



**OLLSCOIL NA HÉIREANN MHÁ NUAD NATIONAL UNIVERSITY
OF IRELAND MAYNOOTH**

**Froebel Department of Primary and Early Childhood Education M.Ed.
(Research in Practice) 2024 – 2025**

**How do I encourage reflective practice and student autonomy through
Machnamh, a collaborative and creative approach to learning?**

Eimear Colreavy Thesis submitted to the Froebel Department of Primary and Early Childhood Education, Maynooth University, in fulfilment of the requirements for the degree of Master of Education (Research in Practice)

Date: 10th of September 2025

Supervised by: Dr Edel Fahy

Eimear Colreavy, 19774711

ASSIGNMENT COVER PAGE

Ainm / Name: Eimear Colreavy

Bliain / Year group: M.Ed Research in Practice (2024-2025)

Uimhir mhic léinn / Student number: 19774711

Ábhar / Subject: EDF 689: Thesis

Lecturer / Tutor: Dr Edel Fahy

Sprioclá / Due: 12 September 2025

Teideal an tionscadail / Assignment title: How do I encourage reflective practice and student autonomy through *Machnamh*, a collaborative and creative approach to learning?

Líon leathanach / Number of pages: 153

Líon focal / Word count: 20,668

Aon ábhar eile sa tionscadal / Any other material in the assignment:

Dearbhaím gur mise amháin / mise mar bhall grúpa (cuir ciorcal timpeall na rogha a bhaineann leis an tionscadal thuas) a rinne an saothar seo. Aithním go soiléir aon chabhair a fuair mé ó aon duine eile, baill fhoirne nó gaol clainne san áireamh. Mo chuid scríbhneoireachta féin atá sa tionscadal seo ach amháin nuair a úsáidtear ábhar ar bith as foinsí eile. Tugtar aitheantas do na foinsí seo sna fo-nótaí nó sna tagairtí. Dearbhaím go bhfuil treoirlínte an choláiste do thionscadail léite agam agus go dtuigim iad. Tá cóip den tionscadal coinnithe agam dom féin.

I confirm that I alone / I as part of a group (please circle whichever applies in the case of the above assignment) produced this project. I clearly acknowledge any help I received from any other person, staff members or relatives included. This project is my own composition except for material of any kind taken from other sources. These sources are acknowledged in the footnotes or references. I confirm that I have read and understand the college assignment guidelines. I have also retained a copy of the assignment for myself.

Síniú / Signature: Eimear Colreavy

Dáta / Date: 10th of September 2025

turnitin 

Digital Receipt

This receipt acknowledges that Turnitin received your paper. Below you will find the receipt information regarding your submission.

The first page of your submissions is displayed below.

Submission author: EIMEAR COLREAVY

Assignment title: draft dissertation check Part 1 (Moodle TT)

Submission title: Eimear Colreavy Thesis EDF689

File name: 14453_EIMEAR_COLREAVY_Eimear_Colreavy_Thesis_EDF689_9...

File size: 14.93M

Page count: 154

Word count: 26,608

Character count: 147,475

Submission date: 08-Sep-2025 08:00PM (UTC+0100)

Submission ID: 2745415717





Declaration

I certify that this research, submitted for the degree of Master of Education, Maynooth University, is entirely my own work, has not been taken from the work of others and has not been submitted in any other university. The work of others, to an extent, has been cited and acknowledged within the text of my work.

Eimear Colreavy

Abstract

The purpose of this study was to enhance my teaching and facilitation of *Machnamh*. *Machnamh*, the Irish word for reflection, is a classroom practice I designed. It is a child-led reflection session held every fortnight, in which students work in groups to revisit topics learned previously in class. During *Machnamh* children reflect on their given topic and then present and re-teach the topic to the whole class. This research took place in a mixed senior national school in a large suburban town in Dublin. The chapters of this thesis outline the pathway of my research journey, in which I aimed to enhance my practice and live closer to my educational values; student autonomy, skill development and inclusion. Two interventions were selected for this: co-creating success criteria and teaching skills for collaboration. Data was collected using reflective journals, work samples, questionnaires and Photovoice. Key Findings indicated that teacher's praise, time management, the role of differentiation and teaching skills for collaboration must be considered when facilitating *Machnamh*. Every subject in the curriculum can be reflected on during *Machnamh*. It is also deeply embedded within the Principles and Competencies in the *Primary Curriculum Framework* (NCCA, 2023) and *The Future of Education and Skills 2030* (OCED, 2018). Instead of 'making time' in an already full schedule, *Machnamh* has the potential to facilitate integration, reflection, skill development and creative assessment approaches not only in my classroom, but in all classrooms. Challenges that emerged included time shortages when completing *Machnamh* as well *Machnamh* being too little or too much of a challenge for learners. My practice evolved as I aimed to overcome these challenges. I transitioned from being an instructor and assessor of *Machnamh* to a facilitator that supports self-assessment, reflection and creativity. Future research could include an exploration into further linking *Machnamh* to Universal Design for Learning (UDL) as well as incorporating more choice into the process.

Acknowledgements

Firstly, I would like to express my sincere gratitude to my supervisor, Dr. Edel Fahy. Her support, thoughtful advice, recommendations, and the time she dedicated made this thesis possible (and enjoyable!). I am deeply thankful for her guidance throughout this journey.

I would like to thank the course directors, Professor Marie McLoughlin and Dr. Suzanne O'Keefe for their organisation and management of the course, as well as all the lecturers we had over the course of the year.

I would also like to give a special thank you to my two critical friends for their invaluable feedback and advice on my work throughout this action research.

A big thank you to the 3rd class students that participated in my action research project, as without them and their valuable work and feedback, this would not have been possible. Thank you also to the Board of Management of my school for allowing me to undertake this research project.

Finally, I would like to thank my family for their support and encouragement throughout the year.

Table of Contents

Chapter 1 – Introduction	1
1.1. Introduction.....	1
1.2 <i>Machnamh</i>	1
1.3 Rationale for the Research	2
1.4 Values Statement.....	4
1.5 Research Question.....	5
1.6 Thesis Structure	6
<i>1.6.1 Chapter 1- Introduction</i>	6
<i>1.6.2 Chapter 2- Literature Review</i>	6
<i>1.6.3 Chapter 3- Methodology Chapter.....</i>	6
<i>1.6.4 Chapter 4- Data Analysis</i>	6
<i>1.6.5 Chapter 5- Conclusion</i>	7
1.7 Conclusion	7
Chapter 2- Literature Review	8
2.1 Introduction.....	8
2.2 Child-led, Collaborative Reflection	8
<i>2.2.1 What is Reflection?</i>	8
<i>2.2.2 Collaboration as Fundamental to Reflection</i>	10
<i>2.2.3 The Benefits of Child-Led, Collaborative Reflection</i>	11
<i>2.2.4 Achieving Effective Collaboration in the Classroom</i>	12
2.3 Reflection as a Creative Process	13
<i>2.3.1 What is Creativity?</i>	13
<i>2.3.2 The Importance of Creativity</i>	15
<i>2.3.3 Creating an Environment to Foster Creativity.....</i>	15
2.4 Assessment.....	17
<i>2.4.1 Should Machnamh be assessed?</i>	17

2.4.2 Assessment Techniques that Promote Autonomy	19
2.4.3 Assessment for Learning and Machnamh	21
2.5 Machnamh in Curriculum and Policy	22
2.5.1 The Primary Curriculum Framework	22
2.5.2 The Participation Framework for Children and Young People	24
2.5.3 The Future of Education and Skills 2030	26
2.6 Conclusion	27
Chapter 3- Methodology	29
3.1 Research Context	29
3.2 Educational Action Research Methodology	29
3.2.1 Educational Action Research	29
3.2.2 The Critical Theory Paradigm	30
3.2.3 Self-Study	30
3.2.4 Action Research	31
3.2.5 Living Theory Research	32
3.3 Values	32
3.3.1 Epistemological Values	32
3.3.2 Ontological Values	33
3.3.3 A Living Contradiction of Values	34
3.4 Research Actions and Action Plan	36
3.4.1 Interventions	36
3.4.2 Lesson Plan for the Reflection Sessions	37
3.4.3 Exploratory Talk	38
3.4.4 Co-creating success criteria	39
3.5 Data Collection	41
3.5.1 Mixed Methods Approach	41
3.5.2 Data Collection Tools	42
3.5.3 Triangulation	47
3.6 Data Analysis	47
3.6.1 Brookfield's Lenses of Critical Reflection	48

3.6.2 Critical Friends.....	49
3.6.3 Standards of Judgement.....	49
3.6.4 Generating Theory	50
3.7 Ethics	51
3.8 Conclusion	52
Chapter 4- Data Analysis.....	53
4.1 Introduction.....	53
4.2 Data Analysis	54
4.3 Themes	56
 4.3.1 Theme 1: Teachers' Influence on Student Autonomy	56
 4.3.2 Theme 2: Time and Energy Management.....	63
 4.3.3 Theme 3: Differentiated Support	69
 4.3.4 Theme 4: The Importance of Teaching Collaboration and Feedback Skills. ..	79
4.4 Conclusion	85
Chapter 5- Conclusions and Recommendations	88
5.1 Introduction.....	88
5.2 Overview of Research and Findings	88
 5.2.1 Theme 1- Teacher's Influence on Student Autonomy	89
 5.2.2 Theme 2- Time and Energy Management.....	89
 5.2.3 Theme 3- Differentiated Support	90
 5.2.4 Theme 4- Collaboration Skills.....	90
5.3 Embracing Values and Personal and Professional Development	91
 5.3.1 Values.....	91
 5.3.2 Teacher Identity	91
5.4 Significance of the Research- Curriculum, Policies and Frameworks	92
5.5 Limitations of the study	96
 5.5.1 Researcher Bias	96
 5.5.2 Time Constraints.....	96
 5.5.3 Research Tools	96
 5.5.4 Contextual and Data Limitations	97

5.6 Disseminating the Research.....	97
5.7 My Claim to Knowledge	98
5.8 Conclusion	98
References	100
Appendices	113

Appendices

Appendix A: Lesson Plan for the current reflective sessions that take place in the classroom

Appendix B: Lesson Plan for the revised reflective sessions that will take place in the classroom.

Appendix C: Specific Dialogue skills

Appendix D: White (2019) Self-Expression and Reflection on Goals and Success Criteria

Appendix E: Overall goals of *Machnamh* decided by the class at the beginning of Cycle 1

Appendix F: ‘Select and Reflect’ questions as prompts for children’s reflective entries (White, 2019)

Appendix G: ‘Select and Reflect’ questions as prompts for children’s reflective entries (White, 2019)

Appendix H: ‘Select and Reflect’ questions as prompts for children’s reflective entries (White, 2019)

Appendix I: ‘Select and Reflect’ questions as prompts for children’s reflective entries (White, 2019)

Appendix J: ‘Select and Reflect’ questions as prompts for children’s reflective entries (White, 2019)

Appendix K: ‘Select and Reflect’ questions as prompts for children’s reflective entries (White, 2019)

Appendix L: Pre- Intervention Questionnaire

Appendix M: Pre- Intervention Questionnaire

Appendix N: Pre- Intervention Questionnaire

Appendix O: Pre- Intervention Questionnaire

Appendix P: Information Sheet for Parents

Appendix Q: Information letter for child

Appendix R: Information letter for participants

Appendix S: Consent Form for Parents/Guardians

Appendix T: Child’s Assent Form

Appendix U: Board of Management Consent Form.

Appendix V: Additional examples of *Machnamh* sheets in Cycle 2, to facilitate all learners and UDL

Appendix W: Additional extracts from my Teacher Reflective Journal indicating collaboration in action

Appendix X: Children's self-reported feelings in the Pre and Post Intervention statement
'People listen to me'

Appendix Y: Children's self-reported feelings in the Pre and Post Intervention statement
'The same few students do the talking and the rest just listen'

Abbreviations

AR: Action Research

AfL: Assessment for Learning

CPD: Continuous Professional Development

DCYA: Department of Children and Youth Affairs

NCCA: National Council for Curriculum and Assessment

NCSE: National Council for Special Education

OECD: Organisation for Economic Co-operation and Development

PCF: Primary Curriculum Framework

UDL: Universal Design for Learning

List of Figures and Tables

Figure 1.1: The Machnamh Process

Figure 1.2: Principles of Learning, Teaching and Assessment outline in the Primary Curriculum Framework (NCCA, 2023)

Figure 1.3: My Three Core Overarching ‘Umbrella Values’ underpinning this research

Figure 2.1: Principles of Learning, Teaching and Assessment outlined in the Primary Curriculum Framework (NCCA, 2023)

Figure 2.2: Key Competencies outlined in the Primary Curriculum Framework (NCCA, 2023)

Figure 2.3: Lundy’s Model of Participation as outlined in the Participation Framework (DCYA 2019)

Figure 2.4: OECD Learning Framework 2030: The Future of Education and Skills

Figure 3.1: The Three Components of Educational Action Research

Figure 3.2: My responses to McNiff & Whitehead’s (2011) ‘Question Framework for conducting Action Research’

Figure 3.3: Outlining Action Research Plan for Cycle 1

Figure 3.4: The steps to achieve Exploratory Talk (Mercer, 2000)

Figure 3.5: Children’s Success Criteria, adapted from White’s (2019) ‘Self-Assessment and Goal Setting During the Creative Process

Figure 3.6: Outlining Schön’s (1991) Reflective Model for Reflection in and on Action

Figure 3.7: Outlining the structure of my Teacher Reflective Journal: ‘Reflection-in-Action’ and ‘Reflection-on-Action’

Figure 3.8: Outlining Brookfield’s (2017) Four Lenses of Critical Reflection; Self, Students, Peers and Scholarship

Figure 3.9: My Standards of Judgement prior to commencing Cycle 1 of my research

Figure 4.1: The Four Key Themes that emerged from the data

Figure 4.2: My Research Questions

Figure 4.3: Braun and Clarke’s Coding and Thematic Analysis Framework (2006)

Figure 4.4: Codes and Themes from the Data

Figure 4.5: Response to the Pre Cycle 1 Question ‘How do you know when you have done a good job doing *Machnamh*?’

Table 4.6: (Colreavy, Teacher Reflective Journal extracts during Cycle 1)

Figure 4.7: Erkens et al.’s (2017) ‘Five Questions to Guide Strong Feedback’ used in Cycle

Figure 4.8: Sample Child Reflective Journal in Cycle 2

Figure 4.9: Sample Student Success Criteria in Cycle 2

Figure 4.10: Results of the Pre and Post Intervention Questionnaire; How do you know that you have done a good job during *Machnamh*?

Figure 4.11: Child reflective journal (14/2/25)

Figure 4.12: Child reflective journal (28/2/25)

Figure 4.13: Children’s report on the challenges they are facing in Cycle 1

Figure 4.14: Children's self-reported feelings in Cycle 1

Figure 4.15: Comparison of Children's self-reported feelings in Cycle 1 and Cycle 2

Figure 4.16: The Children's Favourite Way to Review What They Have Learned

Figure 4.17: Photovoice picture and comment during Cycle 1

Figure 4.18: Photovoice picture and comment during Cycle 1

Figure 4.19: Photovoice picture and comment during Cycle 2

Figure 4.20: Photovoice picture and comment during Cycle 2

Figure 4.21: Reflection-on-Action in Cycle 1

Figure 4.22: Example of Success Criteria Template 1 being used

Figure 4.23: Example of Success Criteria Template 2 being used

Table 4.24: Children's Reflective Journals- Those who did not find Machnamh Challenging or Purposeful

Figure 4.25: Reflection-in-Action in Cycle 2

Figure 4.26: Responses to the Pre-Cycle 1 Question 'How do you feel when your classmates give you feedback on Machnamh?'

Figure 4.27: Results of the Pre and Post Intervention Question 'How do you feel about working with classmates on projects?'

Table 4.28: Extracts from my Teacher's Reflective Journal that Highlight the Children's use of the Explicitly Taught 'Exploratory Talk' Skills

Figure 4.29: Results of the Pre and Post Intervention Question ‘How do you feel when classmates give you feedback on Machnamh?’

Figure 5.1: Principles of Learning, Teaching and Assessment outlined in the Primary Curriculum Framework (NCCA, 2023)

Figure 5.2: Key Competencies outlined in the Primary Curriculum Framework (NCCA, 2023)

Figure 5.3: OECD Learning Framework 2030: The Future of Education and Skills

Chapter 1 – Introduction

1.1. Introduction

This chapter provides an overview of *Machnamh* and how it is conducted in the classroom. Secondly, it provides a rationale for the Action Research (AR) Project. The purpose of this study was to enhance my practice and teach in closer alignment with my values. Therefore, the third section of this chapter further explores my core values of student autonomy, life-long skill development and inclusion. To conclude the chapter, the research context is outlined along with a brief description of the preceding Thesis chapters.

1.2 *Machnamh*

This AR is aimed at improving my own practice. Currently in my classroom, I implement child-led reflection sessions. I named these reflection sessions *Machnamh*, as it is the Irish word for reflection. During the week, when I teach new topics, I write down the key information about the topic on flipchart paper. This can be information the children already know as well as new information that comes up during the lesson. Once the topic is discussed and I have written the key information on the flipchart, it then goes on display. Following on, every fortnight, the child-led reflection sessions take place. In groups of four or five, the children are given one of the flipchart sheets to review and reflect on. This sheet could be based on something we have talked about in Social, Environmental and Scientific Education (SESE), Maths, Languages or The Arts in the previous fortnight. Each group must think back to when they learned about this topic, discuss the main points and remind and re-teach each other. They can highlight key points, add extra information and refine their knowledge. When these small group reflections are done, each group stands up and presents their revised flipchart paper. They re-teach the topic to the whole class and can ask and answer questions.

Figure 1.1 outlines the four stages of *Machnamh*.



Figure 1.1: The Machnamh Process

1.3 Rationale for the Research

Prior to conducting this research, I observed many skills being developed during *Machnamh*.

Cognitive and metacognitive skills were in use as the children reflected on and refined their knowledge, critically evaluated, asked questions and made connections in their learning. The children were also developing their communication skills as they reflected in small groups, orally presented to the class, and asked and answered questions.

Many links exist between *Machnamh* and the *Primary Curriculum Framework* (PCF).

Machnamh links to several of the Principles of Learning, Teaching and Assessment (Figure 1.2 below) as well as several of the Key Competencies outlined in the Framework (NCCA, 2023), such as Being an Active Learner, Being a Communicator and Using Language.



Figure 1.2: Principles of Learning, Teaching and Assessment outlined in the Primary Curriculum Framework (NCCA, 2023)

However, these observations are not findings or truths, but rather considered as information collected during the reconnaissance phase of my research. This reconnaissance phase is the initial, informal exploration of a topic before beginning the Action Research (Carr & Kemmis, 1986). During the reconnaissance phase, the researcher can develop an understanding of the topic before the Action Research takes place (Whitehead, 2018). As a result, the purpose of this study was to conduct formal research into *Machnamh*. This included investigating the structure I had put in place for *Machnamh* and the role I played during *Machnamh*, with the aim of identifying how both could be enhanced and brought into closer alignment with my

values. Claims about the benefits and outcomes of *Machnamh* could only be made once the stages of Action Research were completed, and concrete, ethically gathered data had been collected.

1.4 Values Statement

I value Student Autonomy, Life-Long Skill Development and Inclusion in my classroom. Student autonomy refers to children taking responsibility for their own learning, making choices, and reflecting critically on their progress (Deci & Ryan, 2013). To cultivate this in the classroom, students must be given opportunities to self-direct, self-assess, investigate, and critically think (Reeve, 2006). Life-long skill development relates to the nurturing of skills that the children in my class can use across the curriculum, both inside and outside of school and in the future (Dewey, 1930). This includes skills such as critical thinking, collaboration, communication, reflective practice, questioning, exploring, and constructing new knowledge (OECD, 2018). My final core value is inclusion. This value reflects my commitment to creating a welcoming learning environment in which every child feels respected, valued, and able to participate fully (Meyer et al, 2014). By having an inclusive approach, I aimed to promote not just academic success, but also social belonging and emotional well-being, ensuring that all students could engage meaningfully in *Machnamh*. These three core values; student autonomy, life-long skill development and inclusion are overarching values, also known as ‘umbrella values’, that encompass other values I hold about education (Figure 1.3 below).

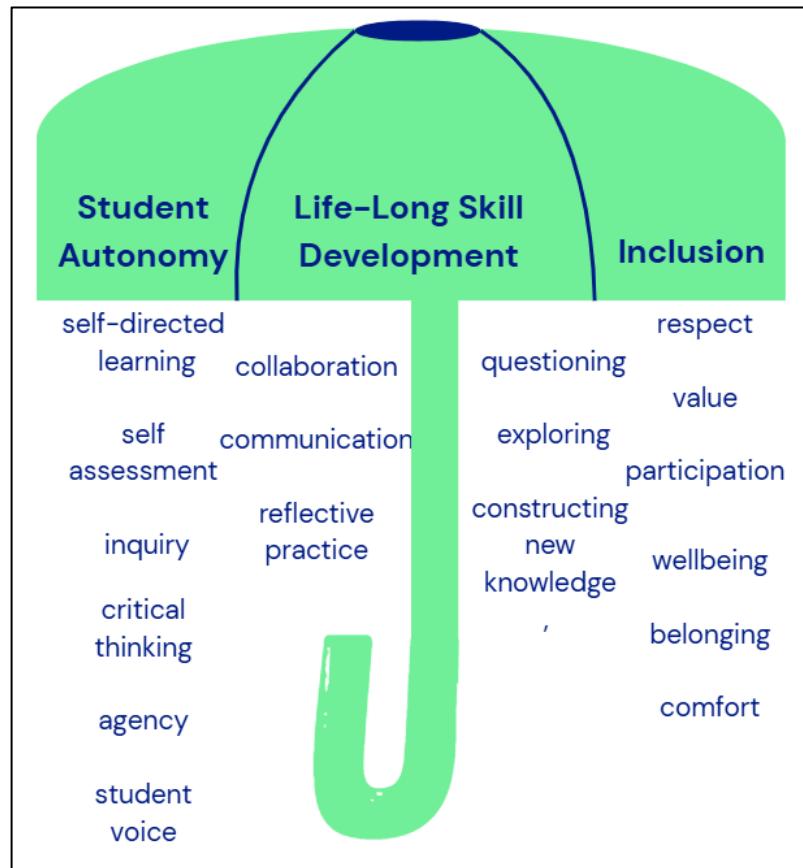


Figure 1.3: My Three Core Overarching 'Umbrella Values' underpinning this research

Both ontological and epistemological values are concerned in this study, both of which are discussed in further detail in Section 3.3. However, it is important to note at the outset that these values were the driving force behind the research. Through carrying out this study, my aim was to improve my practice and live out my values more authentically in the classroom.

1.5 Research Question

As outlined in the title, the aim of this study was to research how I could encourage reflective practice and student autonomy through *Machnamh*, a collaborative and creative approach to learning. This included looking at how I could enhance children's learning and development through *Machnamh*. It also included an exploration of how I could support children to take

ownership of their learning and engage in self-reflection. As evident in the phrasing of these questions, the focus was on me, the educator, and how I could move my practice in the direction of my values outlined above. This is a core aspect of Educational Action Research, which is discussed further in Section 3.2.

