

Katrina Axford



Head of Middle Years Transformation
Wirreanda Secondary School



Panalatinga Partnership
Presentation

katrinaaxford.com



#PanaConf18

What is PBL?

Why PBL?

Two types of PBL

- Ping Pong Projects
- Peanut Butter Cup Projects

Planning PBL

- Wiggins Backwards by Design
- The 6 As of PBL
- Essential Questions

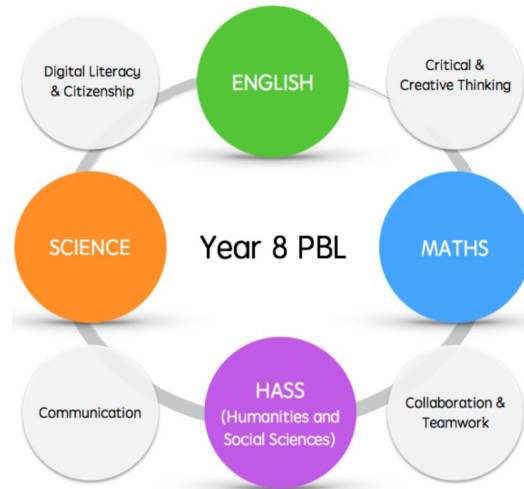
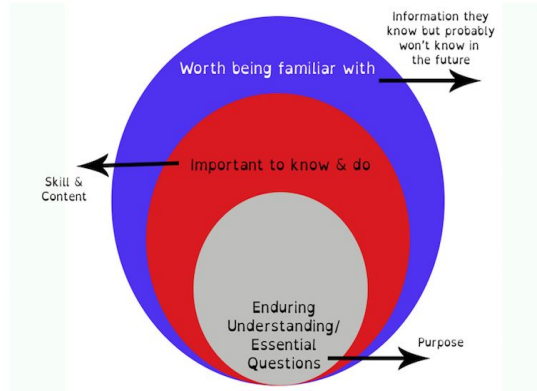
Successful PBL

- The proof is in the product
- Embrace the unexpected

Project Based Learning Wirreanda Secondary School

HOW TO DEVELOP ENDURING UNDERSTANDING AND ESSENTIAL QUESTIONS

What do our students need to learn?



VIA Classification of Character Strengths



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Project Based Learning (PBL) has become a key part of many successful learning environments in Australia and across the world. It takes students on a journey of creativity and exploration with real-world connections.

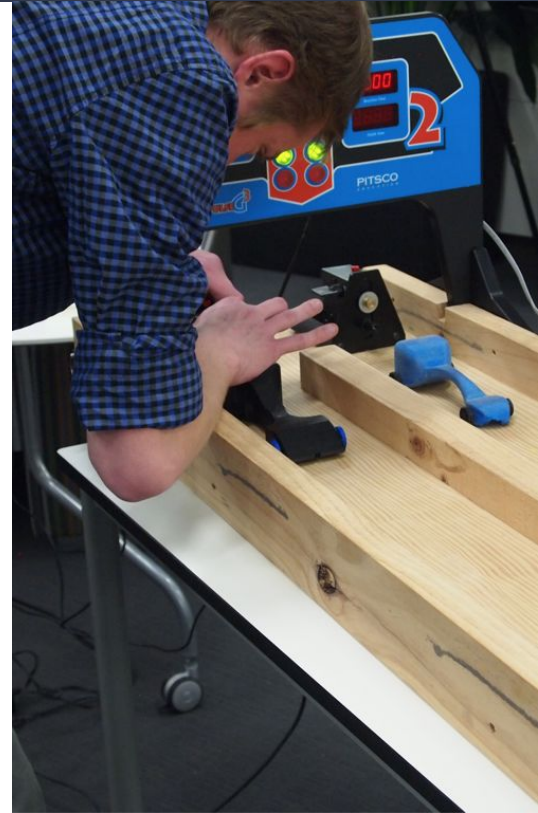
Students learn problem-solving skills by successfully navigating learning challenges that are cross curricula, enhancing engagement and developing deeper understanding. [Jeff Robin What is PBL](#)

Why Project Based Learning?

