration. We came out of our monthly meetings feeling more confident about exploring different pedagogical methods thus shifting instruction and making education more flexible - even within the constraints of a rigid system. The team has often noted how their PBL pedagogy has changed the shape of learning for their students and in their own planning as well.

Project Goals

Describe/show to what degree the goals of the approved project were met. If the goals were only partially met or not met at all, describe the reasons for this.

Through our monthly meetings as the PBL steering committee, we were able to define PBL and identify why this framework is a good fit for our students and community. As a group we represent multiple disciplines and therefore worked together to envision how PBL could be reflected and implemented across the curriculum both individually and in a cross-curricular format. As representatives of our subject areas, we encouraged others within our departments by modelling and sharing PBL based lesson plans and projects in the hopes that a PBL mindset will begin to grow among staff. One main focus of the PBL steering committee was/is to communicate clearly to parents and staff what PBL is, how it differs from other pedagogies and how it benefits our students. This has been partially achieved through presentations to staff during staff meetings, as well as open-door events to the greater community during events such as Open House and our end of year vernissage. Through these continued conversations, we hope to encourage a “PBL mindset” throughout the school and our school community.

Project Outcomes

Describe/show the gains that the participating teachers achieved through this project.

An important starting point for all teachers involved in the PBL steering committee was to define and understand what PBL is and how it differs from other pedagogical frameworks. Through our early meetings, lead team members were able to define terms as well as demonstrate PBL based projects that have been successful. With this base established, teachers were then able to learn the pedagogical value of process and problem-based learning, creating student voice/choice opportunities, including visually supportive materials that engage students, and develop learning situations for inquiry and research regardless of subject.

Through the adoption of Gold Standard PBL, teachers were able to reflect on and adapt pre-existing units in order to develop organizational skills among students and consider ways to increase both accountability and autonomy. Assessment tools were also redesigned to reflect a new “PBL mindset” focusing on process, progress and end product. Perhaps most valuably, teachers were able to meet and discuss their subject areas together and plan units that drew on content across the curriculum. Teachers were able to plan whole units start to finish with immediate feedback and support from PBL lead teachers and other colleagues. Through the implementation and showcasing of PBL projects throughout the school, other teachers outside of our initial steering committee have also expressed interest in PBL based learning.

We hope to continue and grow this interest through the continued exploration and implementation of PBL within WWJR.

Reinvestment

Clearly describe how the resources created and/or the learning achieved by the participants can be of benefit to the educational community at large. Make sure you include these resources with your report. If applicable, comment on whether or not this project should be carried out by other teams.

A shared folder containing horizontal curricula, PBL units, progressive reporting, rubrics, and assessment tools has been made available to all staff members so that they have structured plans in order to pave the way for their own implementation of PBL in their classrooms. In addition, one of our desired outcomes of the project/program building was to create ready-to-use project-based learning units in which the educators act as facilitators so if anyone feels like they need help with the direction of a PBL unit, they can use our templates or our pre-existing projects.

All in all, we feel like PBL Programming by a core group of teachers should be something explored in every school given that the learning goals have changed from subject-knowledge to 21st century competencies. We want to shift our instruction so that students' learning experience includes knowledge acquisition that is relevant to their lives as well as the necessary skills to exist within their communities and the 21st-century world. In fact, based on our own anecdotes and the sharing of our project journeys amongst ourselves, we have noticed students are developing skills such as problem-solving, creativity, innovation, and beautiful design across subjects and disciplines. Our core teachers in the PBL Program have implemented student-centred evaluation into their assessments that have lead to beautiful products for presentation or public display. At the end of our school year, we are hoping to increase visibility concerning the success of a fully-implemented PBL program by hosting a vernissage for the community which will be hosted on Thursday, May 4, 2023.

Throughout our year, regular reports will be made at Staff Council and Governing Board meetings so that parents, community members, and teachers alike are aware of the progress of the pilot program.

The teachers designing this unit have also disseminated their knowledge and skills across staff in department meetings and even share our professional development with staff as a whole, acting as models, so that the shift education is made apparent and we have taken the steps to create a new culture collectively.

In the end, the WWJR PBL Program would like to share their experiences, newly-acquired knowledge, and new tools for PBL with the board and its consultants so that PBL can be something other English schools can experiment with and they can use our practice as an expert basis upon which to build other PBL programs.

We believe that sharing our new approach to teaching and learning with the board, other schools, and the community at large can begin to make profound changes within the institution of education. We hope to provide the initial steps towards a shift in instruction, assessment, and the definition of school for all students regardless of subject, grade, and capabilities.