1.6 Thesis Structure

1.6.1 Chapter 1- Introduction

This chapter provides an overview of my research, including a description of *Machnamh*, the rationale for the research and an overview of my values.

1.6.2 Chapter 2- Literature Review

This chapter provides an analysis of current literature that exists on the topic of child-led learning and reflection. The elements of collaboration, creativity and assessment discussed in the literature helped to inform the interventions I put in place for the Action Research.

1.6.3 Chapter 3- Methodology Chapter

Chapter three outlines the research context, a description of Action Research as a methodology, my values and my Action Plan. This chapter also outlines the interventions I put in place and the research tools used to gather the data, as well as the ethical considerations given to the study.

1.6.4 Chapter 4- Data Analysis

Chapter four is an analysis of the data collected during the study. Through thematic analysis, four key themes emerged:

-Teacher's Influence on Student Autonomy

-Time and Energy Management

-Differentiation

1.6.5 Chapter 5- Conclusion

Chapter five is an overall review of the findings from the study. This chapter also outlines how I am living according to my stated values as well as the implications of this study for future practice. Recommendations for future research are also considered in this chapter.

1.7 Conclusion

This chapter began with a description of *Machnamh*. *Machnamh*, the Irish word for reflection, is a classroom practice I developed that sees children reflecting on their learning and re-teaching the class. While I see many benefits to *Machnamh* in my classroom, the aim of my research was to conduct robust, rigorous and credible research into this practice, determine the benefits of *Machnamh* and identify areas for improvement in my practice. This led to a brief discussion of my values (student autonomy, life-long skill development and inclusion) which were the driving force behind the research. Finally, this chapter outlined a brief description of each of the preceding chapters in the thesis. These chapters outline the pathway of my research journey, in which I reflected on my classroom practice and facilitation of *Machnamh*, with the aim of enhancing my practice and living closer to my educational values.

Chapter 2- Literature Review

2.1 Introduction

This Action Research was based on improving my practice and aligning closer to my values as I explored the question; ‘How do I foster reflective practice and student autonomy through *Machnamh*, a collaborative and creative approach to learning?’ Specifically, my aim was to improve the reflection sessions I facilitated in the classroom. Therefore, this Literature Review explores research that already exists on the topic of child-led reflection and informed my research and action plan.

The literature highlights three areas of focus: child-led, collaborative reflection, reflection as a creative process and the assessment of reflections. To begin, child-led, collaborative reflection is addressed. Gaining multiple perspectives and reflecting with others rather than in isolation is seen to foster deep reflection (Boud et al., 2006). Following on, the element of creativity is reviewed. Literature highlights that many aspects of creativity and creative skills are linked to this type of practice (White, 2019). Finally, the topic of assessment is addressed. Many find that when reflection is assessed, it limits autonomy (Bradbury et al., 2010), yet assessment has been highlighted as vital to progressing creativity (White, 2019). This was crucial to explore as I wanted to ensure that I was facilitating autonomy rather than hindering it. To conclude, a summary of these three aspects is provided to reaffirm their significance. This reiterates the importance of collaboration, creativity, and assessment in aligning me with my values when facilitating *Machnamh* in my classroom.

2.2 Child-led, Collaborative Reflection

2.2.1 What is Reflection?

Reflection enables us to become aware of ourselves in the world and make meaning from experiences (Greene, 1995). Bradbury et al. (2010) find that ‘reflection’ is often interpreted

and implemented in various ways. They argue that reflection and reflexivity (being able to reflect) is a *practice*. By using this term, it becomes contextualised and the actions of the person doing the reflecting is taken into account (Boud et al., 2006). The term ‘Productive Reflection’ refers to reflection focused on practice. Boud et al.’s (2006) ‘Productive Reflection’ has six key features; it is collective rather than individual, contextualised (links learning to work), connects people involved, developmental in nature, and a practice that is open, unpredictable and dynamic. This explanation of reflective practice and productive reflection is crucial to highlight at the outset. Throughout this Literature Review, when the term ‘reflection’ is used, it is this ‘Productive Reflection’ and its features that is being explored. This is because each of its features ensure that the child is active and at the centre of a collaborative, reflective practice. Reflection, when seen in this way, links to all three of my core values (student autonomy, inclusion and life-long skill development). As well as Boud et al. (2006), Wellman (1985) has done extensive research into further defining reflection and metacognition (becoming aware of your thinking processes), with a particular focus on children’s development. He found that it has two aspects: awareness of thinking (knowledge of cognition), and ability to control and regulate thinking (regulation of cognition). This correlates with Boud et al.’s (2006) research, that reflection is a practice, and one that requires deliberate engagement and action from the reflector.

Schön (1991) claims that educators should enable children to do ‘reflection-on-action’, i.e., reflect on what has happened. Froebel (1887) concurred, claiming that as well as having ‘knowledgeable and reflective educators’, children should be encouraged to reflect on their learning to deepen their understanding. Teacher reflection has been widely acknowledged in literature and curricular materials (NCCA, 2017). However, my Action Research focuses

specifically on the lesser discussed ‘child reflection’ which, if facilitated correctly, would ensure that my values of student autonomy and inclusion are at the forefront of my teaching.

2.2.2 Collaboration as Fundamental to Reflection

Carr (2011), Boud et al. (2006), and Bradbury et al. (2010) among many others, argue that reflection is not only an individual process, but one that can be strengthened through social interactions, shared experiences and discussions with others. Collaborative reflection often leads to insights that may not emerge through individual reflection alone (Boud et al., 2006). This idea of children learning from social interaction originates from Vygotsky’s and Freire’s theory on social constructivism (Brostrom, 2006). During collaboration and discussion, assumptions are challenged, and thoughts are clarified as students bounce ideas and knowledge off each other, assist in refining plans and making decisions (Reeves, 2015; Boud et al., 2006; Brostrom, 2006). Prior to the interventions, the children collaborated and discussed topics that they had already learned about in class. Following their small group reflection on the topic, they were given the opportunity to share their reflections with the class and receive feedback from their peers. This practice is in line with Collier’s (2010) research, who claimed that creative work such as this should be ‘put on stage’ as it allows for a dynamic and performative way of showcasing understanding and gaining feedback (further discussed in Section 2.3). This highlights that for me to encourage child-led reflection, working with others must remain as a core component. Collaboration also ensures that I am facilitating work in an inclusive environment (one of my core values), as it is experiential, includes social-emotional learning, is strengths-based and builds relationships (Miller et al., 2005).

While I see many advantages of *Machnamh* in my classroom, the following section reviews literature and policy that has examined, demonstrated and highlighted the benefits

and importance of work that involves collaborative reflection. This is worth noting as it links my classroom observations to literature and gives purpose to my Action Research Project.

2.2.3 The Benefits of Child-Led, Collaborative Reflection

While information is important, inviting children to reflect on their learning, manipulate information, re-imagine it, revisit it, and build on it, helps them become more sophisticated thinkers and is critical for the growth of our societies (White, 2019; Rothstein & Santana, 2014). Arnold (1979) and Froebel (1887) claim that an experience only becomes meaningful when met by the act of reflection. Therefore, by encouraging collaborative reflection, learning can be made more meaningful, and the life skill of ‘reflective thinking’ can be fostered in my classroom.

Collaborative reflection fosters empowerment, as the children feel they have control over their learning (Dueck, 2014). In addition, when children are given this control, and the chance to explain and reason, they better demonstrate their learning (Dueck, 2014). This of course is useful for assessment, which is considered further in Section 2.4. Tan (2004:103) finds that ‘when learners perceive they have control and responsibility of the learning process, methods and strategies, they are likely to be committed to the task and thus be motivated to achieve’ i.e., develop their intrinsic motivation. In addition, this practice correlates with my three core values of student autonomy, inclusion and life-long skill development. As outlined in the *Primary Curriculum Framework* (NCCA, 2023:10), ‘children need to be able to communicate and connect with others, to participate in wider society, share meaning, and develop new knowledge’. Every element of this competency aligns with the skills cultivated during *Machnamh*. However, despite this crossover with curriculum competencies, Sweet (2003) warns that collective approaches often foster disagreement or controversy due to the

diverse perspectives, values, and experiences being shared. This diversity can lead to conflicts, as people have varying beliefs about how to prioritise goals and propose solutions (White, 2019). While the bringing together of multiple voices can create a space for debate, Sweet (2003) also claims that collective approaches have the potential to look at topics in a more inclusive and meaningful way. Multiple approaches can produce a richer pool of ideas, foster mutual understanding and promote dialogue (Bradbury et al., 2010). If nothing else, students learn effective communication skills (respect, listening, turn taking) during collaboration and reflection (White, 2019). While I acknowledge the risk of clashing perspectives and views, I value life-long skill development, and disagreements, conflicts and difference of opinions are inevitabilities when many ideas come together (White, 2019).

Rather than knowledge being something I possess, that I can pass on or transfer to the children, knowledge is a concept that constantly evolves and develops through interactions with others (Freire, 1972). White (2019:186) states that ‘collaborative reflection can be a very powerful way to invite meaningful introspection’ and therefore, collaboration serves as a core component of my research. It is clear from the above literature that the advantages of reflecting together with others is not just something that exists in my classroom. Collaborative reflection adds a social dimension that enriches the depth of reflection (Boud et al., 2006; Bradbury et al., 2010) and therefore is an integral part of the child-led reflection I want to nurture and enhance in my classroom.

2.2.4 Achieving Effective Collaboration in the Classroom

To promote collaboration and the use of the ‘language of thinking’ in my classroom, Mercer’s idea of ‘Exploratory Talk’ is valuable to consider. Mercer (2000), coined the term ‘Exploratory Talk’ to describe the time in which partners engage critically and constructively with each other’s ideas and ‘knowledge is made publicly accountable, and reasoning is visible’

(Mercer, 2000:153). By explicitly teaching dialogue skills and establishing ground rules for talking, Mercer ensures that true *collaborative* reflection is facilitated. It is this true collaboration that I wanted to cultivate in my classroom as it would bring me closer to my value of inclusion and life-long skill development. As a result, Mercer's model for 'Exploratory Talk' was applied during the intervention of this Action Research (further discussed in Section 3.4.3).

2.3 Reflection as a Creative Process

2.3.1 *What is Creativity?*

When we think of creativity, we may think of inventiveness, new thinking or creation of a new product or idea not yet imagined (White, 2019). For this reason, it is clear why the creative aspect of reflection is rarely emphasised (Collier, 2010). However, creativity is not solely about idea generation, but about evaluating ideas and approaches as well as reflecting on inspiration (Sawyer, 2006). White (2019:5) notes that 'looking at existing ideas in new ways is a creative act. Imagining a new perspective or mode of expressing an idea that already exists is a creative event'. She goes on to say that 'a truly creative effort requires the learner to return to ideas again and again, considering multiple perspectives, uses, adaptations, and applications' (White, 2019:15). This definition of a 'creative effort' correlates with what the children do during *Machnamh*.

According to Kelly's (2012) 'Categories of Creativity', collaborative reflection would fall under 'interpretive'. That includes reflecting on, modifying or interpreting existing ideas. While many consider creativity to be about 'originality or inspiration', it also refers to the 'processes of deep thinking, crafting, revising and refining' (Gresham, 2014:48). Drapeau (2014:147) agrees, claiming that 'when students are thinking creatively, they are applying

known or learned content and extending their knowledge by considering possibilities, options, and solutions'. This literature highlights that when children are given the opportunity to collaborate and reflect on a topic they have covered in class, they are engaged in a creative act. The role that these elements of creativity and imagination play in the reflective process are seldom discussed (Collier, 2010) and prior to reviewing literature, I did not see the creative element to *Machnamh*. The acts of evaluating, analysing, summarising and refining their knowledge, each link to the creative thinking that Drapeau, White, Gresham and Collier promote above.

Collier (2010) uses the term 'self-spectatorship' to describe how practitioners must become the spectator and audience of their *own* creative reflections. They must visualise an event in the past, 'put it on stage' in their head and watch it from the audience. Children are 'self-spectators' when they work in small groups and reflect on their given topic. Their peers then become the spectators when they go 'on stage' and present their reflections. When learning is put on stage, it allows for a dynamic and performative way of showcasing understanding (Collier, 2010). It is important to give children the chance to hear about the work of their peers, as artistic meaning isn't solely about the artist, 'but is often a creative interpretation by the viewer' (Sawyer, 2006:172). When they share their work, creativity is experienced by all children in the classroom (White, 2019). Prior to this research, when the children presented their reflections, their classmates often asked their own questions. This is a sign of divergent thinking- that is, thinking broadly and *creatively* as they are narrowing down, assessing, analysing, synthesising and comparing (Rothstein & Santana, 2014). Therefore, this peer-feedback and questioning was an important element to retain during *Machnamh*.

2.3.2 The Importance of Creativity

The above literature would indicate that *Machnamh* has the potential to be highly creative.

The children review topics in groups and re-teach them to their peers. Historic research conducted by Csikszentmihalyi (1990), Maslow (1954) and Rogers (1954) found that doing creative work is one of the most significant experiences of one's life. As the development of learners into thinking human beings depends on the presence of creativity in our classrooms (White, 2019), it is my duty as an educator to facilitate it in my classroom. 'Unlocking and promoting children's creative potential impacts positively on their motivation, self-esteem, and overall development' (NCCA, 2020:11). In addition, 'Being Creative' is acknowledged as one of the key competencies in the *Primary Curriculum Framework*; stating that 'as children develop this competency, they come to understand that creative activity involves enjoyment, effort, risk-taking, critical thinking, and reflection' (NCCA, 2023).

2.3.3 Creating an Environment to Foster Creativity

The teacher plays a critical role in establishing and maintaining the opportunity for learners to explore, question, and gather ideas (White, 2019). Teachers' actions, words, decisions and responses nurture processes that invite the children to wonder, imagine, and explore (White, 2019). The level of participation depends on a variety of factors including 'if they trust the teacher and the classroom climate' (Erkens et al., 2017:117). Debating, imagining alternatives, reflecting, wondering, analysing, defending and reworking can all carry elements of emotional risk (Hattie & Donoghue, 2016). For educators to unlock creative spaces, emotional safety must be supported (White, 2019). During *Machnamh*, both the small group collaborations and the presentations of work carry this 'emotional risk'. Setting clear expectations for both creator and audience, supporting and acknowledging effort, and re-

engaging children in the task are just some of the techniques that can be employed to build this trust and reduce emotional risk (Morgan, 2015; Renzulli, 2000; White 2019; Hattie & Donoghue, 2016). This is vital to consider when facilitating *Machnamh*, as high levels of emotional risk and lack of safety do not align with my value of inclusion.

Machnamh begins with me teaching a topic and then giving responsibility to the children to reflect on it and re-teach it. If I expect children to think flexibly, critically, refine and re-phrase knowledge, ‘students must know and understand the content beyond a surface level’ (Drapeau, 2014:20). Reeves (2015:4) puts it another way, ‘you can’t think outside the box if you don’t first understand the box’. Therefore, I as the educator must ensure that I have taught these topics thoroughly and effectively prior to facilitating creative reflection.

Establishing creative spaces provides the intellectual, physical and emotional foundation necessary for creativity as well as the assessment that supports it (White, 2019). By giving children ownership of topics and enabling them to reflect and re-teach them to the class during *Machnamh*, true creativity is being facilitated, as ‘true creativity is borne out of ownership’ (White, 2019:86). The literature on ownership, agency, autonomy and child’s voice has been widely discussed and promoted in recent years (Hedges, 2022). As creativity is an intrinsic process that comes from the creator, we must place responsibility with the students doing the creating (White, 2019). This means walking alongside them as they negotiate ideas and materials, explore their options and make decisions (Brostrom, 2006). The teacher plays a critical role in promoting ownership and autonomy in a creative environment. The work of Montessori and Piaget, and at the heart of The Reggio Emilia approach, is the view that creativity flourishes when children have freedom to explore and create without adult interference or restrictions (Mooney, 2000). Brostrom (2006) also speaks about the

importance of teachers becoming co-constructors of understanding rather than transmitters of information, if child autonomy is to be present in the classroom. Students are used to looking to teachers for questions and answers, but in this context, the teacher acts as a catalyst for thought and they shift learning towards the student (White, 2019). During this time, teachers can help students reflect, facilitate goal setting, make time for self-assessment and in doing so, help them develop confidence (White, 2019).

2.4 Assessment

At this stage in the Literature Review, the collaborative and creative aspects of *Machnamh* have been clearly outlined. In addition, the critical role of the teacher in facilitating an environment for this creative process has been highlighted. Now the aspect of assessment is addressed. Here, I am not asking ‘how can I assess the success of my intervention?’, as this is explored in the Chapter 3. Instead, I analyse the literature that discusses the critical role that assessment plays in reflection and creativity.

2.4.1 *Should Machnamh be assessed?*

Boud et al. (2006) claim that reflection can become counterproductive when reflective processes become procedures, and attempts are made to assess them. Boud, along with many other contributors to this topic, criticise educators’ attempts to proceduralise reflections through recipes and checklists (Boud cited in Bradbury et al., 2010). Eraut (1995), Bright (1996) and Boud & Walker (1998) among many others, reject how demands for evidence of reflection have been widely accepted and incorporated into appraisals and reviews in the form of diaries, logs, portfolios and other means. When I facilitated *Machnamh* prior to the interventions, my assessment techniques were as Boud et al. (2006) claim ‘procedural’ as I attempted to assess the children with my checklist and observation notes. However, this can negatively affect the child’s intrinsic motivation as they look to the teacher for answers and

affirmation (Appleton et al., 2008) and therefore made me question whether student autonomy was genuinely evident in my classroom.

While assessment of reflective work is largely critiqued in literature, White (2019) finds that assessment plays an important role in the creative process. Creativity is a difficult concept to describe and often it is viewed as a quality that cannot be measured or assessed (Athanasou, 1999). Educators may be uncomfortable with assessing a creative process or product because they believe that it is subjective (White, 2019). However, developing creative skills is not about opinion, but about determining whether the processes used have achieved the goals set and the degree to which it meets success criteria (White, 2019). White (2019) believes that not only should creativity be assessed, but views assessment as *the key* to progressing through the stages of creativity. Consequently, for the purpose of this study, my focus was directed to using assessment as a tool to enhance creativity, rather than continuing to do summative assessment on their reflections, which had likely been limiting their autonomy. Specific assessment strategies can be implemented to enhance creativity, while others limit autonomy, intrinsic motivation and risk taking (White, 2019; Collier 2010). Addressing this was essential before starting my Action Research to ensure that any teacher evaluation and assessment techniques I conducted were beneficial rather than counterproductive with regards to bringing me closer to my values. The following section explores assessment techniques that are essential to fostering creativity and intrinsic motivation according to the literature.

2.4.2 Assessment Techniques that Promote Autonomy

2.4.2.1 Co-creating goals and success criteria

Assessment ‘connects what is happening in the moment to a desired future state’ (White, 2019:33). This ‘desired future state’ must be made clear to the students and can be achieved using goals and success criteria (White, 2019). Kohn (2006) finds that success criteria can limit autonomy, as students often shift their focus from exploration to achieving specific criteria. As a result, I needed to be cautious in providing success criteria as I value autonomy in my classroom. To incorporate success criteria while simultaneously encouraging intrinsic motivation, students should be involved in creating the success criteria (White, 2019). Through the joint establishment of goals that are achievable, intrinsic motivation is simultaneously developed (Erkens et al., 2017). The most powerful reason for student involvement in assessment is to deepen their understanding and learning experiences (Race 2001; Sadler, 1989). This of course is the same reason that I facilitate *Machnamh*.

Self-assessment of their success criteria is crucial. Successful self-assessment focuses on the actions and decisions that have contributed to the goals and success criteria created by both students and teacher (White, 2019). This definition of self-assessment may be difficult for children to grasp if they have previously encountered self-assessment that asks them to rate or reflect on how good they *have done*, rather than the decisions and actions they *are doing* that are achieving their goals (Hattie & Donoghue, 2016). Self-assessment, when done in this constructive way, helps children to recognise the next steps in their learning and become more independent and motivated (NCCA, 2020). In saying this, self-assessment skills take time to develop and learn. The skills can be taught or modelled by the teacher and practiced by the child until they feel comfortable using them independently (NCCA, 2007).

This is important to note as self-assessment is a core component of my intervention (Section 3.4.4).

2.4.2.2 Multiple sources of feedback

Having multiple sources of feedback during *Machnamh*, rather than solely from the teacher, is an important aspect of assessing creative work (White, 2019). Self, peer, and teacher assessment must precede feedback (Miller, 2015), and the feedback that comes from this assessment should then enable students to judge the quality of their work and to monitor themselves during the process (Sadler, 1989). Feedback from others helps children progress through the stages of creativity and reflect on their creative processes (White, 2019). Feedback from a variety of sources (teacher and peers) ensures that children remain autonomous yet gain input into how they can improve (William & Black, 2018). It keeps them in the driver's seat as they select the feedback they will apply and thus, reinforces student autonomy and cognitive flexibility (Miller, 2015). Without this, the likelihood of them looking to the teacher for answers is greater (White, 2019), and I run the risk of limiting student autonomy.

2.4.2.3 Observation

Greene (1995:10) explains that 'one must see from the point of view of the participant in the midst of what is happening if one is to be privy to the plans people make, the initiatives they take, the uncertainties they face'. By watching our students reflect, by listening to them process their thinking, and by examining the reflections they are producing, we can come to understand how comfortable they are with their own creative process and how comfortable they are with the reflection stage (White, 2019). Having a 'Pedagogy of Listening' (listening to thoughts, ideas and theories from children and treating them with respect) is the foundation of teacher assessment and feedback (Hedges, 2022). White (2019:161) would consider this to

be ‘the most important assessment strategy for teachers’ when children are expressing their creative work. That is ‘to step back from feedback or instruction and listen (or read, or view) when students are ready to express their creativity’ (White, 2019:161). For me to encourage autonomy and ensure my reflections are child-led rather than teacher-led, I must have this ‘pedagogy of listening’ and give them the opportunity to express their creative reflections.

2.4.3 Assessment for Learning and Machnamh

The assessment strategies above are the ‘key’ to fostering creativity (White, 2019) and therefore were vital to consider as interventions to bring me closer to my values and enhance my practice. The primary purpose of the strategies above is to foster creativity. Co-creating goals and success criteria, observation and self, peer, and teacher feedback are essential to the creative process (White, 2019). They help children re-focus on their task, gain multiple perspectives, justify and explain their decisions and review their peers' creative work (Hedges, 2022). Without them, creativity cannot reach its full potential (White, 2019). In addition to this, these assessment strategies can contribute to Formative Assessment /Assessment for Learning (AfL). AfL ‘emphasises the child’s active role in his/her own learning, in that the teacher and child agree what the outcomes of the learning should be and the criteria for judging to what extent the outcomes have been achieved’ (NCCA, 2007:9).