Creativity, Innovative, Problem Solver, Analytical Skills, Critical thinker

PBL CAN BE A VEHICLE FOR TO GAIN A DEEPER UNDERSTANDING OF CONCEPTS AND CONTENT (THE LEST IS MORE APPROACH)

In 1999, [Richards J. Heuer Jr.](#), explained that: “Thinking analytically is a skill like carpentry or driving a car. It can be taught, it can be learned, and it can improve with practice. But like many other skills, such as riding a bike, it is not learned by sitting in a classroom and being told how to do it. Analysts learn by doing.”[\[1\]](#)



Planning PBL

- DESIGN YOUR PROJECTS BACKWARDS WITH PROJECT TUNINGS (THE POWER OF CRITIQUES AND WORKING WITH PEOPLE OUTSIDE YOUR AREA).
- DO THE PROJECT YOURSELF
- DON'T WASTE TIME ON UNIMPORTANT TASKS
- MAKE IT 'HARD FUN' AND GET OUT OF THEIR WAY
- BE CONSISTENT (DON'T MAKE EXPECTATIONS A MYSTERY) THERE IS POWER IN PROTOCOLS
- GIVE IT A REAL WORLD CONNECTION

WIGGIN'S HOW TO DESIGN A PROJECT

BACKWARD

- DEVELOP A CLEAR UNDERSTANDING OF WHERE ALL WANT TO GO
- MAP OUT THE STEPS TO GET YOU THERE
- BEGIN WITH THE END IN MIND

DESIGN

- TO HAVE PURPOSES AND INTENTIONS
- TO PLAN AND TO EXECUTE

"TELLING IS NOT TEACHING, KEEP IT ACTIVE. DOING IS WHAT LEADS TO LEARNING." - DENISE POPE

PROJECT TUNING IS THE MOST IMPORTANT TOOL A PBL TEAM CAN HAVE AND IT CAN HAPPEN AT ANY TIME THROUGHOUT THE DESIGN PROCESS HOWEVER THE OPTIMUM TIME IS HERE AFTER STEP 2 AND BEFORE 3.

STEP 3: DESIGN LEARNING EXPERIENCES AND INSTRUCTION

- THE DAILY LESSONS
- THE ACTIVITIES TO BUILD ON STUDENT KNOWLEDGE TO HELP MEET THE AUSTRALIAN CURRICULUM

THE ACHIEVEMENT STANDARDS OF THE AUSTRALIAN CURRICULUM WILL BE THE DRIVING FORCE FOR YOUR PROJECT

STEP 2: DETERMINE ACCEPTABLE EVIDENCE OF LEARNING/ASSESSMENT

- HOW WILL THE AUSTRALIAN CURRICULUM STANDARDS BE MET IN EACH SUBJECT?
- WHAT WILL EACH TEACHER ACCEPT AS EVIDENCE OF STUDENT UNDERSTANDING AND ACHIEVEMENT?
- HOW WILL TEACHERS KNOW THE STUDENTS ARE MEETING THE AUSTRALIAN CURRICULUM ACHIEVEMENT STANDARDS?

EXAMPLES OF EVIDENCE

PRODUCTS
TESTS
ESSAYS
ORALS
PERFORMANCES
PRESENTATIONS

MAKE SURE THE STUDENTS ARE ENGAGING WITH

EXPLANATION
APPLICATION
INTERPRETATION
EMPATHY
PERSPECTIVE
SELF KNOWLEDGE

- DENISE POPE

WILL THERE BE OPPORTUNITIES FOR REVISION AND/OR REDEMPTION?

WHEN MEETING AS A TEAM FOR THE FIRST TIME AND BEFORE DISCUSSIONS ABOUT POSSIBLE PROJECTS BEGIN TRY THE FOLLOWING TASK.

IN SILENCE WRITE DOWN WHAT STUDENTS NEED TO KNOW, UNDERSTAND AND BE ABLE TO DO IN YOUR SUBJECT AND WHEN THEY NEED TO DO IT. FURTHERMORE, IS THERE ANYTHING EXTRA WORTH THE STUDENTS LEARNING? THEN EACH MEMBER PRESENT UNINTERRUPTED BEFORE LETTING THE DISCUSSIONS BEGIN. THIS CAN START A MAPPING PROCESS OF IDEAS.

