Project Design and Outlines Overview

Introduction

The aim of this overview is to provide an introduction to Project-Based Learning (PBL) and Expeditionary Learning (EL), with a specific focus on how projects can be designed.

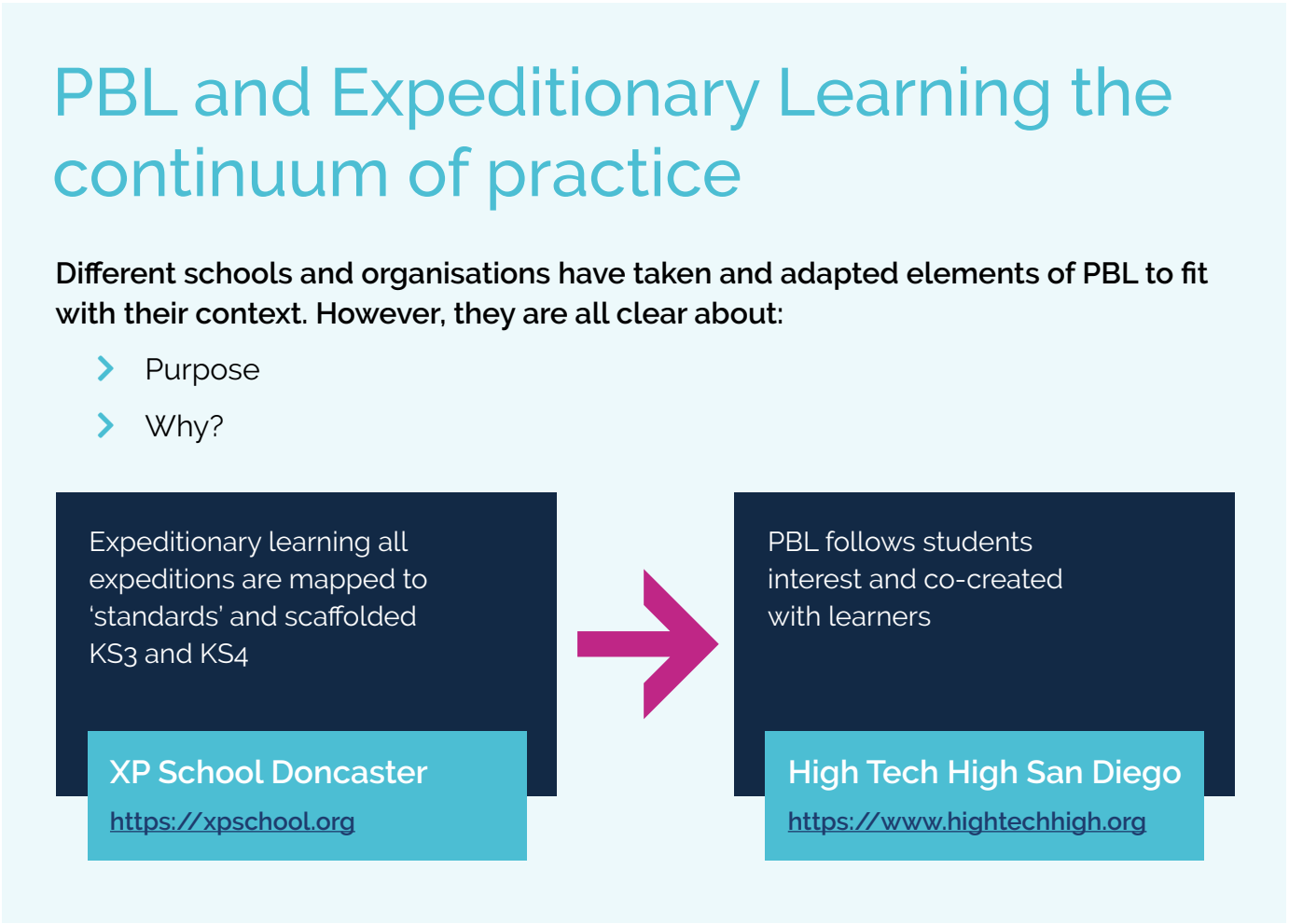
One of the leading proponents of PBL is the Buck Institute who provide resources via PBL Works https://www.pblworks.org/ and define PBL as:

"Students work on a ***project over an extended period of time*** – from a ***week*** up to a ***semester*** – that engages them ***in solving a real-world problem or answering a complex question.*** They ***demonstrate their knowledge and skills by developing a public product or presentation for a real audience.***

Source: Buck Institute for Education http://www.bie.org/about/what_pbl

Schools and organisations have taken and adapted elements of PBL to fit with their context in the USA, UK and beyond. There is a continuum of practice, but within this there are identifiable common elements and themes. All are clear on their purpose, and why they have adopted PBL as a pedagogy for their students and school community.

Figure 1. The Continuum of PBL practice



EL https://eleducation.org/

The ethos behind EL supports this. In 1991 EL Education was born out of a collaboration between The Harvard Graduate School of Education and Outward-Bound USA. EL mission is to create classrooms where teachers can fulfil their highest aspirations and students achieve more than they think possible, becoming active contributors to building a better world.

"When students have completed their academic career and entered adult life, they'll be judged not by performance on basic skills tests—but rather, by the quality of their work and the quality of their character." Ron Berger

This premise serves as the foundation for EL Education's overarching vision of increasing student engagement and elevating and expanding student achievement.