In line with the Phenomenological Approach to assessment, the methods above are not prescriptive or standardised, but child-centred, reflective and considerate of context (Brostrom, 2006), and therefore link to all three of my values. White (2019) highlights that society has come to view assessment as separate from the act of learning. However, assessment must be something teachers do *with* learners or *with* our guidance and support, rather than something we do *to* learners (White, 2019). Effective assessment (using the

techniques above) drives the creative task forward, makes thinking visible, encourages autonomy and places the learning in the children's hands (Davies, 2011; White, 2019; Collier, 2010). Without consideration of these strategies, I risked the facilitation of assessment that did not correlate with my values of student autonomy, inclusion and life-long skill development. Assessment techniques that are teacher-led, teacher-reviewed, and neither created nor meaningfully used by the children undermines student autonomy. In addition, inclusion is compromised, as the student's voice is not given genuine consideration. Finally, the literature has highlighted that it restricts their opportunities to develop essential skills such as critical thinking, self-assessment, and reflection.

2.5 *Machnamh* in Curriculum and Policy

At this point the collaborative, creative and reflective aspects of *Machnamh* have been outlined. As stated at the outset, *Machnamh* is a classroom practice that I created and therefore has no specific allocated time in the curriculum. However, many aspects of *Machnamh* link to the curriculum as well as national and international policies and frameworks.

2.5.1 *The Primary Curriculum Framework*

The *Primary Curriculum Framework* 'supports a variety of pedagogical approaches and strategies with assessment central to learning and teaching' (NCCA, 2023:4). Therefore, rather than 'making time' in an already full classroom schedule, *Machnamh* has the potential to act as a methodology that facilitates integration, reflection and creative assessment approaches. Every subject in the *Primary Curriculum* can be reflected upon during *Machnamh*. As well as integrating subjects, it allows for the integration of Principles and Competencies. *Machnamh* is deeply embedded within all eight of the Principles of Learning,

Teaching, and Assessment (Figure 2.1), highlighting its strong compatibility with the *Primary Curriculum Framework* and its potential to enhance reflective practice in today's classrooms.

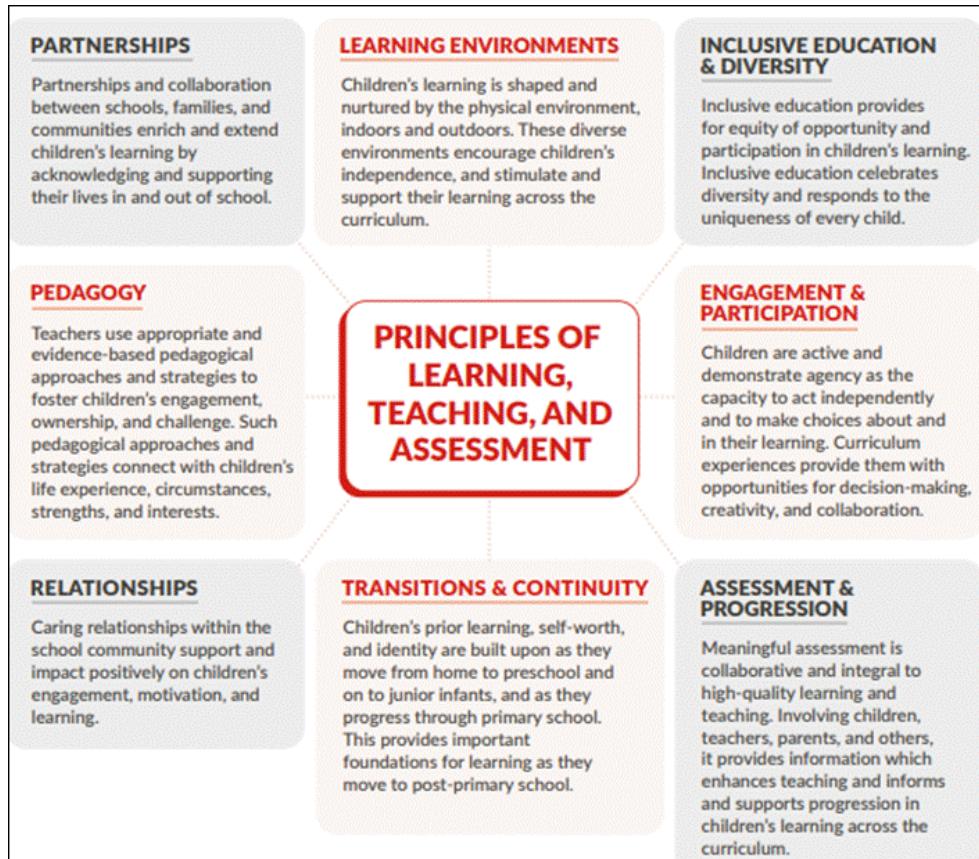


Figure 2.1: Principles of Learning, Teaching and Assessment outlined in the Primary Curriculum Framework (NCCA, 2023)

In addition to these Principles, many of the Competencies in the curriculum such as 'being well', 'being an active citizen', 'being creative' and 'being a communicator and using language', are all promoted during *Machnamh* (Figure 2.2).

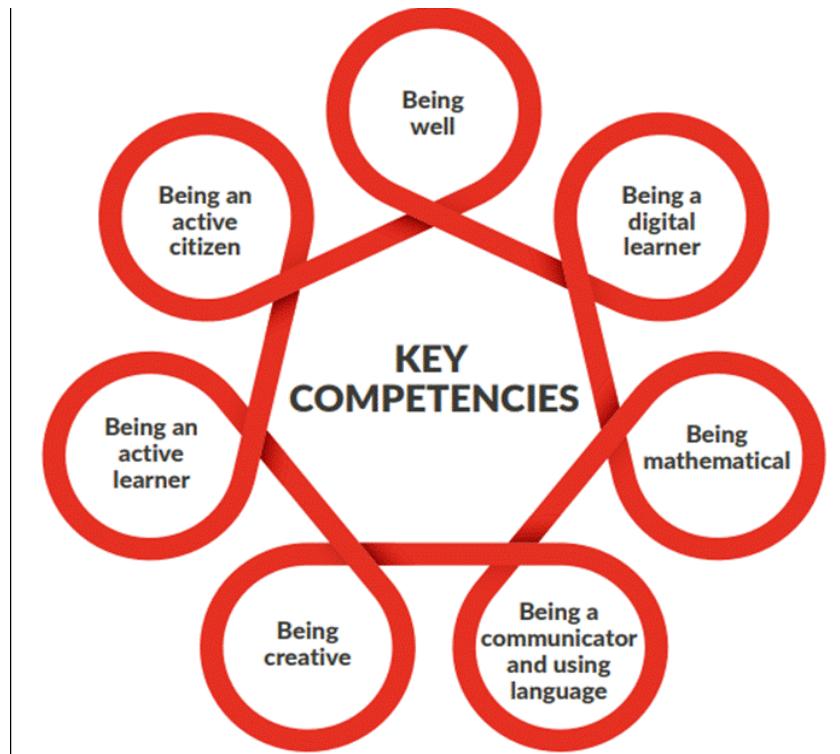


Figure 2.2: Key Competencies outlined in the Primary Curriculum Framework (NCCA, 2023)

2.5.2 The Participation Framework for Children and Young People

This Framework developed by the *Department of Children and Youth Affairs* (DCYA) states that Lundy's Model of Participation is an ideal model to achieve Article 12 of the Convention of the Rights of the Child (DCYA, 2019). As evident in Figure 2.3 below, Space, Voice, Audience and Influence should all be present in decision-making processes that involve children.

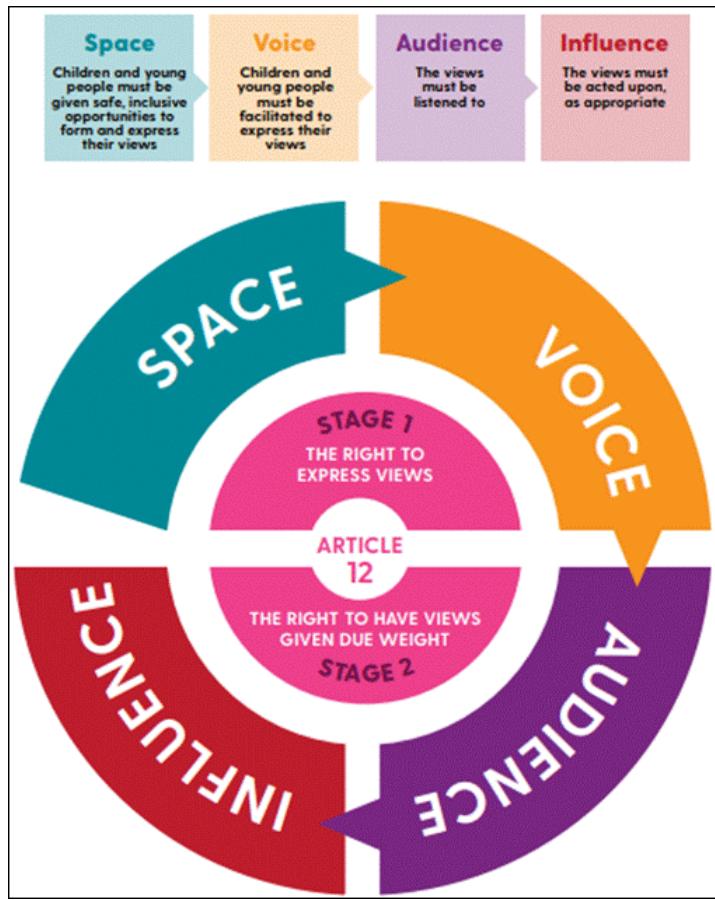


Figure 2.3: Lundy's Model of Participation as outlined in the Participation Framework (DCYA 2019)

While Lundy's Model of Participation was developed to support children's right to be heard in decision-making, its core elements—Space, Voice, Audience, and Influence—should be present in all aspects of children's lives, including everyday classroom practices like *Machnamh*. Teachers must provide students with a dedicated and structured space to express their voice, ensure that they are genuinely listened to, and be conscious that what they say can meaningfully influence classroom learning (DCYA, 2019). Throughout this research, I endeavoured to ensure that my actions and interventions aligned with this model.

2.5.3 The Future of Education and Skills 2030

Looking beyond the Irish Context, the *Organisation for Economic Co-operation and Development* (OECD) with over 80 member nations, launched The Future of Education and Skills 2030 project in 2018. The aim of this project was to help countries re-evaluate and redesign their education systems to better prepare learners for the future. This involves equipping students with the knowledge, skills, attitudes, and values necessary in a rapidly changing world (OECD, 2018). Figure 2.4 below outlines a comprehensive view of the competencies that students need to thrive according to the OECD. The framework supports *Machnamh* as it encourages learners to integrate their knowledge, skills, and values rather than solely learn facts. There is an emphasis on meta-cognitive skills and epistemic knowledge, both of which align with reflective thinking. Most crucially, it supports the idea of children being active in their learning and making informed, reflective decisions with others. These links between the OECD Framework and *Machnamh* also correlate with my core values of student autonomy, inclusion, and skills for life-long learning.

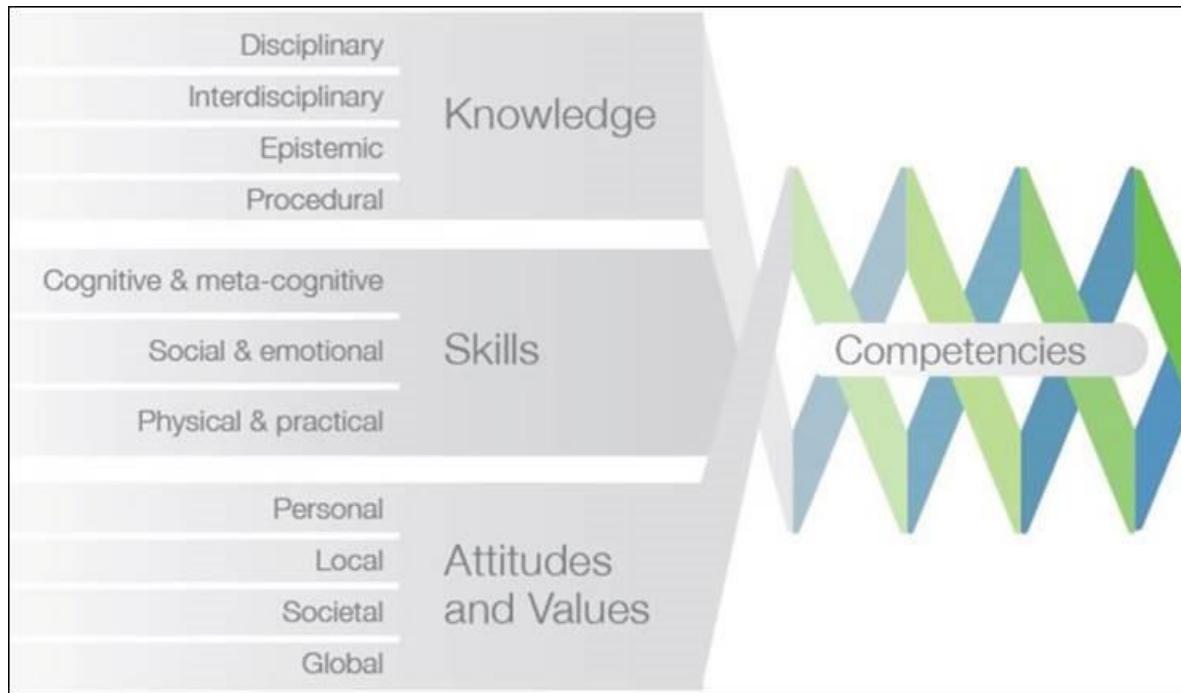


Figure 2.4: OECD Learning Framework 2030: The Future of Education and Skills

2.6 Conclusion

The aim of this Action Research was to enhance my facilitation of *Machnamh* in the classroom and align closer to my values of student autonomy, inclusion and life-long skill development. To do this, I was tasked with researching the literature that currently exists on this topic of child-led reflection.

Literature highlights that reflection is strengthened through social interaction as children share thoughts, build and refine knowledge and help each other learn (Boud et al., 2006; Brostrom, 2006). Therefore, it was crucial for me to continue fostering collaboration during *Machnamh* and actively seek further opportunities for children to work together. The aspect of creativity was also explored in this Literature Review, as creativity is not solely about idea generation. ‘Looking at existing ideas in new ways is a creative act’ and ‘imagining a new perspective or mode of expressing an idea that already exists is a creative event (White,

2019:5). To facilitate this work, teachers need to create a safe environment, give children ownership of learning and have a Pedagogy of Listening (Hedges, 2022).

The aspect of assessment was also addressed. Much of the literature challenges the use of checklists and portfolios that reduce reflection to a superficial, box-ticking exercise. However, specific assessment strategies have been highlighted as vital to progressing creativity (White, 2019). Consideration of this literature ensures that *Machnamh* is indeed child-led and my values of autonomy, inclusion and life-long skill development are being lived out in my practice.

Finally, relevant curricula, policies and frameworks that link to *Machnamh* were reviewed. This was an important step to justify the research, as *Machnamh* is a practice I developed and does not have a dedicated time allocation in the curriculum. Taking on board this research already conducted, the following section outlines the methodology and design of my Action Research.

Chapter 3- Methodology

The purpose of this research was to answer the question ‘How do I foster reflective practice and student autonomy through *Machnamh*, a collaborative and creative approach to learning?’

To do this, I looked at enhancing the reflective sessions I was already facilitating. I aimed to discover whether teaching children specific collaboration skills and offering opportunities to set and monitor their own success criteria would enable them to reflect on pre-learned topics effectively and present these reflections to their peers. These actions were chosen in line with my objective of fostering student autonomy, inclusion and lifelong skill development in my classroom.

3.1 Research Context

This research took place in a mixed senior national school in a large suburban town in Dublin. This school is in a middle-lower class setting and caters for over 600 students. Out of 26 children, 26 children gave consent to participate. The children in third class were aged between 9 and 10 years old. The research was carried out over a 10-week period, from February 2025 to May 2025. Data was collected during the fortnightly *Machnamh* sessions during which the interventions were integrated.

3.2 Educational Action Research Methodology

3.2.1 Educational Action Research

The methodological approach I chose to conduct my research was Educational Action Research as it aligns with the critical theory paradigm (Section 3.2.2). Educational Action Research is a combination of Self-Study, Action Research and Living Theory Research (Sullivan et al., 2016) as outlined in Figure 3.1 below.

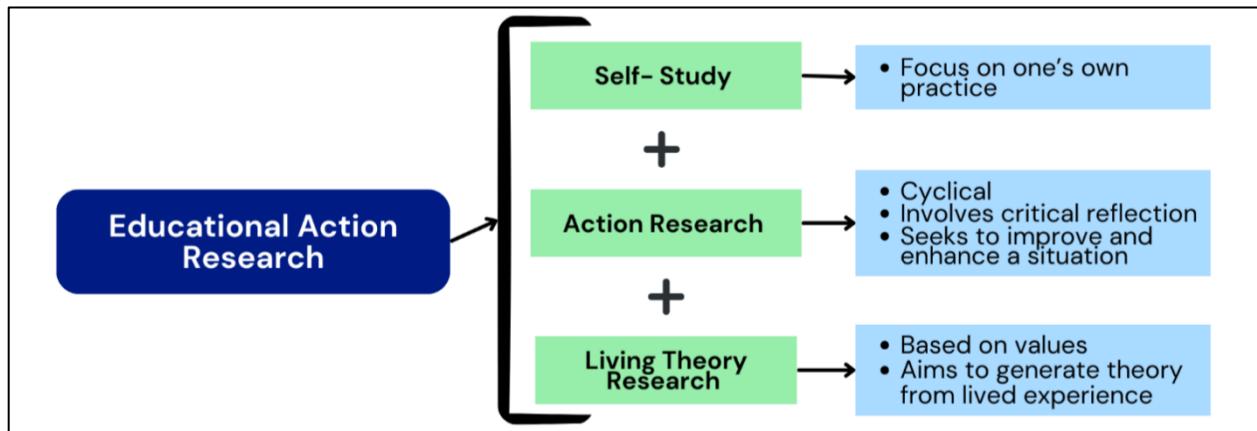


Figure 3.1: The Three Components of Educational Action Research

3.2.2 The Critical Theory Paradigm

A paradigm is a way of researching and looking at events and experiences that is widely accepted or a proven correct way of working (Taylor & Medina, 2013). There are three main research paradigms; positivist, interpretive and critical theory. Critical theory is about taking action with the aim of improvement (Cohen et al., 2018). It is a collaborative approach that involves participants, seeks to question and transform practice, and one in which the researcher's values are central to the process (Cohen et al., 2018). My research links with this critical theory paradigm, as the aim was to research and improve my practice and live closer to my values.

3.2.3 Self-Study

With self-study research, the focus is on the researcher as they explore what they are doing (Whitehead, 2018). My research was 'self-study' as it involved me researching elements of my own practice with the hope of understanding it, improving it, and sharing it with others (Sullivan et al., 2023). According to McNiff (2013:23) it is 'an enquiry by the self into the self, with others acting as co-researchers and critical learning partners' This indicates that I was studying myself, my own practices and classroom experiences. While self-study is a

social process involving collaboration with others, the focus was on my experiences and through reflection, deciding how I could teach in closer alignment to my values of student autonomy, life-long skill development and inclusion.

3.2.4 Action Research

Action Research is associated with Continuous Professional Development (CPD) and educators' life-long learning (Sullivan et al., 2016). It is cyclical in manner, in that action is followed by analysis and planning for future action. For this reason, critical reflection is a core component of Educational Action Research. Being critical refers to the unpacking of assumptions (Whitehead, 2018). Reflective praxis is the interplay between action and reflection that is informed by conversations and collected data (Sullivan et al., 2016). Green (1984) warns that often we get 'caught up' in our daily tasks and routines, however, we need to find moments in which we deliberately seek meaning from experiences and incidents that occur. Therefore, critical reflection was crucial for me to stop and review my practice and determine the extent to which I was living and teaching according to my values (Glenn et al., 2023). With the term 'critical reflection' we often take a pessimistic view on our practice and look for something to be fixed (Glenn et al., 2023). Sullivan et al. (2016) suggest that as well as reflecting on areas of improvement, that we also celebrate elements of our practice. Bearing this in mind, I drew on Brookfield's Four Lenses of Reflection and Donald Schön's framework for reflection, both of which are explored in greater detail in Sections 3.5 and 3.6. These frameworks helped me structure my critical reflections and thus helped me enhance my practice.

3.2.5 Living Theory Research

Living Theory Research is also a feature of Educational Action Research. In Living Theory Research, the researcher articulates their influence and role in their own learning as well as in the learning of others (Whitehead, 2018). This must be preceded by living experiences (Mc Niff, 2013). Living experiences are the personal and evolving ways in which researchers make sense of their understanding as they connect it to their actions and values (McNiff, 2013). Living experiences are the foundation for learning, self-reflection and the expression of the researcher's own theory of practice (Whitehead, 2018). Throughout this research, living theories emerged from my lived experiences as I reflected and continually developed and enhanced my practice.

3.3 Values

The question when conducting Educational Action Research is not only 'What is my concern?', but 'Why am I concerned?', and as highlighted by Glenn et al (2023), this leads to the discussion of values. A value can be something we find that is of worth or importance (Johnson, 2012). My three core values; student autonomy, life-long skill development and inclusion gave purpose and reason to the interventions I put in place for this study.

3.3.1 Epistemological Values

Both epistemological and ontological values were concerned in this study. Epistemological values address how we come to acquire knowledge, what we know, and why we know it (Sullivan et al., 2016). Knowledge is power, and many fail to recognise the impact that context and power dynamics have on both learning (Freire, 1972) and on reflection (Bradbury et al., 2010). In addition, Bradbury et al. (2010) find that there is a lack of encouragement to critically evaluate these elements of power in learning contexts. As part of this study, I was

required to reflect on my epistemological values and examine how knowledge is created and viewed in my classroom. This was crucial, as the aspects of context and power are those in which I, the educator, contribute to most in the process. I value student autonomy, and in line with Piaget (cited in Mooney, 2000), I believe that children should be co-constructors of knowledge and learning, and value themselves as knowledge creators rather than recipients of knowledge and information. By incorporating interventions into *Machnamh* and facilitating collaborative, child-led reflection in the classroom, my aim was to further integrate my value of student autonomy into my practice.

3.3.2 *Ontological Values*

Ontological values inform our way of being in the world and our relationships with others (Sullivan et al., 2023). Ontological values were linked to this study as I was concerned with the way the children were interacting with the world and the self-awareness they had of their presence in the classroom and society. As mentioned, my research was a form of self-study, and an analysis and discussion on the way people exist in, and relate to the world should be a core focus of this type of research (Bullough and Pinnegar, 2004). My core ontological values are life-long skill development and inclusion. *The Future of Education and Skills 2030* (OECD, 2018), highlights the importance of considering the types of 21st century competencies (knowledge, skills, attitudes, and values) children will need in the future. They acknowledge that the future is uncertain and cannot be predicted, but we need to be open and ready for it (OECD, 2018). As highlighted by the (OECD, 2018:2), ‘to navigate through such uncertainty, students will need to develop curiosity, imagination, resilience and self-regulation; they will need to respect and appreciate the ideas, perspectives and values of others; and they will need to cope with failure and rejection, and to move forward in the face

of adversity. Their motivation will be more than getting a good job and a high income; they will also need to care about the well-being of their friends and families, their communities and the planet'. These life-long and future focused competencies outlined by the OECD are in line with my ontological value of skill-development. By living in line with this ontological value, and valuing the whole child (Froebel, 1887), I endeavoured to ensure that they develop as well-rounded individuals. In addition to skill development, inclusion was a core ontological principle central to this research. Inclusion is the practice of ensuring all students, regardless of abilities, needs or backgrounds, feel valued, supported and able to fully participate in their environment (Foreman & Arthur Kelly, 2014). An inclusive classroom builds a supportive and respectful community, preparing students for a diverse world and therefore, is one of my ontological values.