FROM THIS POINT THERE IS NO RIGHT OR WRONG WAY TO GO ABOUT COMING UP WITH A PROJECT. JUST KEEP IN MIND. WHAT IS THE DESIRED "ESSENTIAL QUESTION", "REAL WORLD CONNECTION" AND PRODUCT GOING TO BE.

IF A PBL TEAM IS STRUGGLING TO DECIDE ON A FINAL PROJECT/ PRODUCT/ESSENTIAL QUESTION PROJECT TUNING IS RECOMMENDED HERE

STEP 1: IDENTIFY DESIRED LEARNING

1. IDENTIFY WHAT EACH TEACHER NEEDS THE STUDENTS TO LEARN AND WHEN THEY NEED TO LEARN IT.

BACKWARD DESIGN PROCESS DIAGRAM
DIANA CORNEJO-SANCHEZ 8.12.08
ADAPTED FOR MARK OLIPHANT COLLEGE
BY KATRINA AXFORD

Remember

- Develop a clear understanding of where you want to go
- Map out the steps to get there
- Begin with the end in mind



The Six A's of Designing Projects

Academic Rigor: How do the projects address key learning concepts, standards or help students develop habits of mind and work associated with academic and professional disciplines?

Authenticity: How do the projects use a real world context (e.g., community and workplace problems) and address issues that matter to the students?

Applied Learning: How do the projects engage students in solving semi-structured problems calling for competencies expected in high-performance work organisations (e.g., teamwork, problem-solving, communication, etc.)?

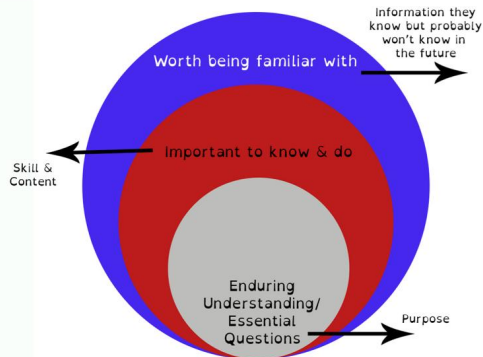
Active Exploration: How do the projects extend beyond the classroom and connect to work internships, field-based investigations, and community explorations?

Adult Connections: How do the projects connect students with adult mentors and coaches from the wider community?

Assessment Practices: How do the projects involve students in regular exhibitions and assessments of their work in light of personal, school and real-world standards of performance?

HOW TO DEVELOP ENDURING UNDERSTANDING AND ESSENTIAL QUESTIONS

What do our students need to learn?



FILTERS FOR SELECTING ENDURING UNDERSTANDING GOALS AND ESSENTIAL QUESTIONS

- Representing a big idea with enduring value beyond the classroom
- Resides at the heart of the discipline
- Is open-ended, complex, provocative
- Is relevant and developmentally appropriate for students “you cannot engage your students if you don't know where they're at” John Dew - Sympathetic Learning.

CHECKLIST FOR ENDURING UNDERSTANDING GOALS AND ESSENTIAL QUESTIONS

- Organises and focuses learning
- Defines the essence of what students will learn
- Cannot be answered in one sentence and has no easy answer
- Can be examined from multiple perspectives
- Allows students to think deeply
- Is kid friendly and easily accessible, publicly displayed
- Core concepts, principles, theories, and processes that anchor curriculum
- Is this what we want students to remember
- Students will understand and be able to use long after high school

The ‘could we should we’ project

Investigating

GMOs & Cloning

Using the power of Art and Media to question the ethics of scientific progress

Year 10 Science and Visual Art
Ms. Boltyshak and Ms. Axford



BOXING EQUATIONS PROJECT

YEAR 10 MATHS & VISUAL ARTS

MR. RANIERI AND MS. AXFORD

Being a conceptual artist means that all of the planning and decisions are made before the execution of the piece. The idea becomes the machine that makes the art. It is the concept rather than the art piece itself that is important. The artist acts as an architect, designing a plan that can be followed perfectly by anyone because the directions are based on mathematical concepts. – Sol LeWitt and HTH

Project Overview

- The aim of this project is for you and your classmates to develop Mathematical instructions that will create a sculptural art piece for the school. The sculpture will be displayed in the school grounds and will represent your knowledge and understanding about linear equations in Maths and how anyone can recreate this artwork using the instructions.