PBL Works https://www.pblworks.org/

Distinctive elements of the project as identified by PBL Works.[1] All linked to the 'standards' i.e. curriculum, the key knowledge, understanding and success skills:

1. Challenging Problem or question – the 'Driving Question' and sub-questions
2. Sustained inquiry
3. Authenticity
4. Student voice and choice
5. Reflection
6. Critique and revision
7. Public product - 'exhibition' 'expedition'

[1] Reference: Adapted from Buck Institute for Education PBL 101

What PBL is not...some common misconceptions

- Learning is unstructured
- Students just do what they want around a general topic or theme
- Students are left to their own devices
- There is no 'input' from the teacher until the end
- It's a 'free for all'
- There is no 'formal' learning/input or teaching from the teacher
- Students will be assessed as a group
- Students can get away with doing very little and leave it to the rest of the group
- There are no checks and balances throughout the project

Where to start...

Firstly, need to consider the project idea and focus on the following:

- Key stage? Year group?
- Area of the curriculum looking to cover through the project
- What do you want the students to learn? What knowledge, skills and understanding and key concepts do you want them to grasp through the project?
- How many lessons can be allocated to the project?
- What do you want the students to do?
- What are initial thoughts on a possible end-product?
- What are the smaller milestones within the larger project, what do students need to have achieved, show or demonstrate to enable them to progress through the project?
- How long will the project last?
- How will students be assessed and when?
- Make the assessment rubric available to students and refer to it
- Ensure there is 'working time' built into the project for students
- Students are clear on the deadlines and what they have to produce and by when
- Be clear on the protocols you will use for feedback and structuring the project

Overview of the key elements:
Driving or Guiding Question

What does this mean in relation to the project?

- Open ended Driving Question is at the centre of PBL – this drives the project
- Below the Driving Question it is helpful to devise sub-questions to scaffold the project for students
- Is the Driving Question engaging for students?
- Is the Driving Question aligned with learning goals?

Different types of driving question.

- A philosophical or debatable Issue or an intriguing topic
- Specifying a product, task or problem to be solved
- Adding a real-world role for students
- How?
- What?
- Who?
- Why?
- Does?
- Can?
- Is?

Entry or Immersion Event

Aim of the entry event

- To introduce and lead students into the project and as a pre-curser to students being 'given' the Driving Question an entry event will take place to kick-start the project and put it in context.
- It will also contribute to equality of opportunity as all students receive the same 'entry' experience.

What could the entry event be? Possible examples:

- Field trip
- Guest Speaker
- Film / video / website
- Simulation or activity
- Startling statistics
- Puzzling problem
- Piece of real or mock correspondence
- Song, poem, art
- Discussion
- Provocative reading

End-Product – Focus on Beautiful Work

What does this mean?

A key element of PBL is that what students produce is made public.

This can take many forms but in essence students make their project work public by explaining, displaying or presenting it to people beyond the classroom.

Key questions to consider:

- Product - what will the students 'do'? Or 'create'? What will this look like?
- How will it be made public? When? How?
- What help and resources will you need to support this?

Check out these resources to give some ideas of end products and PBL/EL

- X-P School Doncaster https://xpschool.org/our-expeditions/
- School 21 – London curriculum https://www.school21.org.uk/sec-beautiful-work
- High Tech High https://www.hightechhigh.org/student-work/student-projects/

Assessment

What does this mean? Key factors to consider

- How will the project be assessed?
- What elements of the curriculum will be assessed and covered?
- What knowledge, skills and understanding will students have used?
- What do students need to have 'completed' 'achieved' to progress through the project?
- Students will be assessed individually even if the project is completed as a group
- Students from the outset understand how they will be assessed and how criteria will be applied

Think about…How you will assess? When? What? Learning Outcomes

- What are the 'check-points?' During the project i.e., what formative assessment will students undertake and is planned into the project and project timeline?
- This is vital in order to be able to give valuable feedback and critique to students as they go along, enabling such feedback to be used throughout, rather than being all at the 'end'
- When formalising assessment concentrate on ***1 skill per project only***[2]
- Map the skills across all projects so you have coverage

Top Tips for Success

To ensure successful PBL - things to get ready and things to have to hand at the start of the project

- **Project documents** – these are really important - what are students being asked to do? What guidance are they being given?
- **Feedback and assessment are on-going** – teach students as you go along, do not leave everything to the end. Make sure students are given opportunities to practice with formative assessment points prior to the end result and summative assessment and 'end-product'
- **Work time** needs to be built in for students, so they have time to 'do' the work, research and background to complete the project to a high standard
- **Scaffold the resources** – don't give them to the students all at once
- **Have a project wall** – What is the Driving Question? What do we need to know?
- **Calendar** – make sure it is clear and shared with students – authentic deadlines
- **Rubric available** – students are clear from the outset on how they will be assessed and what they are being asked to do
- **Check lists and deliverables** available for students
- **Be clear at the start what the 'end' product is**

[1] As recommended by High Tech High CPD course Intro to PBL Nov 2018

Sources of best practice and further resources to explore	
Expeditionary Learning	https://eleducation.org/resources/cp-9-designing-learning-expeditions https://eleducation.org/resources/curriculum-mapping-within-and-beyond-learning-expeditions-1
	https://eleducation.org/resources/curriculum-mapping-within-and-beyond-learning-expeditions-1
	Curriculum mapping within and beyond learning expeditions
	https://eleducation.org/resources/the-core-practices-a-complete-list-with-links
	Core Practices
PBL Works	https://www.pblworks.org/pbl-resources/project-designer
High Tech High USA	https://www.hightechhigh.org/student-work/student-projects/
	https://gse.hightechhigh.org/design/PBL Design Kit
XP School Doncaster	https://xpschool.org/our-expeditions/
School 21	https://www.school21.org.uk/pri-pbl

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