As outlined in my values statement in Section 1.4, there exists a crossover of values. Student autonomy, inclusion, and life-long skill development are values that are deeply intertwined with my personal identity and belief system about both children and education as a whole.

3.3.3 A Living Contradiction of Values

A living contradiction occurs when a person's behaviour and actions are not in line with the values or principles they claim to hold (Whitehead, 2018). While there were many positive aspects to *Machnamh* prior to this study, critical reflection highlighted living contradictions between my values and my practice. For example, my role during *Machnamh* was authoritative as I told the children what to do and how it should be done. I also conducted a lot of summative assessment. When the children were put in groups, I allowed some children to take over and control the work while others stood back and were disengaged. These actions

and outcomes were not in line with my values of student autonomy, life-long skill development and inclusion. Being reflective helps educators identify these living contradictions and clarify the values that give their practice meaning and value (Whitehead, 2018). This reflexivity enabled me to recognise and articulate my values and acknowledge the living contradiction between these values and my classroom practice.

Each of the components (Self-Study, Action Research and Living Theory Research) together form Educational Action Research. At the heart of this Educational Action Research are my ontological and epistemological values discussed above. After deciding that this was the most relevant and ideal methodology for my study, I sought to address McNiff & Whitehead's (2011) 'Model for Conducting Action Research'. Figure 3.2 (below) presents my responses to their question framework, which provides guiding prompts to refine the research focus, clarify the purpose of the inquiry, and develop a comprehensive research plan. This figure serves as a reference for the following section, where I outline my research actions.

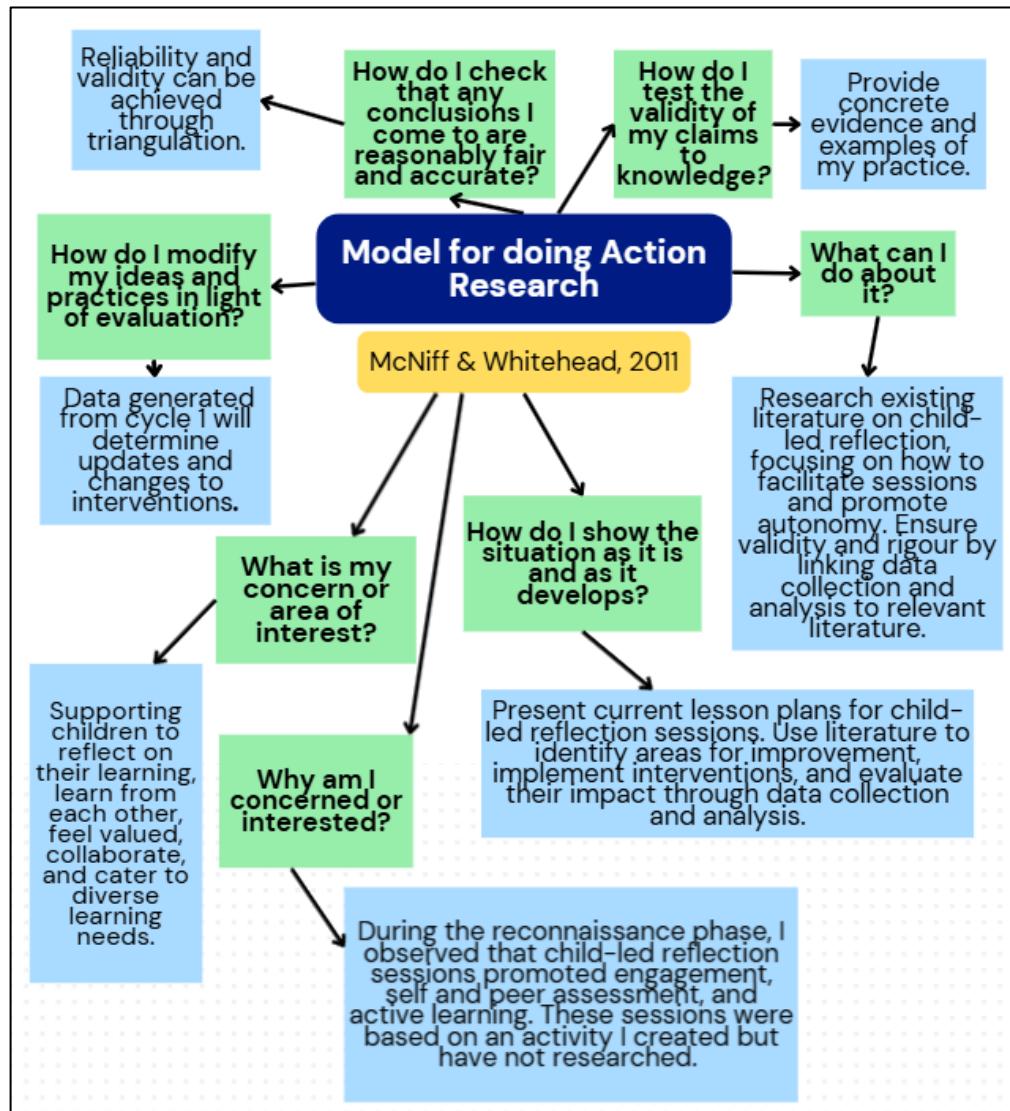


Figure 3.2: My responses to McNiff & Whitehead's (2011) 'Question Framework for conducting Action Research'

3.4 Research Actions and Action Plan

3.4.1 Interventions

In Cycle 1, my intervention involved directly teaching and demonstrating specific dialogue skills that enhance collaboration. I also provided the children with opportunities to set their own success criteria, as this is an assessment technique that enhances student autonomy

(White, 2019). Data was gathered and generated using the data collection tools outlined in Section 3.5 below. I then evaluated the effectiveness of my interventions, and this informed plans for Cycle 2. Figure 3.3 below illustrates the steps involved in Cycle 1 and demonstrates how they shaped and informed Cycle 2.

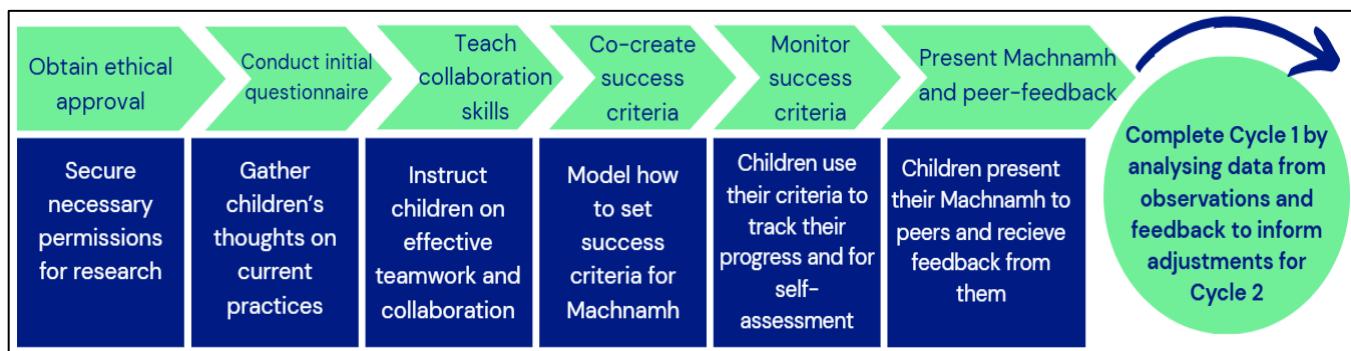


Figure 3.3: Outlining Action Research Plan for Cycle 1

3.4.2 Lesson Plan for the Reflection Sessions

Appendix A shows the lesson plan for *Machnamh* before this research began. Each group of four children was given a flipchart paper that was completed by me during a lesson, based on a topic covered in the previous fortnight. This could be based on any subject area. The children had 10-15 minutes to review it, clarify thoughts and information with each other and add more information to the flipchart. During this time, they planned what each member of the group would say when they re-taught their topic to the class. They also thought of three questions to ask the class based on the topic. When the groups stood up and presented the topic they reflected on, I usually sat at the back and wrote notes as a form of assessment. Appendix B outlines the revised lesson plan I worked off, with the interventions outlined in red. The planned interventions were aimed at bringing me closer to my values of student autonomy, life-long skill development and inclusion.

3.4.3 Exploratory Talk

As outlined in Section 2.2.4 (Achieving Effective Collaboration in the Classroom), Mercer (2000) coined the term ‘Exploratory Talk’ to describe a type of dialogue where participants engage critically and constructively with each other's ideas. During Exploratory Talk, true collaboration is being achieved as people share knowledge, challenge assumptions, and work together to build shared understanding (Rojas-Drummond & Mercer, 2003). A living contradiction existed between my value of inclusion and my classroom practice. When I facilitated *Machnamh* before this research, the same few children seemed to lead their groups while the rest stood back, waiting to be told what to do. Exploratory Talk and collaboration among all group members was not being practiced. As a result, part of my intervention required me to teach skills and strategies on how to use Exploratory Talk and collaborate with others, to ensure that everyone's voice is heard and everyone feels valued. To begin, a specific dialogue skill was introduced to the class (Mercer, 2009). These are skills that explicitly teach children how to listen, reason, justify, elaborate, build on others' ideas, challenge, clarify, seek consensus and manage disagreements (Dawes et al., 2000). Appendix C outlines a list of specific dialogue skills derived from Mercer (2009) that were implemented into *Machnamh*.

Figure 3.4 below outlines the steps I followed to incorporate these skills into *Machnamh*. I used this framework to teach the dialogic skills and the children were then encouraged to use these skills during *Machnamh*.

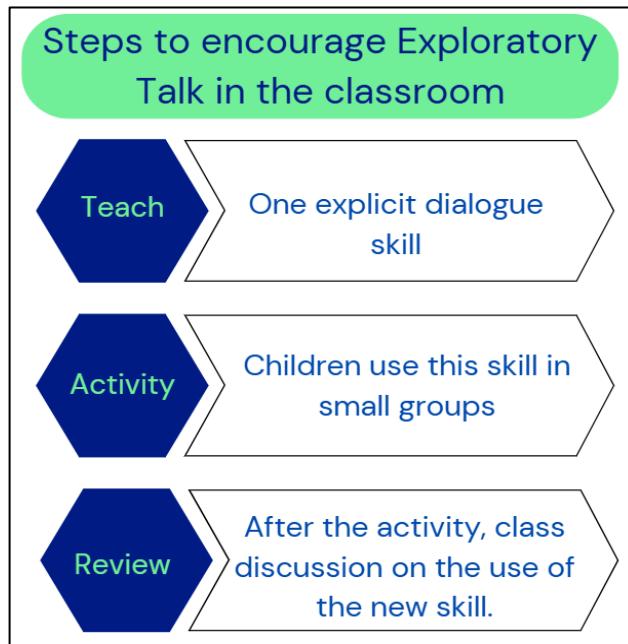


Figure 3.4: The steps to achieve Exploratory Talk (Mercer, 2000)

To incorporate this framework for Exploratory Talk into *Machnamh*, I first taught the class a specific dialogue skill before it began. During the session, students had the opportunity to practice and use this skill in their groups. At the end of the session, they reflected and discussed how they applied the skill. The rationale for this intervention was that by engaging in *Machnamh* they would develop a broader range of skills for collaboration and teamwork, bringing me closer to my values of inclusion and life-long skill development.

3.4.4 Co-creating success criteria

As noted in the literature review (Section 2.4.2), co-creating success criteria is an ideal method of self-assessment and way of supporting and developing creative work (White, 2019). Self-assessment techniques such as creating and monitoring success criteria, helps children to recognise the next steps in their learning and become more independent and motivated (NCCA, 2020). Therefore, as part of the Cycle 1 intervention, students learned how to set success criteria and monitor their own progress. After their presentations, they received

feedback from both their peers and teacher. Each child then had the opportunity to select feedback and do a final review of their success criteria. By having multiple sources of feedback, the child remained in the driver's seat as they selected the feedback they would apply and thus, student autonomy was reinforced (Miller, 2015). Figure 3.5 below outlines the template for the success criteria the children set and monitored for themselves for each *Machnamh* session. This is an adaptation of White's (2019) template for 'Self-Expression and Reflection on Goals and Success Criteria' (Appendix D) and served as a data collection tool by providing samples of children's work (Section 3.5.2.2).

My topic is _____			
A) I will know I have succeeded when <input checked="" type="checkbox"/>	B) How am I feeling about my progress	C) Challenges I am facing	D) Next time I will try

Figure 3.5: Children's Success Criteria, adapted from White's (2019) 'Self-Assessment and Goal Setting During the Creative Process'

This success criteria template was completed by the student and monitored throughout *Machnamh*. While they are similar, success criteria differ from goals (Black & Wiliam, 2018). Goals are broad, and they outline the desired outcomes and purpose of the work. They are the long-term, overarching objectives for which success criteria are established. Therefore, goals for *Machnamh* were determined and set by the whole class at the beginning of Cycle 1

(appendix E) and remained in place for the duration of the study. Having these goals helped the children set their success criteria for each lesson as they could identify the overarching goals they were aiming for.

3.5 Data Collection

3.5.1 Mixed Methods Approach

For this study, I conducted qualitative data using a variety of data collection tools (teacher and student reflective journals, children's work and Photovoice). According to Zeichner (1999) qualitative data is suitable for conducting self-study research as it incorporates contextual understanding, is flexible and based on experiences (Glenn et al., 2023). Qualitative research adopts a holistic perspective, capturing the complexities of classroom dynamics, including social interactions, engagement, and emotional responses (Whitehead, 2018), each of which are in line with my values. Qualitative data collection methods also give students and teachers a voice and enable greater participation, which brought me closer to my value of student autonomy (Glenn et al., 2023). Finally, I chose to use mostly qualitative research tools as it gave me rich data to reflect on.

In addition to the qualitative collection methods above, I decided to use a pre and post intervention questionnaire. This mixed-methods questionnaire collected both qualitative and quantitative data using open and closed questions, scales and opportunities for additional information to be given (Rowley, 2014). While I concur with Whitehead (2018) that qualitative data provides richer and more meaningful data than quantitative data, the questionnaire was used as a support tool (Glenn et al., 2023). Questionnaires give direct access to attitudes and knowledge that already exist (Silverman, 2010) and the use of scales to gauge their attitude was ideal for collecting baseline data. Repeated use of the questionnaire

also facilitated comparison in attitudes over time (Rowley, 2014). By using a wide selection of collection tools triangulation was made possible, and I could ensure that the research was robust, credible and rigorous (Glenn et al., 2023). Having this depth of data provided a solid foundation for reflective practice (Glenn et al., 2023).

3.5.2 Data Collection Tools

Teachers constantly collect data about their teaching through conversation and observing actions and interactions (Glenn et al., 2023). Informal observations thus far in my teaching have contributed to the reconnaissance phase of my research and highlighted areas for improvement in *Machnamh*. Employing specific data collection tools (also known as research instruments) for this study provided me with concrete, ethical, and valuable data for analysis and meaningful interpretation (McAteer, 2013; Glenn et al., 2023). A holistic approach to gathering data (Hedges, 2022) was achieved as a result of the varied data collection tools chosen (reflective journals, samples of work, Photovoice and questionnaires).

3.5.2.1 Teacher Reflective Journal

Observation is used by teachers on a daily basis to inform their teaching and to assist in planning (Cohen et al., 2018). Using a reflective journal is a valuable source of qualitative data and should be used to note these observations, as well as actions and reflections (Glenn et al., 2023). According to Sullivan et al. (2016), reflective journals give the researcher a chance to step back and evaluate their work with a new awareness of what is happening. Glenn et al. (2023) find that the teacher reflective journal is one of the richest sources of data as it enables the teacher researcher to track new insights and new learning. It also serves as evidence of efforts to enhance practice, responses to events, and growing awareness of an alignment with the established values (Creswell & Creswell, 2018; Glenn et al., 2023). Bassey

(1999) as well as Carr & Kemmis (1986), claim that a dual-approach to reflection is required. These theorists find that the teacher's reflective journal should be used in the moment as well as reflected on later. The dual approach enables teachers to capture immediate experiences and insights while also allowing for deeper, critical reflection at a later time to improve future practice (Bassey, 1999). As a result of this literature, I implemented Donald Schön's (1992) Reflective Model (Figure 3.6 below) when completing my teacher reflective journal.

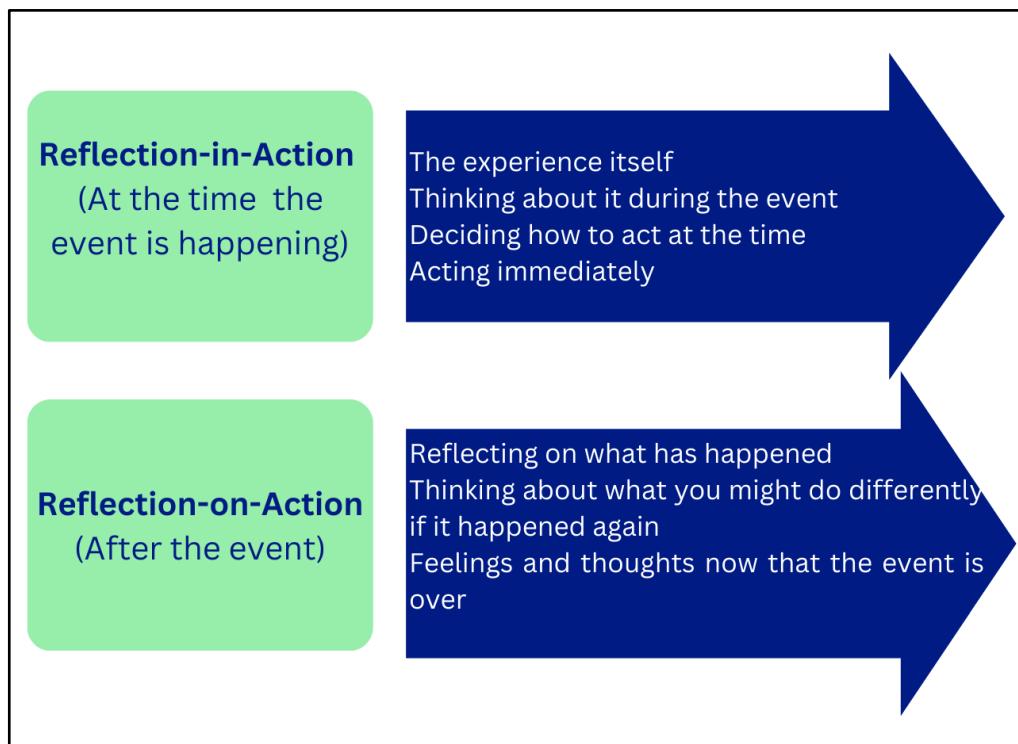


Figure 3.6: Outlining Schön's (1992) Reflective Model for Reflection in and on Action

Schön (1992) introduced the concepts of "reflection-in-action" and "reflection-on-action" to describe how professionals think and learn from their experiences. Through this dual reflection, my reflective journal indicated whether or not my research was having the desired effect on my practice (Sullivan et al., 2016). The desired effect was that I was living closer to my values of student autonomy, life-long skill development and inclusion. The reflection-on-action in my reflective journal prompted adjustments to my plan and initiated a second

research cycle (Glenn et al., 2023). The structure for my teacher's reflective journal is outlined in Figure 3.7 below. On one side I made note of events, decisions and dialogue 'in the moment' and this was paired with a blank page, for reflection-on-action at a later date.

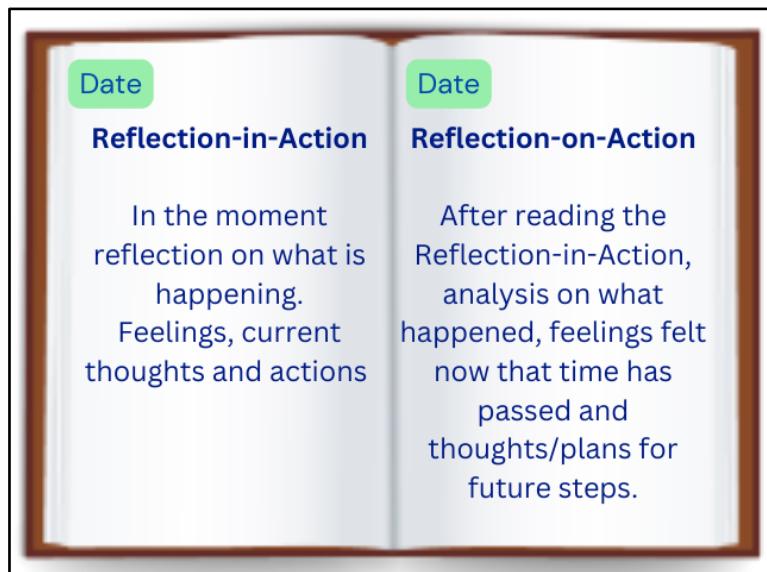


Figure 3.7: Outlining the structure of my Teacher Reflective Journal: 'Reflection-in-Action' and 'Reflection-on-Action'

3.5.2.2 Student Reflective Journal and Samples of Children's Work

This type of research is conducted with others, not on others (Sullivan et al., 2016). Therefore, I gave children the opportunity to have their own reflective journal. According to Boud et al., (1985) objectives of reflective journals must be made clear to children (Moon, 2004). I made clear to the students that their journals were a tool to help them look back and reflect on the work they have done. According to Boud et al., (1985) prompts and guiding questions help students to focus their reflections effectively (Boud et al., 1985). As a result, I used White's (2019) 'Select and Reflect Questions' as prompts for children's reflective entries. White (2019) provides a variety of questions to guide children that are doing creative work. These questions are based on topics such as collaborating, making choices and sharing work with

others. Appendices F-K outline a selection of White's (2019) 'Select and Reflect' questions to support children during creative work that I used to guide each reflective journal, based on my observation of their work during *Machnamh*. Children also contributed rich data by completing the success criteria during the intervention. Reflecting on their completed success criteria gave me insight into their ability to set criteria for achievement, identify challenges and feelings, and set future aspirations. These insights guided the necessary adaptations that had to be made during the AR.

3.5.2.3 Photovoice

With Photovoice, images act as windows for us to understand the participants' reality. The person who takes the photo invites us to see from their perspective and their experience (Wang & Burris, 1997). The theoretical foundations of Photovoice are rooted in Freirean principles of critical education and documentary photography, both of which focus on empowering vulnerable and marginalised groups (Kara et al., 2021). Using visual methods to enhance the voice of marginalised groups is crucial when conducting research (Mertens et al., 2016). Mertens et al., (2016) advocate for research approaches such as Photovoice as it empowers participants and addresses issues of social justice and equity. Photovoice is a research tool that brought me closer to my value of student autonomy as it empowered the children, validated their experiences and represented their experiences in visual, written and oral form (Luttrell, 2020). Photovoice also linked to my value of inclusion as it is designed to give voice to underrepresented groups, enabling them to document and share their perspectives in ways that traditional methods may overlook (Kara et al., 2021). It was also an ideal tool for this research as it involved collaborative analysis. Participants were involved in analysing and interpreting data and played a part in discussing the themes that emerged from photographs

(Kara et al., 2021). Using the classroom iPads, they took pictures of their work and accompanied it with a typed or dictated explanation.