THE WALLZ RULZ PROJECT

YEAR 10 MATHS & VISUAL ARTS
MRS. THOMAS AND MS. AXFORD



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PROJECT OVERVIEW

- THE AIM FOR THIS PROJECT IS FOR YOU (THE MATHEMATICIAN AND ARTIST) TO DEVELOP AND DEMONSTRATE AN UNDERSTANDING OF LINEAR RELATIONSHIPS BY CREATING A CONCEPTUAL ART WALL MURAL INSPIRED BY THE WORK OF SOL LEWITT. THIS PIECE WILL BE TRANSFERABLE AND WILL BE DISPLAYED AS A PROTOTYPE MODEL THEN TRANSFERRED TO A WALL MURAL IN THE COMMUNITY.

The “Newtoons” Project

Year 10 Maths/Science/Art
Ms. Axford & Mr. Tatyzo

Project Overview

The ‘Newtoons’ Project requires you to become a Scientist, Cartoonist and Animator all rolled into one. Using the knowledge developed in Science, Maths and Art you will create a series of cartoon drawings that will be animated into a short film, which accurately illustrates one of Newton's Three Laws of Motion. These short film animations will be played on the TV Screens around the school but also on their very own ‘Newtoons’ You Tube channel for the entire world to see.



Year 10 Project Overview

MY ELEMENTAL SUPERHERO PROJECT 10 & SCIENCE, ENGLISH AND ART

JATINDER SAROWA, SUZANNE VELZBOER, KATRINA AXFORD

Project Overview

For this project you will research, develop and create a superhero or character based on the characteristics of an element from the periodic table. In Science you will research your chosen element including its physical and chemical properties collecting all the information needed to develop a character description and storyboard scenario in English/Art. From this research and development you will then create concept art for a logo, superhero/character (design costume/figure) and storyboard scenario.

PUTTING THE MO IN MOC



The ‘Putting the MO in MOC’ project is to date the most ambitious project that students of Mark Oliphant College have ever undertaken. The project posed the dilemma question: “As students of Mark Oliphant College how can we acknowledge the 70th anniversary of the dropping of the atom bomb on Hiroshima?” Students answered this question by using Art and Drama to design, write, and perform a play from scratch. Working with teachers across subjects was vital for the play to be historically and scientifically correct. The Visual Arts students also explored traditional Japanese art making techniques to create murals and lanterns for the drama performance.

CURRICULUM

ACAVAR131

Australian Aboriginal Art and Torres Strait Islander Art.

- Contemporary and past

- ~~different~~ explore differing viewpoints

- International context.

- ACAAM1289

- Present ideas for displaying artworks ~~and that~~

- Evaluate displays of artworks.

EXPLICIT TEACHING / SKILLS

→ What is Aboriginal Artwork.

→ learn about Contemporary Art - " " traditional Art

→ ~~comparing~~ comparing the differences and similarities from past to present.

→ comparing artworks with opposing views.

→ Understanding what context has on understanding on artwork. (key arts language).

→ learning the role of a curator

→ Excursion to Tandanya or Art Gallery of SA.

→ Skill of setting out artworks for display

Take photos of Art pieces.

ESSENTIAL QUESTION

~~You~~ ^{are} ~~is~~ the curator of the Art Gallery of SA and have been asked to put together a show of 20 of the most Influential Aboriginal Artworks of all time... what would they be?

Split the team up into four groups. Each team will present to panel of experts.

PRODUCT

Online Art Gallery

Vital Art Gallery

Written/visual presentation. to a curator and/or Aboriginal person.

can be changed out for any gallery.

AUDIENCE.

→ Online is an international audience.

→ Another school overseas.

→ Curator from Art Gallery of SA or Tandanya.

→ Aboriginal Artist

→ Kaveri Fry.

→ AB ED Worker.

This could lead to working with an artist with council funding etc.

Proof is in the product

[The Wallz Rulz Project](#)

Embrace the unexpected

[Travis](#)

[Putting the Mo in MOC](#)

[The Diggers Letter](#)



Finally

BE PREPARED TO BE COMPLETELY EXHAUSTED AND IF
SOMEONE OFFERS TO HELP SAY YES!!!!