

## Introduction

This submission is a reflection on the experience of applying a Problem Based Learning Approach to completing a 4th Year Final Year Project (FYP). This piece begins with a brief description of the PBL process and then a reflection on the experience and identification of lessons for the future.

## Outline of the Project

In September 2021, the 4TH Year students of the Early Childhood Education and Care (ECEC) Programme in TUS Mid West (Thurles) set out on the journey of completing their FYP using a Problem Based (PBL) approach. PBL is a process of interest to educators 'because of its emphasis on active, transferable learning and its potential for motivating students. (Hmelo-Silver, 2004). The project was supported by two modules one in semester 1 and the second in semester 2. This Module required that

*"As a final year capstone module students educated in early childhood education will have to address research skills and carry out some form of practice-based research. To provide students with the opportunity to complete this research... and approach the process in a creative and innovative manner, this module will take place over the entire academic year and be allocated 10 credits. Students will have to engage with a number of Problem Based Learning (PBL) type activities and carry out a small piece of related Action Research (AR) followed by a submission of a short project/thesis/floor book outlining their work, analysis and findings..."*

## Research Process

The process began with an identification of a significant issue faced by practitioners in the ECCE sector. The outcome of this consideration was the identification of the research topic exploring the issue of the **Pay Crisis in the Early Years**. In Semester 1, students explored the issues related to pay and using a 'problem tree' methodology (<https://mspguide.org/2022/03/18/problem-tree/>) to identify the overall structure of the research. (Doyle 2008)

In undertaking an analysis of this problem, the group identified a number of causes and effects connected to the problem. In addition they also identified various context and background issues. This analysis was informed by the students experience but also through the interviews with 'key informants' working in the sector.

Each student was allocated a topic (cause, effect or background) and was tasked with conducting a literature search and writing a chapter related to the topic on hand. This chapter was 6-7,000 words in length (70% of the module marks). The sum of all students work was collected into the production of a single book (212 pages) as the final outcome of the project.

In addition to the core work of producing their own chapter, each student took responsibility for an additional piece of work (30%) connected with the goal of 'launching' the book and sharing the outcome of the research with peers and the public. This additional work related to team tasks including: proof reading, writing a summary piece for the document, issuing of invites, preparing the launch and preparing associated graphics.

The outcome of all this research and exploration of the topic was a launch of the book with an invited audience and the sharing of the summary learning for the project with key stakeholders in the sector.

## Reflection:

Hmelo-Smith (2004) identified the following outcomes for a PBL process and these help to structure this reflection.

1. construct an extensive and flexible knowledge base
2. develop effective problem-solving skills
3. develop self-directed, lifelong learning skills
4. become effective collaborators; and
5. become intrinsically motivated to learn

In this project the students' knowledge base was expanded through being required to adopt a number of different perspectives on the issue. Instead of just seeing the 'problem' from their own perspective, they were required to understand the problem from the perspective of the employer and the regulators. They were also expected to be able to situate the problem within current policy and legislative context. This is one of the strengths of PBL which "...is well suited to helping students become active learners because it situates learning in real-world problems and makes students responsible for their learning." (Hmelo-Silver, 2004)

One of the strengths of the FYP is that it requires students to develop their own project management capacity and skills and in this project, students were asked to do this from a team perspective. The challenge was not simply to prepare their own chapter but to co-ordinate and share knowledge with others to ensure the coherence of the final project. It should be noted that the work of the group happened primarily in class time as there was no additional supervision hours attached to this module. Students were apprehensive about this project at the outset but the process of scaffolding the module with incremental deadlines contributed to effective group collaboration. Consequently, the students held each other collectively responsible and were motivated to achieve the goals set out.

PBL takes a constructivist perspective on learning and from a teaching perspective, it is necessary to support and hold the students at certain pressure points in the project. There is uncertainty but setting an expectation of a positive outcome and standard is effective in encouraging collaboration and motivation.

The scaffolding of the process is important. During this year-long process, students submitted their proposal before Christmas and shared in setting the milestone dates for the 2nd Semester. There were also two presentations where students shared their work content and reading lists and in the second ensured that there was no overlap. The standard format for presenting and writing was agreed together in the team and this led to consistency of product in the end. This enabled participants to develop their collaboration skills and capacity.

The inclusion of a 'launch' meant that the deadline for submission of the work was early and in the future, consideration will be given to beginning the writing process earlier and therefore allowing more time for formative feedback as the students work towards completion.

The overall experience of the process was very positive, students rose to the challenge presented and the outcome was very impressive.

### References

Doyle, T. (2008) *Helping Students Learn in a Learner-Centered Environment : A Guide to Facilitating Learning in Higher Education*. Sterling, Va: Stylus Publishing.

Hmelo-Silver, C. E. (2004) 'Problem-Based Learning: What and How Do Students Learn?', *Educational Psychology Review*, 16(3), pp. 235–266.  
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