3.5.2.4 Questionnaires

While I am aware that the aim was to improve my practice rather than the participants', this type of research is done with them rather than on them, therefore consideration of their input and voice was important and in line with my values of inclusion and student autonomy (McNiff & Whitehead, 2011). Using questionnaires with children requires thoughtful design to ensure that it is ethical, engaging and effective in capturing meaningful data (Glenn et al., 2023). When designing the questionnaire, I ensured that the language was age appropriate, included visual elements and was short and focused (Cohen et al., 2018). A variety of open and closed questions were also used to enable comparisons and give children a chance to explain and qualify their answers (Cohen et al., 2018). The initial questionnaire (Appendices L-O) was given at the beginning of Cycle 1, to determine the children's current attitudes, understanding and experiences of collaboration, reflective work and student voice. The questionnaire was a combination and adaptation of questions from Mercer's (2009) 'Thinking Together Programme', Shirzad & Ebadi's (2022) 'Questionnaire on Developing Learner Autonomy' as well as Lloyd and Emerson's (2017) 'Questions on Measuring Children's Experience of their Right to Participate'. In addition, I asked questions specifically about their experience of *Machnamh*. The results of this questionnaire helped me to determine what I needed to do during Cycle 1 and bring me closer to my core values. While questionnaires are an excellent way to learn about trends in students' behaviours, they are a form of self-reported data and often people can be biased in their view, and report on themselves in a more favourable way than reality (Creswell & Creswell, 2018). Therefore, triangulation and reflection from different viewpoints were needed when analysing the data from questionnaires.

3.5.3 Triangulation

Triangulation refers to using multiple methods and lenses of inquiry to address a research question (Glenn et al., 2023). Triangulation helps to strengthen the accuracy of collected data as it requires data from more than two sources (Glenn et al., 2023). By using questionnaires, reflective journals, work samples and Photovoice, I was able to triangulate my data as they provided different perspectives on my research. According to Cohen et al. (2018), triangulation explains more fully the complexity and richness of what is being described as it is studied from more than one viewpoint and provides a more balanced picture of the research. Using triangulation when analysing the data added to the trustworthiness of my research and helped me to eliminate bias that may have stemmed from me interpreting my own data (Glenn et al., 2023). During the data analysis process, I generated common codes, as I looked for common responses, ideas and patterns. Related codes were then grouped to form overarching ideas or concepts called themes. Triangulation enabled me to identify these codes in other data collection methods and therefore I was not relying solely on my own views and conclusions but had reliable verification of my interpretations.

3.6 Data Analysis

Educational Action Research involves constant checks for validity and the teacher is responsible for being both research aware and research active (Glenn et al, 2023). Lyons & LaBoskey (2002) address the important elements of validity and reliability in terms of self-study research. Because this research is personal and subjective, the research approach must ensure rigour throughout (Lyons & LaBoskey, 2002). To achieve validity and credibility of findings, biases must be avoided, assumptions must be challenged, and the researcher must

expand interpretations of data (LaBoskey, 2004). I achieved this by using triangulation and Brookfield's Four Lenses of Critical Reflection (2017).

3.6.1 Brookfield's Lenses of Critical Reflection

Using Brookfield's Four Lenses of Critical Reflection (Figure 3.8 below) invited multiple perspectives to be considered in my research. Through teacher and student reflective journals, children's work samples and questionnaires, I applied the 'self' and 'student' lenses. The 'scholarship' lens linked to the theoretical literature discussed in the Literature Review. To incorporate the 'peers' lens, I enlisted the support of critical friends.

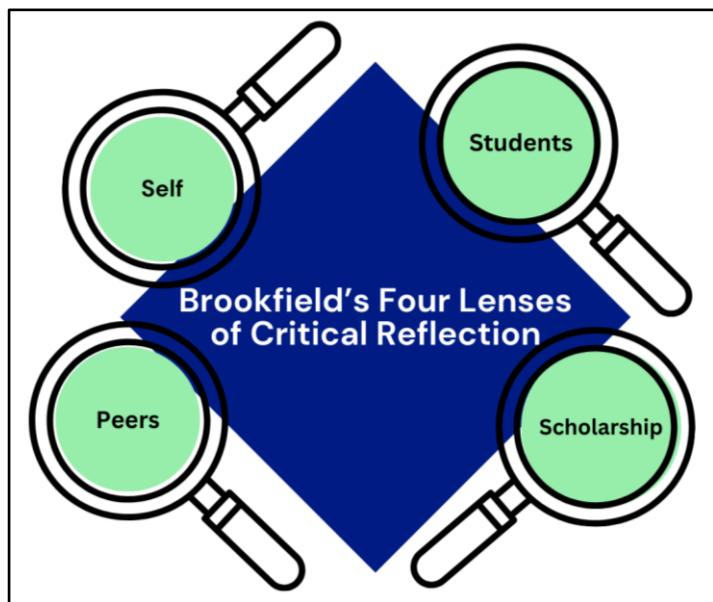


Figure 3.8: Outlining Brookfield's (2017) Four Lenses of Critical Reflection; Self, Students, Peers and Scholarship

3.6.2 Critical Friends

Collaboration with critical friends and colleagues helped me to gain alternative perspectives on this largely personal study and fulfil the use of Brookfield's 'peer' lens. In their definition of a 'critical friend', Baskerville and Goldblatt (2009:206) address the need for a 'capable reflective practitioner' with 'a passion for teaching and learning'. In inviting others to view and interpret my work, authenticity and validity was achieved as I saw the 'situation through other's eyes' (LaBoskey, 2004: 847). Costa & Kallick (1993) and Swaffield (2008) describe a critical friend as a trusted individual that asks questions, offers critique, provides another viewpoint and gives honest feedback. Bearing this in mind, I enlisted the support of two critical friends. One friend was familiar with my teaching, my class and the environment in which I teach. The other friend had a wealth of experience in teaching and a particular interest in literature and practice involving student autonomy. Their feedback was given on my literature review to ensure clarity as well as on my data collection tools to ensure rigour and reliability. I collaborated with them during data analysis to strengthen the validity and credibility of my findings and encouraged them to challenge any assumptions I held as a teacher-researcher.

3.6.3 Standards of Judgement

'Standards of Judgment' in Action Research refers to the criteria used to evaluate the validity and impact of the research (McNiff & Whitehead, 2011). The Standards of Judgement for this study were developed in line with my values and were used to ensure that my research remained meaningful, focused and rigorous (Glenn et al., 2023). I understood that these standards were not static but could evolve as the research unfolded. Figure 3.9 below outlines my Standards of Judgement at the beginning of Cycle 1.

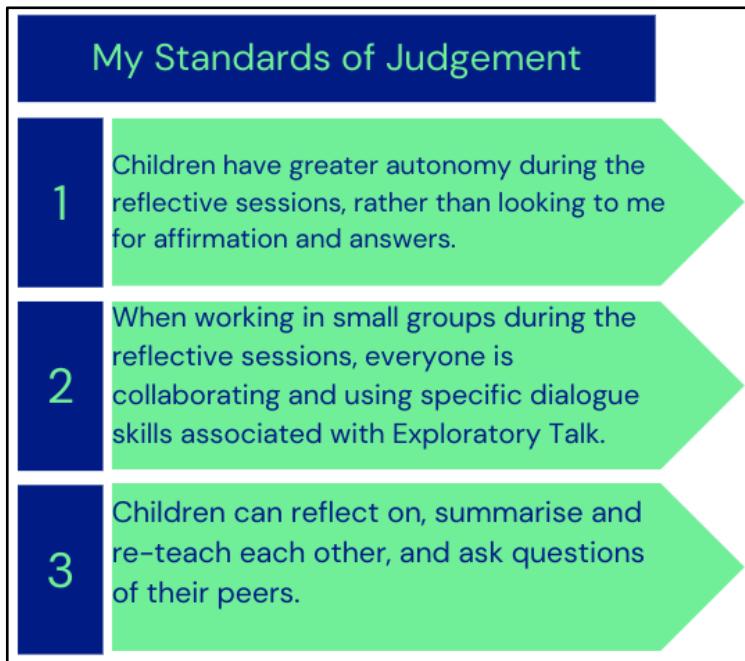


Figure 3.9: My Standards of Judgement prior to commencing Cycle 1 of my research

3.6.4 Generating Theory

The processes of data analysis discussed above, along with my Standards of Judgement, contributed to my research claim. Many educators still believe that teachers who conduct research need to have their work interpreted and validated by academic outsiders. However, we, as teachers, can generate validated theory from our practice without this (Whitehead, 2018). The aim of Educational Research is not only to transform our work as educators, but society at large (Carr & Kemmis, 1986). When a Living Educational Theory is reached, it holds transformative potential to enhance one's thinking, actions, and practice, while also having a positive impact on others (Glenn et al., 2023). When researchers provide explanations and descriptions of their findings, they are considered a new theory of practice (Cohen et al., 2018). The aim of this research was to generate a 'living educational theory' as an explanation for the educational influence in my learning and the learning of others (Whitehead, 2018). Through teaching specific skills for collaborating with others and

implementing self-set success criteria, I aligned with my values and answered the research question: How can I foster reflective practice and student autonomy through *Machnamh*, a collaborative and creative approach to learning?

3.7 Ethics

Ethics must be considered throughout a project, from the initial design, to fieldwork, to dissemination (Cullen et al., 2011). Therefore, while the ethical approval was given from the Board of Management, participants and parents, it was an area that was at the forefront of all stages in this research. To do this, I reflected on Cullen et al.'s (2011) questions to guide my decision making; Are the questions age appropriate? Are the data tools age appropriate? Are the children maintaining assent? Do the chosen procedures make good use of participants' time? Children may indicate continued assent or dissent through verbal and non-verbal means throughout a project (Harcourt & Conroy, 2005), and I needed to be alert for this. Consent, especially from children, required me to go beyond the information sheet and engage in dialogue and further explanation of what participation involved (Brostrom, 2006). By developing 'keener antennae' during research, I heightened my sense of personal, intellectual and relational awareness (Glenn, 2021). Anonymity, privacy and confidentiality were also crucial to consider at all stages of this study. Often, children do not grasp the permanency of images when research is disseminated. Therefore, Eckhoff (2015) calls on researchers to be cautious, even with ethical permission, when sharing findings. This was important for me to consider when using Photovoice as one of my data collection tools (See Appendices P-U for all ethical documents related to this research). By using Thematic Analysis to study the information gathered from these data collection tools (further discussed in Chapter 4), ethical considerations were also addressed. Thematic Analysis ensured that the process was child-

centered, limited power imbalances and reduced the risk of misrepresentation due to coding and triangulation.

3.8 Conclusion

This chapter has detailed the key components of my selected research design: Educational Action Research. I selected this research design to help me answer the question ‘How do I foster reflective practice and student autonomy through *Machnamh*, a collaborative and creative approach to learning?’. In line with the Critical Theory Paradigm, Educational Action Research includes Self-Study, Action Research and Living Theory Research. At the heart of Educational Action Research are my values. Through reflection, using Schön’s (1992) reflective model, I was brought closer to my values of student autonomy, life-long skill development and inclusion. I outlined my Action Plan and interventions for Cycle 1, which included teaching the children explicit collaboration and dialogue skills. In addition, children began co-creating and monitoring success criteria to develop their autonomy. Insightful data was collected using a broad variety of data collection methods. These included teacher and student reflective journals, children’s work samples, questionnaires and Photovoice. This variety of data collection tools also warranted triangulation, ensuring that data was reliable and credible. Brookfield’s Lenses of Critical Reflection, Critical Friends and my Standards of Judgement were outlined as crucial elements to my data analysis. Finally, ethical considerations were explained, including consent, assent, anonymity and confidentiality in relation to the research intervention, data collection tools and data analysis. In the following chapter, I will analyse the data and present the findings of this research.

Chapter 4- Data Analysis

4.1 Introduction

This chapter presents an analysis and discussion of the data collected during Cycle 1 and Cycle 2 of my research in which I aimed to answer; How do I encourage reflective practice and student autonomy through *Machnamh*, a collaborative and creative approach to learning?

For the purpose of the data analysis, each theme will be discussed independently, with the changes from Cycle 1 to Cycle 2 discussed within each theme. Figure 4.1 below outlines the Themes that emerged from a thematic analysis of the data.

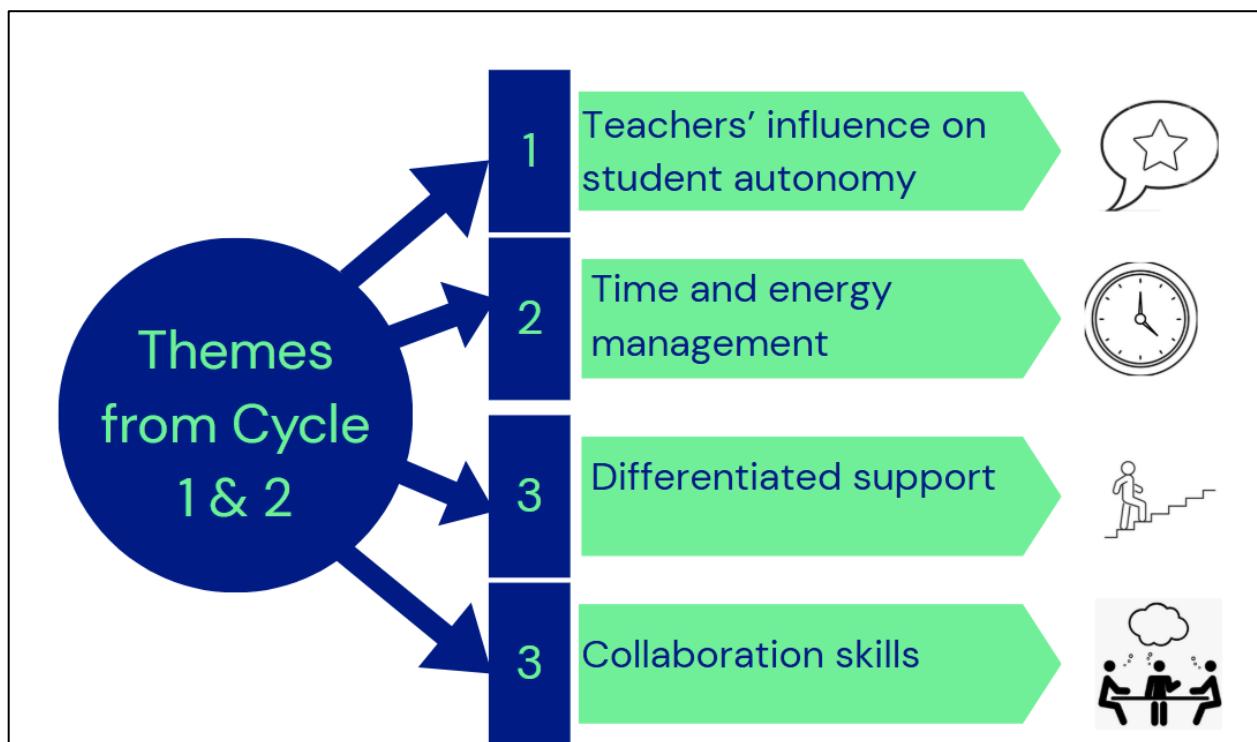


Figure 4.1: The Four Key Themes that emerged from the data

4.2 Data Analysis

These themes were in response to the interventions I put in place to answer my research questions (discussed in section 1.5). These research questions (reiterated in Figure 4.2 below) were consistently reviewed throughout the AR to ensure that I remained focused on the aims of the study.

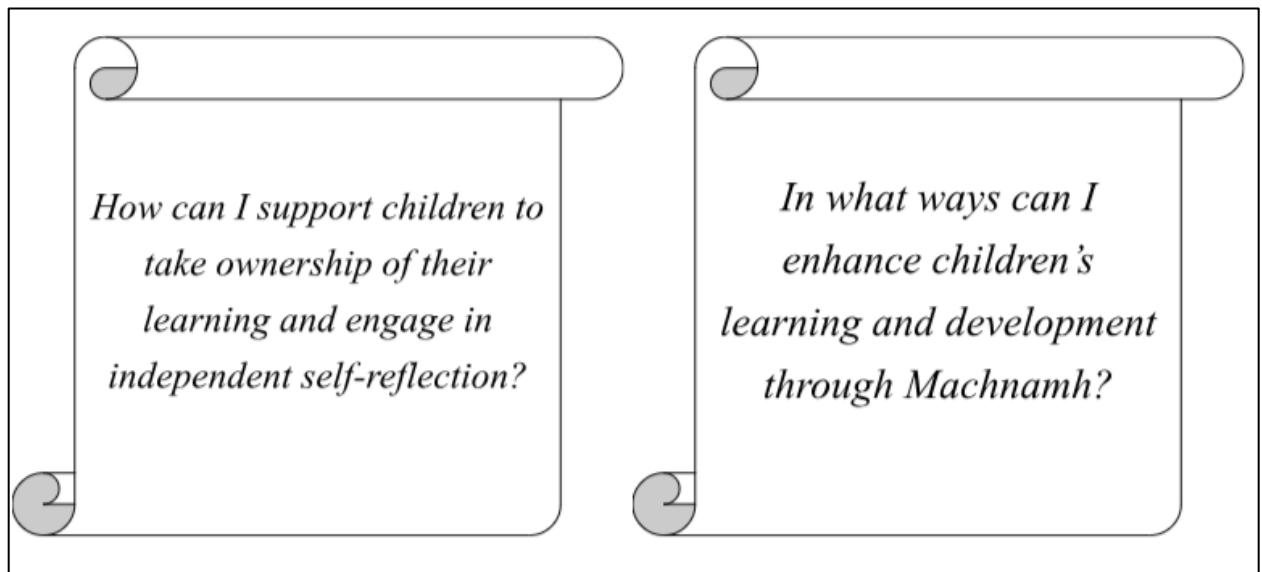


Figure 4.2: My Research Questions

Data was collected using teacher and student reflective journals, questionnaires, students' work and Photovoice. The data was then analysed using Braun and Clarke's (2006) model of coding and thematic analysis (Figure 4.3) below.

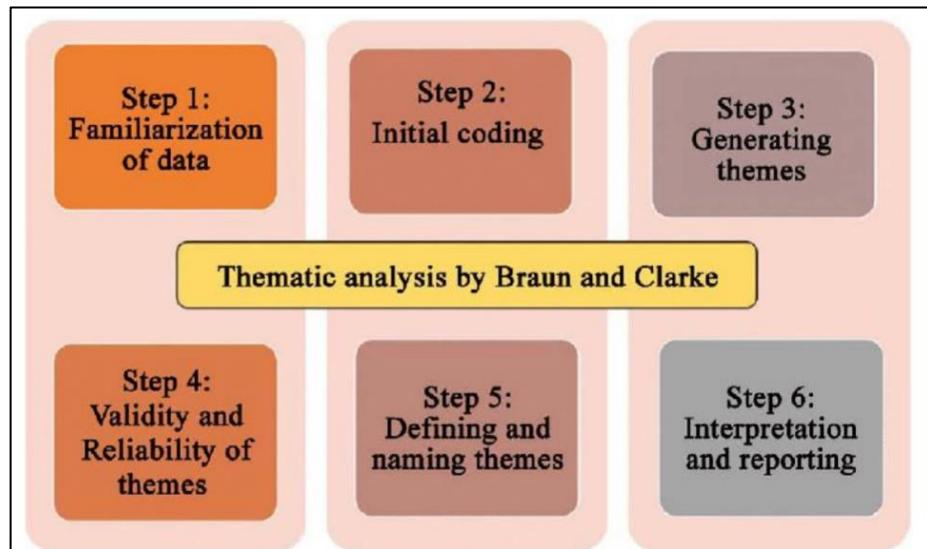


Figure 4. 3: Braun and Clarke's Coding and Thematic Analysis Framework (2006)

Braun & Clarke's (2006) Thematic Data Analysis approach has 6 key phases. The analysis process begins by becoming familiar with the data and generating initial codes. Following on, themes are generated by looking at codes from all data collection methods and finding connections between them (Braun & Clarke, 2006). Following a review and reflection of these themes, the relevant literature is consulted, and conclusions can be drawn (Braun & Clarke, 2006). Throughout these six phases of thematic analysis for this AR, particular attention was given to transparency, reflexivity, and coherence to ensure the integrity and depth of the analytic process. It was this 6-stage process that led to the emergence of the themes and thus my findings. Figure 4.4 below outlines the specific codes and themes that were encountered during my data analysis.

Codes	Sub-Themes	Themes
Praise, encouragement, recognition, confidence, motivation, reflection, self-evaluation, pride, feeling valued, teacher feedback, external validation	<ul style="list-style-type: none"> <u>Student Autonomy</u> <u>Reflective Practice</u> <u>Praise vs Feedback</u> 	Teachers' influence on student autonomy
Planning, clarity, timing, goal-setting, structure, reviewing, negative emotions, incomplete work, pressure, anxiety, preparation, transitions, deadlines	<ul style="list-style-type: none"> <u>Time management</u> <u>Time related stress</u> 	Time and energy management
Differentiation, support levels, scaffolding, individual needs, pace, flexibility, tailored instruction, learning styles, accessibility, equitable learning, access, adaptability.	<ul style="list-style-type: none"> <u>Making Machnamh accessible</u> <u>Enhancing challenge</u> 	Differentiated Support
Group work, collaboration, peer feedback, communication, participation, involvement, inclusion, active listening, respect, feedback skills, teamwork, co-construction, reflection	<ul style="list-style-type: none"> <u>Whole group involvement</u> <u>Collaborating and giving feedback</u> 	Collaboration Skills

Figure 4. 4: Codes and Themes from the Data

4.3 Themes

4.3.1 Theme 1: Teachers' Influence on Student Autonomy

The first thematic finding that emerged from the data in Cycle 1 was the impact teacher's praise has on children's autonomy. During the intervention I aimed to live closer to my value of student autonomy through student engagement with *Machnamh*. The principle of 'Engagement and Participation' outlined in the *Primary Curriculum Framework* seeks to ensure children 'are active and demonstrate agency', 'make choices about and in their learning' and that 'curriculum experiences provide them with opportunities for decision-making, creativity and collaboration' (NCCA, 2023: 6). Yet, much of the data collected during Cycle 1 indicated that some of my actions as a teacher were limiting autonomy and the development of life-long skill development.

When asked in the Pre-Cycle 1 Questionnaire, “How do you know when you have done a good job doing *Machnamh*?” (Figure 4.5 below), over half of the children voted that the teacher tells them, with 10 children voting that they do not know when they have done a good job. Only 4 children claimed that they viewed their own work to determine if they did a good job. This would indicate that in some cases, my values were not being lived out in my practice.



Figure 4.5: Responses to the Pre Cycle 1 Question ‘How do you know when you have done a good job doing *Machnamh*?’

As outlined in Section 3.4.4, my interventions included co-creating success criteria in which the children could monitor their own aims and determine themselves if they had done *Machnamh* successfully. However, during Cycle 1, even with this success criteria, I noticed

that my praise was having a negative effect on the student autonomy that I was trying to foster. In my reflective journal I was conscious of myself praising what the children were doing even though I acknowledged that I wanted them to decide if they had succeeded.

Table 4.6 highlights a selection of my Reflection-in-Action notes that were taken during Cycle 1.

<p>During Machnamh, they keep looking at me when they talk/ after they talk, checking for validation</p> <p>I am giving the final bit of praise/ feedback.</p>
<p>I said "brilliant, brilliant excellent" when I seen a girl's reflection sheet! I was just so delighted that she understood- but I per don't think I should have. I want them to decide if they have succeeded</p>
<p>ability → I want to praise them so badly but I don't want to take away from their autonomy in deciding if they do a good job.</p>
<p>I keep catching myself nodding and reaffirming them! I don't know whether to look at them or not. I don't want them to look at me for answers but I also don't want to look uninterested</p>

Table 4.6: (Colreavy, Teacher Reflective Journal extracts during Cycle 1)

Using Schön's (1991) Reflection-on-Action model, I reviewed these comments at a later date and came to the following conclusion;

Praise is coming up as an issue I am having. I think I need to give specific praise rather than ‘good’ or ‘brilliant’. Praising effort rather than outcome should also encourage student autonomy simultaneously. This is in line with readings I did from John Hattie (Colreavy, Reflective Journal: 17/2/25).

I was clearly unsure of my role/ expectation as a teacher who is trying to encourage autonomy. I do not think I should stay quiet, because as I said in my reflection-in-action, I feel that I look uninterested then. Perhaps if I encourage skills rather than general phrases this could go alongside autonomy. By praising transferable skills while also continuing with success criteria and peer feedback, autonomy will still be present (Colreavy, Reflective Journal: 17/2/25).

Further engagement with Hattie’s (2012) research highlighted that teachers should be aware of the difference between praise and feedback. In Cycle 1, I was providing the children with general praise as well as ‘Person-Level Praise’ (Hattie, 2012). That is praise directed at the individual’s traits, such as intelligence or personality (‘you’re great’). Hattie (2012) and Pink (2009), along with Skipper & Douglas (2011), advise educators to keep praise and feedback about the learning separate, as praise supports learned helplessness and students often come to depend on praise to be involved in their work. Similarly, Dweck’s (2014) extensive research on Growth Mindset and self-belief would find that ‘Person-Level Praise’ contributes to a fixed mindset on ability. That being said, Baumeister et al. (2003) argue that there is some merit in Person-Level Praise as it can boost self-esteem and be helpful in emotionally challenging contexts such as trauma-informed teaching. While I appreciate that there may be cases in which Person-Level Praise is useful, I concur with Hattie, Dweck and Pink who find that Person-Level Praise is damaging in this context as it often directs attention away from

the task, processes and self-regulation (Hattie, 2012) and this conflicts with the aims of my intervention and values.

This marked the beginning of Cycle 2. Learning from my data and relevant literature, I wanted to focus on the ‘process level’ and ‘self-regulation level’ of feedback (Hattie, 2012). That is, feedback on the processes and skills they used to complete their work as well as feedback that enhances their ability to self-regulate and monitor their own work. I also referred to Erkens et al. 's (2017) ‘Five Questions to Guide Strong Feedback’ (Figure 4.7 below) during *Machnamh* in Cycle 2;

- Does it elicit a positive response?
- Does it identify what is next for the learner?
 - Is it targeted to their level?
 - Is it strengths based?
 - Does it provoke thinking?

Figure 4.7: Erkens et al. 's (2017) ‘Five Questions to Guide Strong Feedback’ used in

Cycle 2

This shift in how I interacted with pupils during *Machnamh*, combined with the interventions already in place, reflected a move towards greater autonomy and lifelong skill development in Cycle 2. In my Reflection Journal, I noted:

Even though they asked me some questions, they showed greater autonomy by not looking to me for answers after each sentence they said (Colreavy, Reflective Journal: 28/3/25)

A child came up and asked, 'Ms Colreavy can we ask a really hard question?', to which I replied, 'will they [the class] be able to answer it?' He said he did not know, and I said he and his group must decide (Colreavy, Reflective Journal: 4/4/25)

This enhancement of student autonomy, ability to self-reflect on, and monitor their work was also evident in their reflective journals (Figure 4.8) and success criteria (Figure 4.9) during Cycle 2. In contrast to them looking to me for affirmation as they did in Cycle 1, the children were able to determine for themselves how they had done.

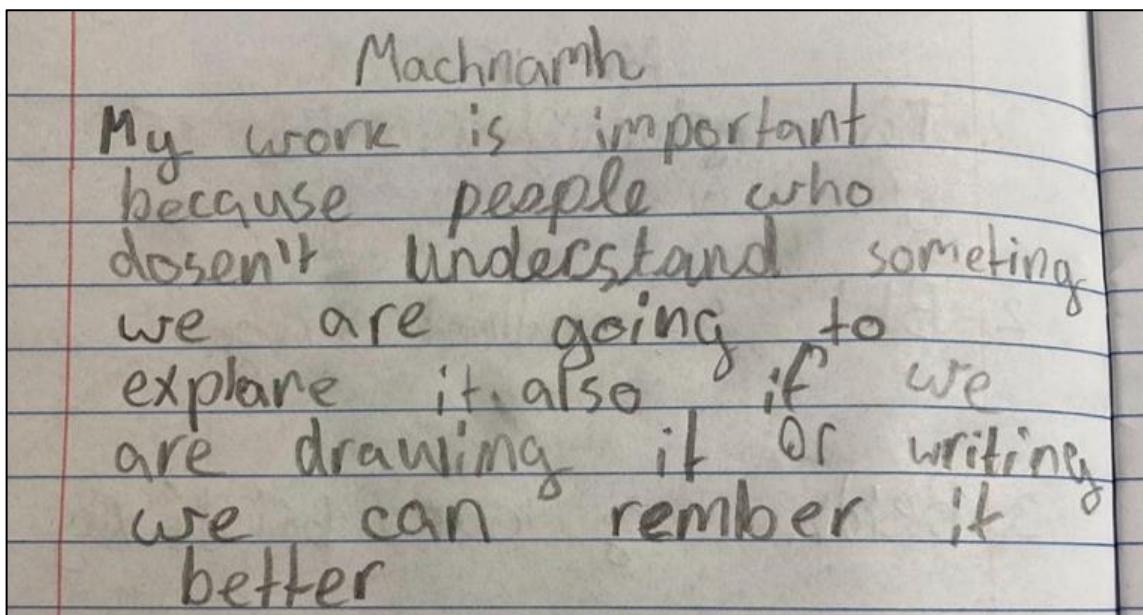


Figure 4.8: Sample Child Reflective Journal in Cycle 2

A) I will know I have succeeded when	B) How am I feeling about my progress	C) Challenges I am facing	D) Next time I will try
<p>1. I speak nice and clearly to my group</p> <p>2. I justify and elaborate.</p> <p>3. I help others when they need help.</p> <p>4. I listen to others when they are talking.</p>	<p>I feel good because its going on very good but I am still nervous.</p>	<p>We need a little bit more time.</p>	<p>I will try to read more next time</p>
<p>5. I teach the class about the work house and the famine.</p>			

Figure 4.9: Sample Student Success Criteria in Cycle 2

Finally, at the end of Cycle 2, the Pre-Cycle 1 Questionnaire question was asked again; “How do you know when you have done a good job doing *Machnamh*?” and the results showed that reviewing their own work was the most popular vote, with 10 more children voting for this option in comparison to before the intervention. In addition, 12 less children voted for ‘teacher tells me’, resulting in it becoming the least popular vote in the post intervention questionnaire (Figure 4.10 below).

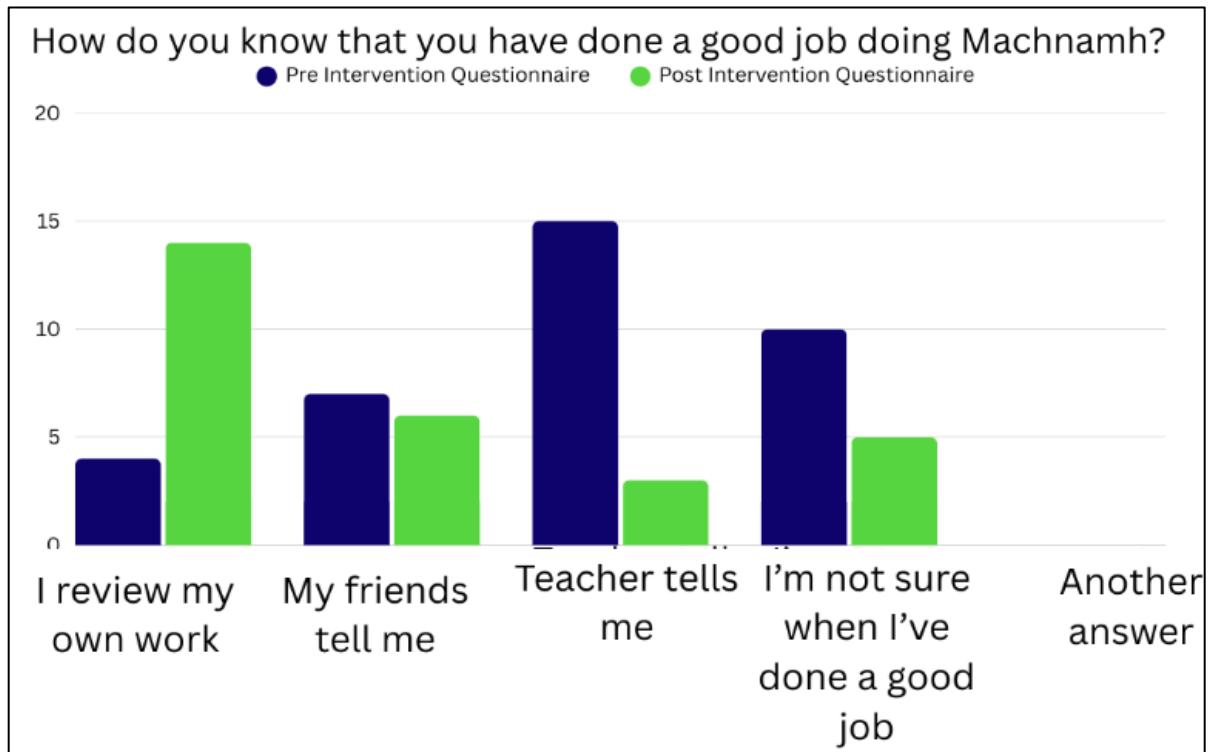


Figure 4.10: Results of the Pre and Post Intervention Question; How do you know that you have done a good job during Machnamh?

Giving feedback that is focused on skills and improvement rather than praise, supports an orientation towards life-long, deep learning rather than just getting high marks (Black & Wiliam, 2018). Implementing this type of feedback in Cycle 2, along with my planned intervention of creating their own success criteria brought me closer to my values of autonomy and life-long skill development.

4.3.2 Theme 2: Time and Energy Management

Educators' allocation of time communicates their values, and each decision made regarding time sends a powerful message to students about what is truly valued in the classroom (Ritchhart, 2015). Given that this research was centered on aligning my practice with my values, it was particularly revealing to observe how time became a barrier to achieving my goals in Cycle 1. Specifically, two sub-themes emerged within the overarching theme of time.

-Unclear and Insufficient Time Allocation.

-Lack of Incubation Time (White, 2019).

This was evident in my teacher's reflective journal, the child reflective journals, and children's work.

4.3.2.1 Unclear and Insufficient Time Allocation

The generated data in Cycle 1 showed that the children needed to see how much time was left as they worked. In my reflection-in-action below, I noted:

In the last six minutes, five children asked me how much time is left. I usually play it by ear and tell them to stop the review after around 10-15 minutes (Colreavy, reflective journal: 28/2/25).

This was also evident in the child reflective journals (Figures 4.11 and 4.12 below).

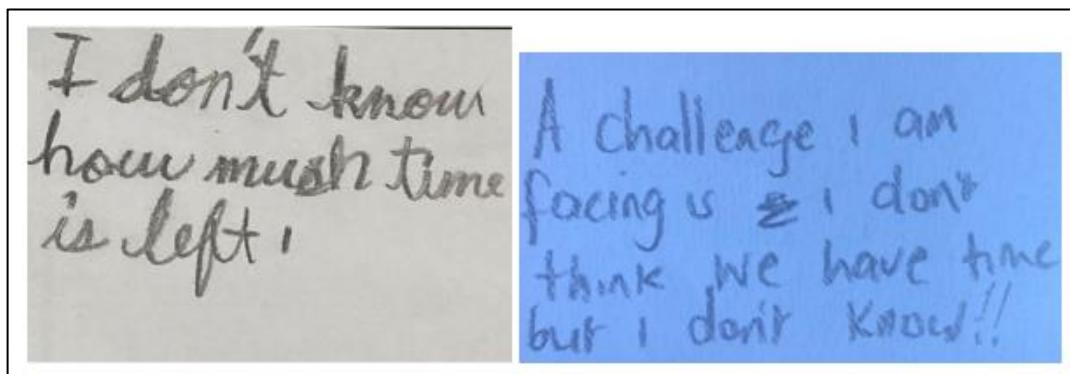


Figure 4.11: Child reflective journal

(14/2/25)

Figure 4.12: Child reflective journal

(28/2/25)

Reviewing this later in my Reflection-on-Action I wrote:

When children ask me how much time is left, I am taking away their sense of ownership and control of the activity. By having the timer on the board for them all

to see, I can align more closely to my value of autonomy and let them answer the question themselves (Colreavy, Reflective Journal: 3/3/25)

As well as being unsure of how much time was left, a shortage of time also became evident in Cycle 1. According to ‘challenges I am facing’ in their success criteria, time constraints were identified as the primary challenge. The word cloud below (Figure 4.13) represents their answers, with the biggest words being the most common. Additionally, many children reported experiencing negative emotions during the review of their *Machnamh* sheet (Figure 4.14).



Figure 4.13: Children’s report on the challenges they are facing in Cycle 1

positive	negative	neutral
good	nervous	I don't know
confident	I don't know wha	Okay
ready	scared	okay I guess
ok	worried	I don't know
really good	bad	I don't know
	scared	
	worried	
	unprepared	
	nervous	
	we're not done	

Figure 4.14: Children's self-reported feelings in Cycle 1

As outlined in the Literature Review, *Machnamh* is a highly creative, reflective and collaborative process. Cognitive processing and thoughtful, contemplative, creative responses, (such as those required from *Machnamh*) require time to construct (Ritchhart, 2015). White (2019), whose research on creativity in assessment was explored in Chapter 2, also emphasises the importance of allowing adequate time to 'generate ideas, experiment, ask questions, set goals, reflect, revise, and assess their progress' (White, 2019:30). This literature highlighted the need for me to allow ample time for children to immerse themselves in such a creative and complex thinking process. My goal was to shift my practice towards student autonomy and facilitate skill development in an inclusive environment in which thinking is valued, visible and promoted. To do this, time must be invested to cultivate long-term success (Dewey, 1930). Acknowledging this, in Cycle 2 I began to add more time to the flipchart review stage of *Machnamh*.

However, even when given more time, insufficient time remained as barrier to the children as evident in my reflection-in-action;

I can see them panicking. I feel like I gave them enough time to do the work but maybe not? I don't want to keep adding more and more time (Colreavy, Reflective Journal: 14/3/25)

As I felt that continuously adding time was not the best course of action, I re-engaged with the literature and discovered that often it is not time, but energy that we need to manage, and this led me to the second sub-theme within this finding; Lack of Incubation Time.

4.3.2.2 Lack of Incubation Time

The observations I gathered, along with the children's feedback in Cycle 1, are consistent with literature on time management. From writing success criteria to reviewing, planning, and presenting the *Machnamh* sheet, I did not provide enough time for children to step away from this potential "overstimulating" and "overwhelming" environment. Ritchhart's (2015) research highlights that time management alone is rarely effective in reducing stress. Rather than stress indicating the need for more time, it indicates the depletion of resources (Ritchhart, 2015). Therefore, to manage stress, such as the stress I witnessed during the flip chart review stage of *Machnamh*, energy must be examined (Ritchhart, 2015). Managing energy involves the use of recovery periods, occasions to recharge and regroup, and opportunities for renewal (Schön, 1991; Ritchhart, 2015). This concept of pausing and thinking before acting is referred to as 'wait time' (Rowe, 1972) or 'incubation time' (White, 2019). White (2019) found that having this balance between time to engage with others and time to reflect is crucial, as an overstimulating and overwhelming environment can reduce productivity during the creative process (White, 2019).

As a result, in Cycle 2, I incorporated this ‘incubation time’ to support a deeper connection to my values. Halfway through the review of their topic, I gave learners time to reflect on their work, evaluate their progress, and plan their next steps. This incubation time was incorporated halfway through the *Machnamh* review rather than continuously adding more time if they were not done. Taking on board Ritchhart’s (2015) findings on managing stress rather than time I focused on questions such as ‘How are you using your energy now?’, ‘What are your end goals and are you using your energy to achieve this?’ and ‘What do you need to do to achieve these goals?’ (Loehr & Schwartz, 2003). These questions are more beneficial than just adding more time, and link to our priorities and values (Ritchhart, 2015).

These adaptations were designed to support autonomy and promote skill development and thus enabled me to live out my values more authentically. As a result of these changes, I observed a noticeable shift in both the children’s emotional responses during *Machnamh* and the nature of the challenges they encountered. Time appeared to be less of a barrier than it was in Cycle 1, and my teacher’s reflective journal noted fewer instances of negative emotions compared to Cycle 1. Figure 4.15 below illustrates the shift in children’s self-reported feelings and challenges from Cycle 1 to Cycle 2, reflecting the impact of these adjustments in practice.

Children's Self-Reported Feelings in Cycle 1			Children's Self-Reported Feelings in Cycle 2		
positive	negative	neutral	positive	negative	neutral
good	nervous	I don't know	confident	complicated	still thinking
confident	I don't know wha	Okay	confident	nervous	kind of good
ready	scared	okay I guess	we are prepared	nervous	just ok
ok	worried	I don't know	listened to		ok
really good	bad	I don't know	good		
	scared		part of the group		
	worried		fine and ready		
	unprepared		excited		
	nervous		good		
	we're not done		happy		
			positive		
			prepared		
			confident		
			perfect		
			were doing great		

Figure 4.15: Comparison of Children's self-reported feelings in Cycle 1 and Cycle 2

4.3.3 Theme 3: Differentiated Support

Once the interventions were in place, I consciously took a step back to encourage autonomy and ownership of their work in Cycle 1. This was in response to the literature discussed in Section 2.3.3, which stated that creativity flourishes when children have freedom to explore and create without adult interference or restrictions (Mooney, 2000). I purposefully took a step back so as not to take over and limit their autonomy. However, I soon realised that my responsibility as a teacher to differentiate and scaffold was still crucial. The two sub-themes within this included:

- Applying UDL (Universal Design for Learning) to *Machnamh*
- Balancing Support and Challenge During *Machnamh*

These findings collectively showed that to foster independence, autonomy and inclusion, differentiated support needs to be given based on learning styles and learning needs. This challenged my prior belief that for student autonomy to exist, there must be an absence of teacher voice and input. The generated data that led me to these conclusions came from Photovoice, the Pre-Cycle 1 questionnaire, student reflective journals and teacher reflective journals.

4.3.3.1 Applying UDL to Machnamh

In the Pre-Cycle 1 questionnaire, children were asked about their preferred methods for reviewing their work. As shown in Figure 4.16 below, their responses reflect a diverse range of review preferences.

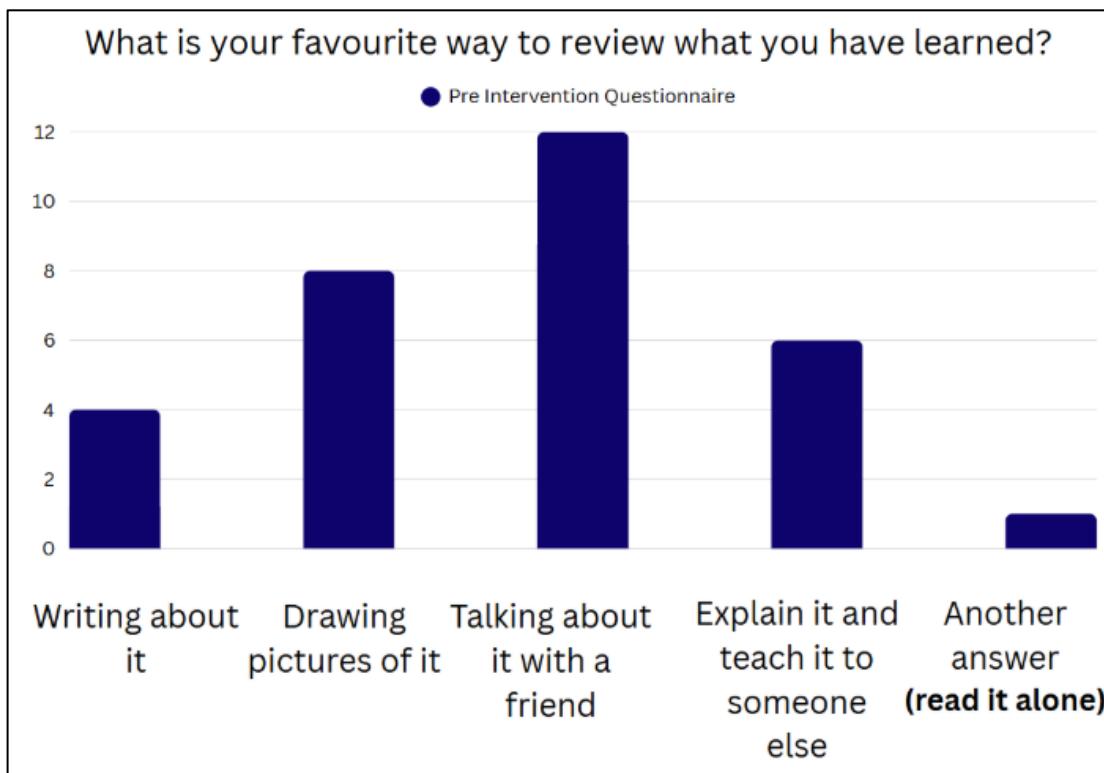


Figure 4.16: The Children's Favourite Way to Review What They Have Learned

However, in Cycle 1, I did not fully consider this wide range of learning styles in my classroom. The *Machnamh* process catered to aural learners and those who liked to write, however this did not suit the visual learners. As shown in Figures 4.17 and 4.18 below, the children using Photovoice demonstrated that their edits on the *Machnamh* sheet were exclusively in written form.

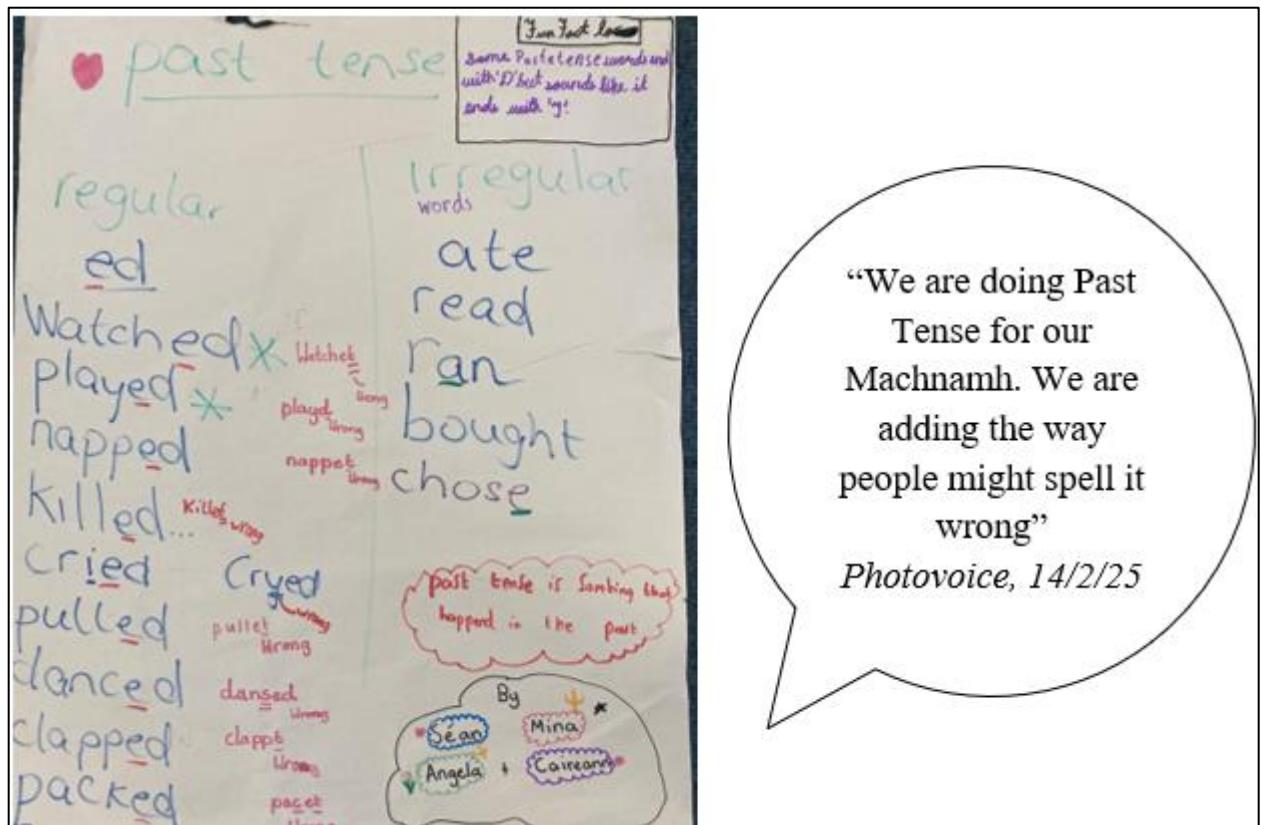


Figure 4.17: Photovoice picture and comment during Cycle 1

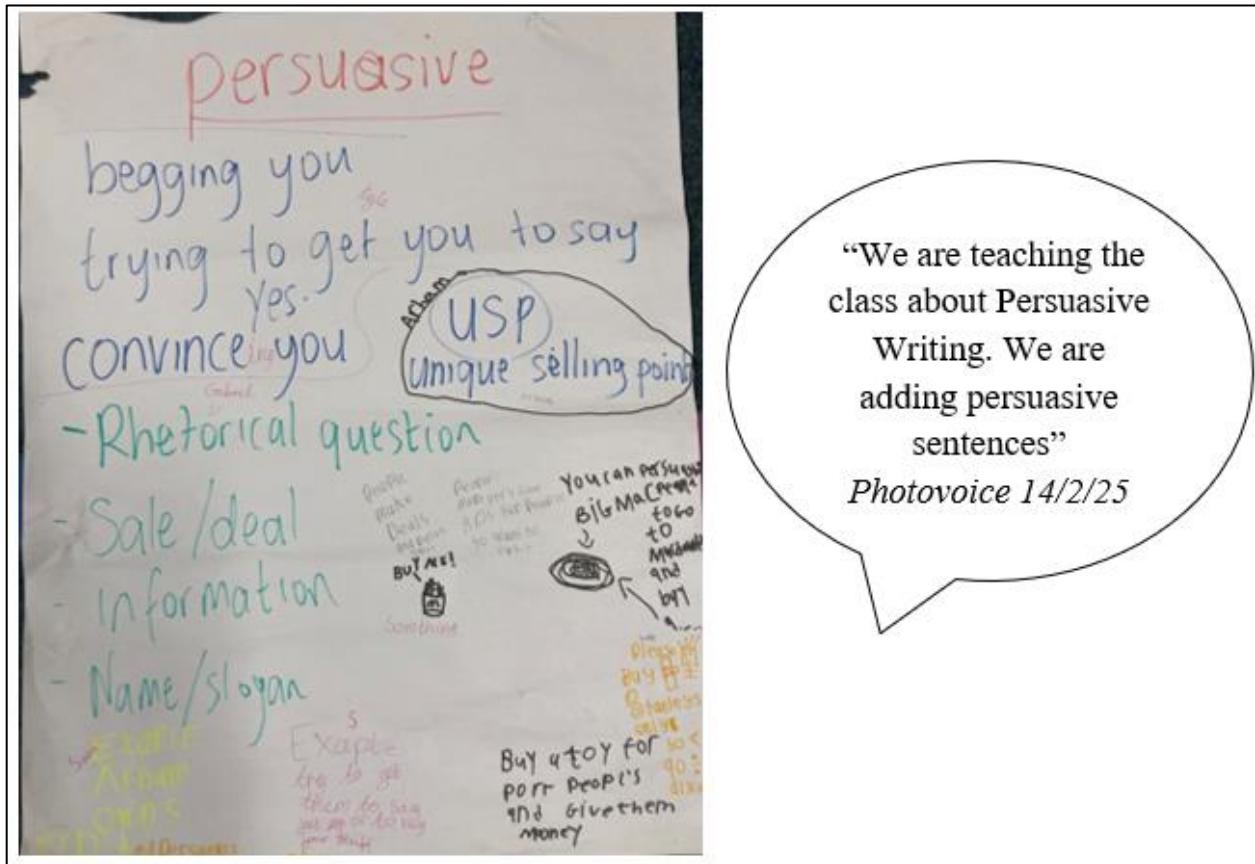
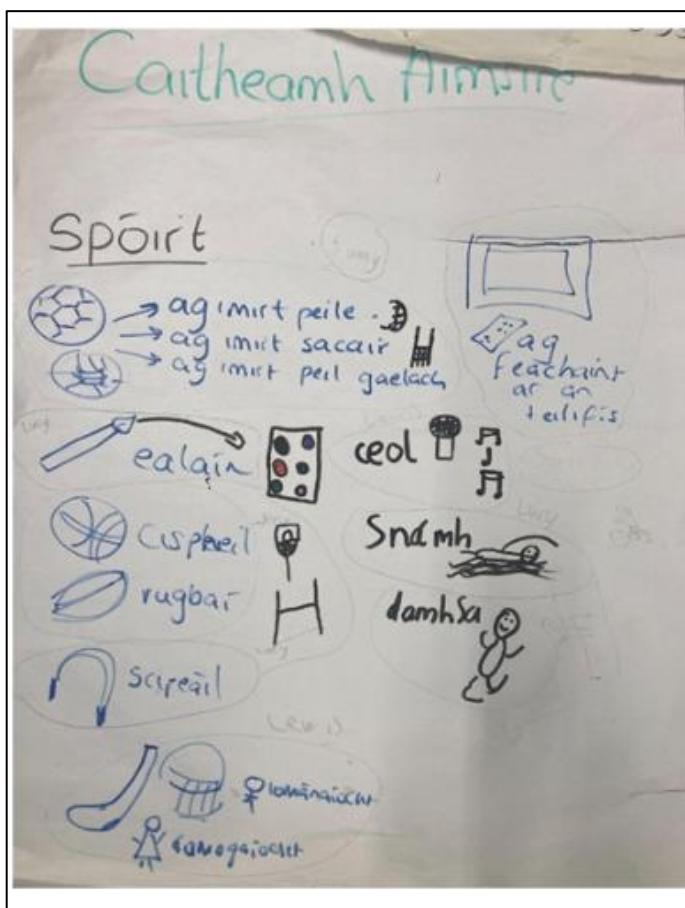


Figure 4.18: Photovoice picture and comment during Cycle 1

Providing multiple means of representation is essential to give learners various ways of acquiring information and knowledge (Meyer et al., 2014), and this is the foundation of UDL (Universal Design for Learning). To facilitate a stronger connection with my value of inclusion, all learning types needed to be considered. This aligns with *The National Council for Special Education* (NCSE, 2011) which has focused on the importance of UDL as a framework for supporting inclusive learning. Learning from this, in Cycle 2, I informed the children that they could re-teach the topic in the way that suited them best. This could be reading lines off the *Machnamh* sheet that were already written, adding their own lines and describing them or drawing a picture and explaining it. Additionally, I modelled drawing as a learning strategy by incorporating illustrations on the *Machnamh* sheets during our initial

exploration of the topic. Employing a range of pedagogical approaches, including the modelling of learning strategies is a key responsibility of educators in addressing children's learning needs, as highlighted in the *Primary Curriculum Framework* (NCCA, 2023). This explicit teaching and modelling of various learning techniques reinforced the message that intelligence is not a single, fixed ability, but rather a spectrum that can be expressed in various ways (Dweck, 2014; Meyer et al., 2014). By incorporating this change in my practice in Cycle 2, I was including all learners and creating a more inclusive learning environment. Figures 4.19 and 4.20 below highlight some of the more creative approaches children used to review their *Machnamh* sheet in Cycle 2 (see Appendix V for further examples).



‘We are teaching
Caitheamh Aimsire.
I drew more
caitheamh aimsire’
Photovoice, 28/3/25

Figure 4.19: Photovoice picture and comment during Cycle 2

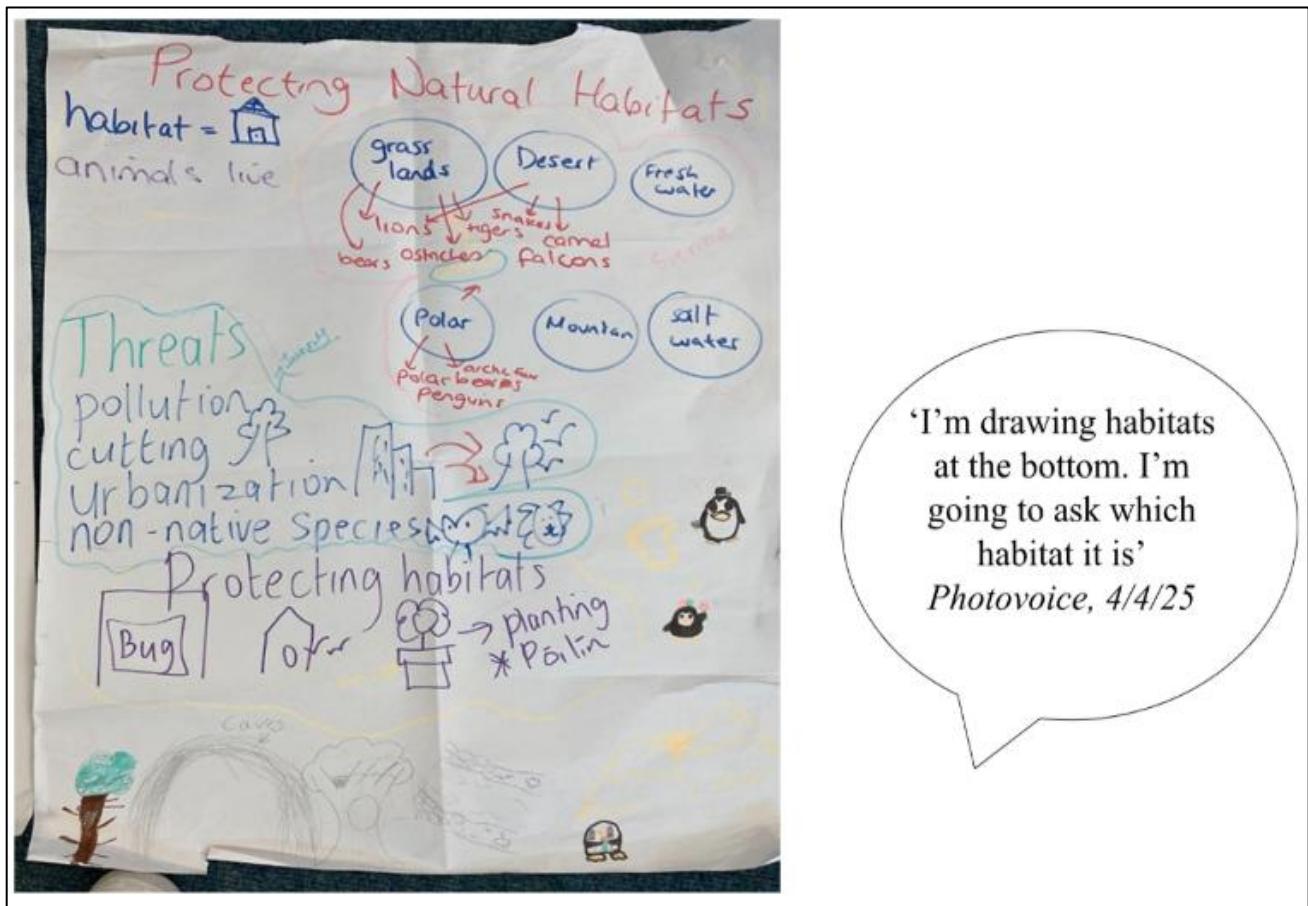
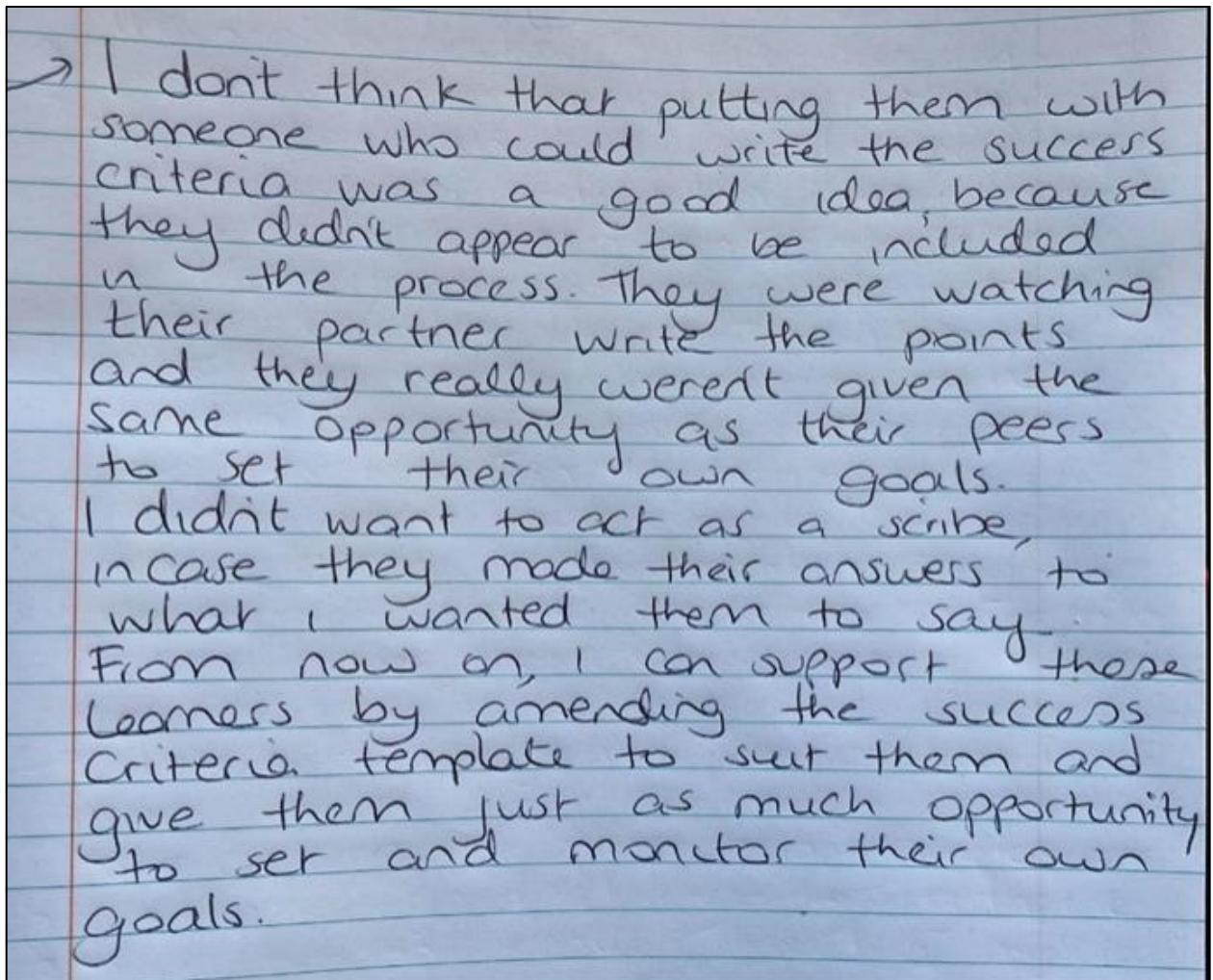


Figure 4.20: Photovoice picture and comment during Cycle 2

4.3.3.2 Balancing Support and Challenge During *Machnamh*

In addition to catering for diverse learning types during *Machnamh*, I also recognised the need to adapt *Machnamh* to accommodate the abilities in my class. During Cycle 1, in my Reflection-in-Action, I wrote that I was pairing children up if they could not write their own success criteria, as I did not want them to feel left out. This action was in line with Johnson's research (2009), which emphasises that academic growth and social inclusion are fostered when students work in diverse pairs. Despite this literature aligning with my action, I still felt conflicted and at odds with my values, as the less-able child was watching, and not fully

included or autonomous in their goal setting. I reflected on this at a later stage. In my Reflection-on-Action (Figure 4.21) I wrote:



→ I don't think that putting them with someone who could write the success criteria was a good idea, because they didn't appear to be included in the process. They were watching their partner write the points and they really weren't given the same opportunity as their peers to set their own goals.
I didn't want to act as a scribe, in case they made their answers to what I wanted them to say. From now on, I can support these learners by amending the success criteria template to suit them and give them just as much opportunity to set and monitor their own goals.

Figure 4.21: Reflection-on-Action in Cycle 1

I came to understand that encouraging autonomy, providing scaffolding, and offering support can, and should co-exist in the classroom (White, 2019). As a result, in Cycle 2, I decided to create a visual success criteria board for four of the children. This involved them selecting pictures for their aims, an emoji for their feelings, and writing one key word to address any challenges they were having. When the differentiated success criteria template was provided, all children were able to set, monitor, and reflect on their goals. This shift in my practice in

Cycle 2 represented meaningful progress toward my values of autonomy, inclusion, and skill development. Figures 4.22 and 4.23 below represent the differentiated success criteria that was used by the children in Cycle 2.

My topic is <u>Coltheamh Aimsire</u>			
A) I will know I have succeeded when	B) How am I feeling about my progress	C) Challenges I am facing	D) Next time I will try
<ul style="list-style-type: none"> ol Will justify and elaborate ol Will add on teacher's ideas ol Will help out 	<p>I feel like I am in group because we are doing really good</p>	<p>I am facing some challenges because we got Irish.</p>	<p>to much group a bit more brighite.</p>

Figure 4.22: Example of Success Criteria Template 1 being used

My topic is <u>Machnamh</u>			
A) My goal for today	B) I feel...	C) Challenges	D) Next time I will...
			
		X num	at a a

Figure 4.23: Example of Success Criteria Template 2 being used

As well as catering for those who need additional support during *Machnamh*, generated data during Cycle 1 indicated that three participants did not find *Machnamh* purposeful. This was noted in my teacher's reflective journal as well as children's reflective journals (Table 4.24 below).

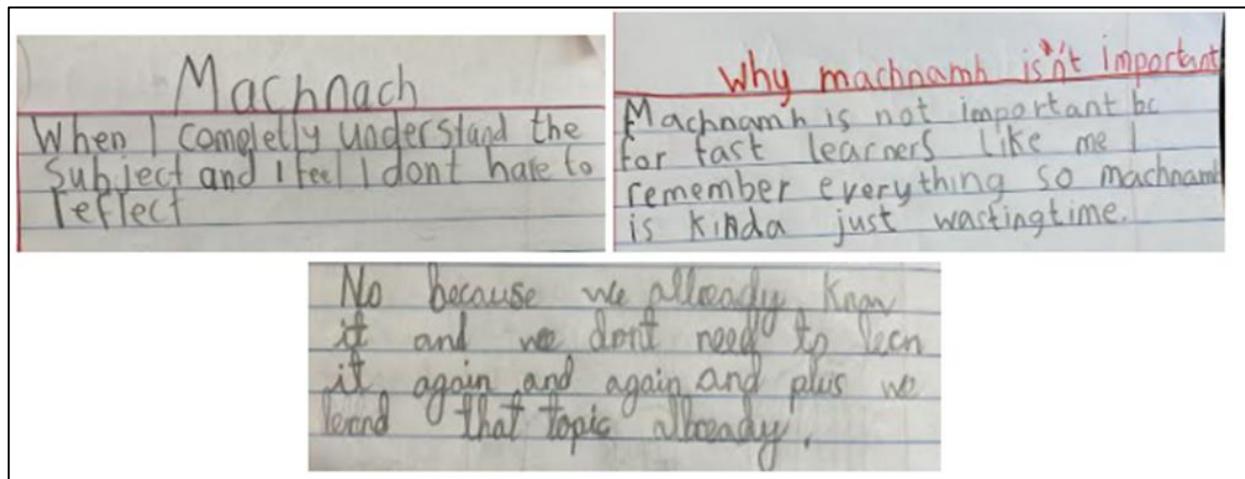


Table 4.24: Children's Reflective Journals- Those who did not find Machnamh Challenging or Purposeful

Initially after reading this unexpected data, I was disheartened as I felt that *Machnamh* was not working. However, my critical friend had the following advice;

Isn't it great that they feel comfortable enough with you to give you such honest feedback. It shows that your values for student voice and autonomy are becoming part of the classroom culture. They are beginning to recognise when their learning could be more challenging and are actively seeking that challenge. You could invite them to explore possible solutions with you and gently guide them to recognise the positive impact their contributions have on their peers during review time—an impact you've already observed (Critical Friend, 4/4/25).

While these children did not see a benefit to *Machnamh*, Askew & Wiliam's (1995), research on students working in small groups showed that those who give help to others generally benefit the most. In addition, Black (2003) found that through articulating understanding, high-attainers strengthen their long-term retention. Upon reading this literature, I met with the three students and shared these facts with them. I also took my Critical Friend's advice on

board and discussed with them how we could make *Machnamh* more challenging. We agreed that a meaningful next step would be making a 'Life Link'. That is, connecting their learning to real-life and explaining why their topic is relevant to them now and in the future, and identifying the professions that are impacted by the topic. In Cycle 2, this 'Life-Link' was the ideal next step, as when high-attainers are forced to make richer and more profound links to knowledge, long term retention is strengthened (Black, 2003). Figure 4.25 below is an example of this 'Life-Link' in action, that I noted in my Reflection-in-Action in Cycle 2.

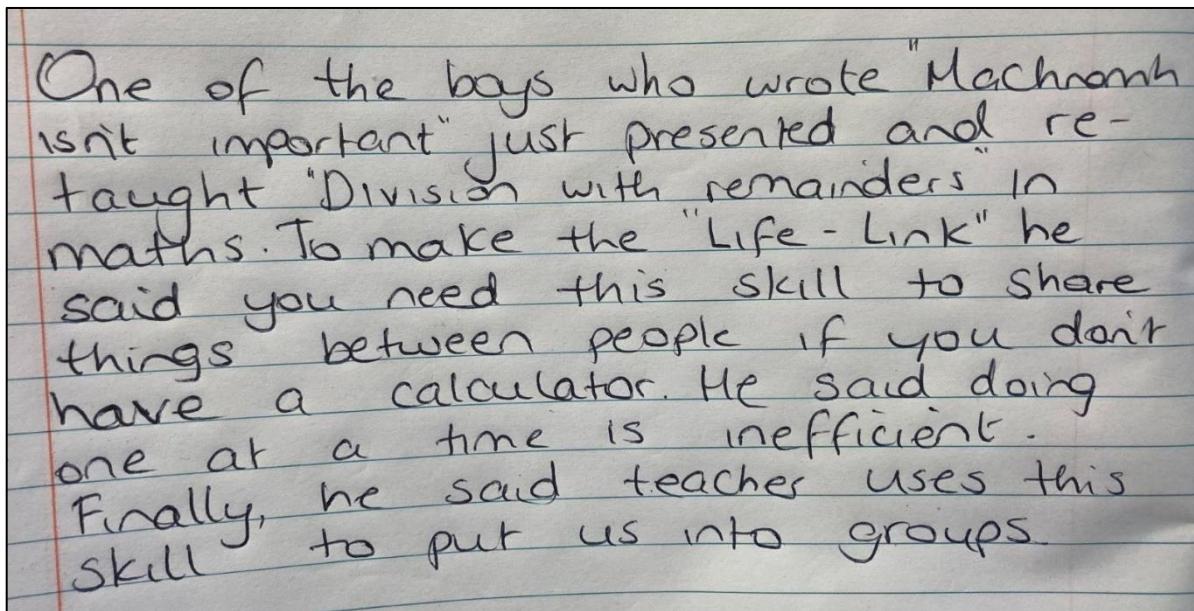


Figure 4.25: Reflection-in-Action in Cycle 2

Despite my beliefs prior to the AR, moments of direct instruction are embedded within the creative process and creativity is not without intervention and support from the teacher (White, 2019). In addition, theorists such as Vygotsky (1978) and Bruner (1996) have shown that scaffolding serves as the bridge to autonomy. The data generated in Cycle 1 indicated that I was not providing this bridge to autonomy for all the students in my class. The 'one size fits all' approach I had to the success criteria and overall structure of *Machnamh* was not suitable

for the diverse needs and learning types in my class. While I was being wary of over-instruction and control, the generated data from Cycle 1 correlates with White's (2019) observation that we do not have to choose between instruction and creativity, they are in partnership within creative processes. In Cycle 2, catering to different learning types, using differentiated success criteria and creating extra challenges for high-attainers, enabled me to live out my values more authentically during *Machnamh*. Recognising their needs and learning styles and giving them the necessary support during *Machnamh* was crucial for me to enhance student autonomy, lifelong skill development and inclusion.

4.3.4 Theme 4: The Importance of Teaching Collaboration and Feedback Skills.

An integral aspect of *Machnamh* is collaborating with others. Yet, in the Pre-Cycle 1 questionnaire, just under half of the children said that they loved working with their classmates. In this questionnaire, the children were also asked about their feelings in relation to feedback from peers in which most of the children voted that 'it's ok sometimes'. The children who expanded on this answer said that 'it depends on what they say' and 'if it makes me sad, I don't like it' (Figure 4.26 below).

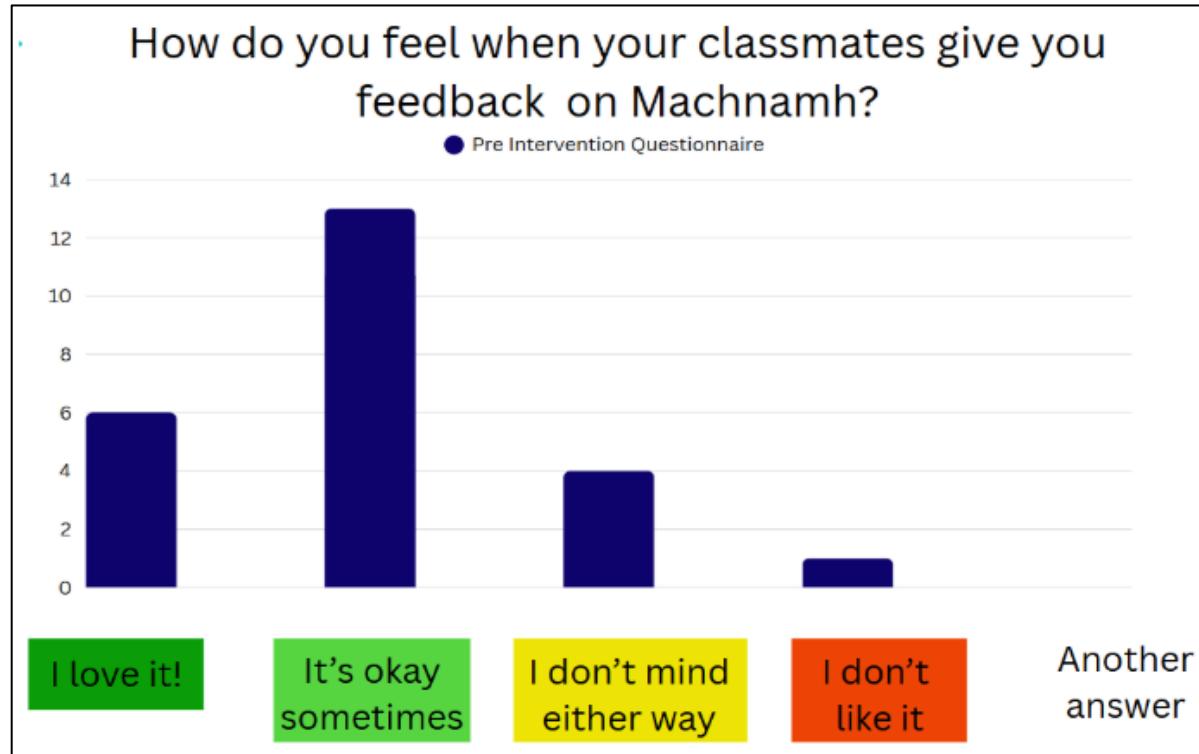


Figure 4.26: Responses to the Pre-Cycle 1 Question 'How do you feel when your classmates give you feedback on Machnamh?'

Children may experience vulnerability or anxiety when receiving feedback from peers, often due to fear of judgment or criticism of their work when it is 'put on stage' (White, 2019). Additionally, without explicit teaching and modelling, students may lack the skills to both give and interpret constructive feedback effectively (Black & Wiliam, 2018). As a result, peer feedback can sometimes be unclear or unhelpful, leading to confusion or even frustration as evident in the Pre-Cycle 1 questionnaire response above. Learning from this, I needed to foster an environment in which positive feedback could be given but constructive feedback could also be shared (Wiliam, 2003). Developing collaborative working skills and peer-feedback skills would support a deeper connection to my values of inclusion, student autonomy, and life-long skill development.

Since effective and inclusive collaboration aligns with my core values, part of my intervention included explicitly teaching skills for ‘Exploratory Talk’ (Mercer, 2000). As outlined in Section 3.4.3., Exploratory Talk is a type of dialogue where participants engage critically and constructively with each other's ideas. By doing so, I aimed to foster a greater sense of inclusion and enhance opportunities for, and positive disposition towards, peer-learning and feedback (Mercer, 2000). When implementing this intervention, I did not change my practice in Cycle 2. Instead, throughout both Cycles, the children focused on one skill at a time and incorporated its use into their success criteria. The positive impact of learning and using these skills during both Cycles was evident in comparison of the Pre and Post Intervention Questionnaire (Figure 4.27 below) in which the children voted more positively towards working with classmates.

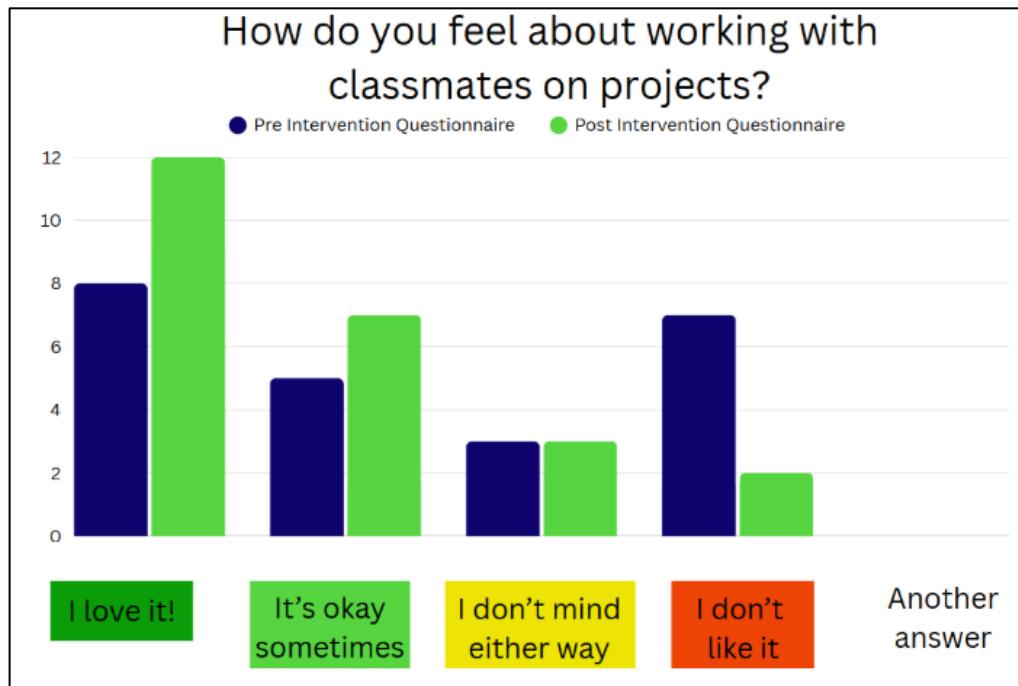


Figure 4.27: Results of the Pre and Post Intervention Question ‘How do you feel about working with classmates on projects?’

The positive effect of teaching specific dialogue skills for collaboration was also evident in extracts of my teacher's reflective journal (Table 4.28 below and Appendix W) in which their behaviours and dialogue were inclusive, respectful and productive as they conducted their *Machnamh* review.

They are giving easy sentences to the children they know struggle to read.
The natural leaders of the class are being so helpful and caring toward the quieter children. One boy explained exactly to his partner what to say because she forgot. He was so patient.
They are differentiating work appropriately for their team members and themselves. This shows that inclusion is a value not only felt by me, but by the class.
Whispering sentences to each other All saying some lines together. thumb up to team mate

Table 4.28: Extracts from my Teacher's Reflective Journal that Highlight the Children's use of the Explicitly Taught 'Exploratory Talk' Skills

In my Reflection-in-Action, I observed that the children's collaborative work reflected a genuine sense of inclusion being practiced in the classroom:

I did not ask them to give easier tasks to the children struggling, but all the groups did it anyway. This shows me that the importance of inclusion is being felt and taken on board by the children (Colreavy, reflective journal: 21/03/2025).

This moment held particular importance for me as a teacher-researcher as it provided clear evidence of my core values (student autonomy, inclusion and lifelong skill development) being lived out authentically by the children themselves. This was also recognised by the children in many of their answers to the post intervention questionnaire (Appendices X and Y). While this research is aimed at helping me act in greater accordance with what I value (Glenn et al., 2023), witnessing this alignment between my values and the learners' actions offered affirmation into the impact of the intervention.

Along with seeing developments in their ability to collaborate, I was aware that conflict and disagreements were bound to occur even with the explicit teaching of skills for dialogue. During *Machnamh*, I observed children encountering and resolving conflict independently, without my intervention. In one instance I observed a group discussing and debating over what examples they should give for the sense of sight, with each offering different viewpoints. This was encouraging to witness, as navigating opposing perspectives fosters empathy, tolerance, and meaningful learning (Dewey, 1930). Witnessing them face and overcome conflict without my assistance was evidence of my core values in practice; inclusion, autonomy and lifelong skill development. In my Reflection-on-Action I wrote:

This was the first time that conflict occurred between the groups. I am not surprised as this is an inevitability with collaborative work. They overcame it themselves and I'm glad I didn't take over and control it. This develops social skills that they need now and in the future. The Exploratory Talk lessons have addressed how to work

together and overcome difficulties as they arrive (Colreavy, Reflective Journal: 14/3/25).

Miller (2015) found that when students are familiar with strong feedback, they should be encouraged to seek it from multiple sources (i.e., their peers). This keeps them in the driver's seat as they select the feedback they will apply and reinforces student autonomy and cognitive flexibility (Miller, 2015). Therefore, in addition to using their skills for Exploratory Talk during the *Machnamh* review, I supported them in using these skills during peer feedback at the end of *Machnamh* (using the "Two Stars and A Wish" approach). The positive effect of teaching skills for 'Exploratory Talk' and peer-feedback was evident in the Post- Intervention Questionnaire. Figure 4.29 below shows the shift in students' attitudes towards receiving feedback from their peers. This shift in perspective stemmed from the 'feedback giver' being well-equipped to give formative, constructive, feedback and the child presenting *Machnamh* viewing it as an opportunity for growth and improvement, rather than perceiving it as an offense.

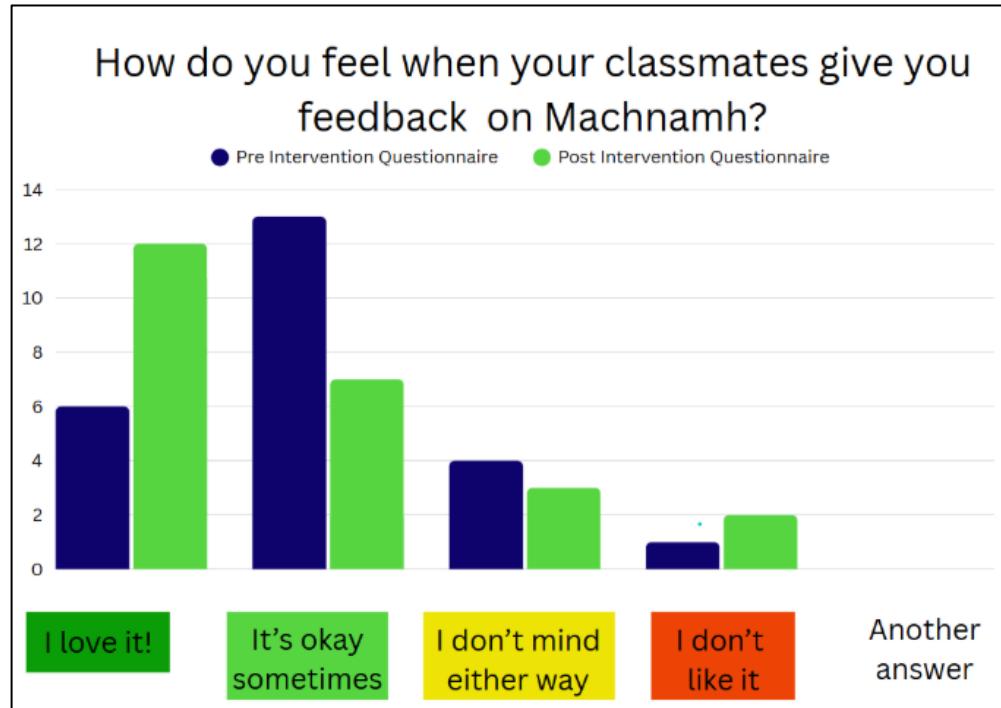


Figure 4.29: Results of the Pre and Post Intervention Question 'How do you feel when classmates give you feedback on Machnamh?'

Explicitly teaching collaboration and feedback skills strengthens children's ability to work together and nurtures inclusion, autonomy, and resilience in the face of conflict (Mercer, 2000) and these outcomes were evident in my research. By embedding these skills into the *Machnamh* process throughout both Cycles, students were better equipped to share ideas openly, respond constructively, and view feedback as a tool for growth. This alignment between my practice and my values highlights the impact of reflective, value-led teaching.

4.4 Conclusion

This chapter has outlined the Themes that emerged from my research in which I explored the question; How do I foster reflective practice and student autonomy through *Machnamh*, a collaborative and creative approach to learning?" Using Braun & Clarke's (2006) Model of Coding and Thematic Analysis, four key themes were generated.

The first theme, ‘Teachers’ Influence on Student Autonomy’ stemmed from data in Cycle 1 highlighting that my praise was supporting a reliance on external validation (Figure 4.5). This finding indicates that educators should keep praise and feedback about learning separate, as praise supports learned helplessness and students often come to depend on praise to be involved in their work (Hattie, 2012). In Cycle 2, by providing feedback on their skills I enhanced rather than limited their autonomy and skill development.

Theme 2 was named ‘Time and Energy Management’, as the data in Cycle 1 highlighted that time was a significant factor in the *Machnamh* process. I learned that for *Machnamh* to be successful, children need sufficient time to do the review (Figure 4.13). They also need what White (2019) refers to as ‘incubation time’. This is a planned pause midway through the review process, giving students time to reflect on their progress, re-assess their goals, and identify the steps needed to achieve them. When these elements were in place in Cycle 2, children were less worried about the time and better equipped to properly engage with the task (Figure 4.15).

The third theme was ‘Differentiated Support’. As I wanted to promote student autonomy, in Cycle 1 I took a step back and watched *Machnamh*. However, I soon realised that my responsibility as a teacher to differentiate was still crucial. Adult intervention and scaffolding are still crucial at times during the creative process (White, 2019) and when facilitating student autonomy (Bruner, 1996). Learning from this, in Cycle 2 I adapted *Machnamh* to suit visual learners (Figures 4.19 and 4.20), I differentiated the success criteria to include emojis and visuals (Figure 4.23) and provided additional challenges to the children who found *Machnamh* unstimulating (Figure 4.25).

The fourth and final theme was ‘Collaboration Skills’. The data collected throughout both Cycles highlighted that teaching children specific skills on how to collaborate and give feedback is vital. Through teaching skills associated with ‘Exploratory Talk’ (Mercer, 2009), children learned how to build on each other’s ideas, actively listen and challenge others constructively. *Machnamh* became a truly collaborative process in which my values were evident not only in practice, but in the children’s interactions with each other (Table 4.28).

The data, relevant literature, and adaptations within the two cycles led to four key findings: the effect of teacher’s praise when encouraging autonomy and reflective practice, the importance of a clear, sufficient and goal-oriented time schedule, the role of differentiated support in promoting autonomy and the importance of teaching collaboration and feedback skills. In the following and final chapter, I will provide a summary of the research, draw conclusions from the study and outline the implications and recommendations for future practice.

Chapter 5- Conclusions and Recommendations

5.1 Introduction

The aim of this study was to research how I could encourage reflective practice and student autonomy through *Machnamh*, a collaborative and creative approach to learning. *Machnamh*, the Irish word for reflection, is a classroom practice I developed that sees children reflecting on their learning and re-teaching the class. The research involved looking at how I could enhance children's learning and development through *Machnamh* as well as an exploration into how I could support children to take ownership of their learning and engage in independent self-reflection. In this final chapter, an overview of the key findings are provided. The significance of the research as well as the limitations of the study are explored. As this Action Research was focused on how I could improve my practice, my educational values are revisited. Finally, recommendations for future practice and my claim to knowledge are put forward.

5.2 Overview of Research and Findings

This research was carried out with 26 children aged between 9 and 10 years old, over a 10-week period, from February 2025 to May 2025. The focus of this study was on me as I explored how I could move my practice and live in closer alignment to my values; student autonomy, inclusion and life-long skill development. Data was collected using teacher and student reflective journals, questionnaires, students' work and Photovoice. The data was then analysed using Braun and Clarke's (2006) model of coding and thematic analysis. Four key themes emerged from the data;

5.2.1 Theme 1- Teacher's Influence on Student Autonomy

Prior to the interventions, I constantly gave praise during *Machnamh*. However, reliance on praise can limit autonomy (Hattie, 2012) and this was evident in my classroom when children looked to me for praise and affirmation during *Machnamh* (Figure 4.5). Hattie (2012) advises educators to keep praise and feedback about learning separate, as praise supports learned helplessness and students often come to depend on praise to be involved in their work. In Cycle 2, by providing feedback on their skills I was enhancing rather than limiting their autonomy and skill development. This was evident in my teacher reflective journal (Section 4.3.1) and post intervention questionnaire in which 12 less children voted for 'teacher tells me', when answering the question 'How do you know when you have done a good job doing *Machnamh*?' (Figure 4.10).

5.2.2 Theme 2- Time and Energy Management

The generated data also highlighted that time was a significant factor in the *Machnamh* process. I learned that for *Machnamh* to be successful, children needed sufficient time to do the review. They also needed what White (2019) refers to as 'incubation time'. This is a planned pause midway through the review process, giving students time to reflect on their progress, re-assess their goals, and identify the steps needed to achieve them. When these elements were in place, children were less worried about the time and better equipped to properly engage with the task. This was evident in the students' self-reported 'challenges I am facing', which showed a shift from largely negative emotions to positive emotions when sufficient time and 'incubation time' was provided in Cycle 2 (Figure 4.15).

5.2.3 Theme 3- Differentiated Support

As I wanted to promote student autonomy, in Cycle 1 I took a step back and watched *Machnamh*. However, I soon realised that my responsibility as a teacher to differentiate was still crucial. White (2019) as well as Kirschner et al. (2006) call attention to the importance of adult intervention at times during the creative process. Learning from this I applied UDL to *Machnamh* to suit all learning styles, created differentiated success criteria for the children struggling to write sentences, and provided additional challenges to the children who found *Machnamh* unstimulating. These children had to address how their *Machnamh* topic linked to their lives and existing professions as connecting learning to real life deepens understanding (Black, 2003). The success of this differentiated support was evident in the adapted success criteria (Figures 4.22 and 4.23) and my teacher reflective journal (Figure 4.25).

5.2.4 Theme 4- Collaboration Skills

Finally, the data showed that teaching children specific skills on how to collaborate was vital. Through teaching skills associated with ‘Exploratory Talk’ (Mercer, 2009), children learned how to build on each other’s ideas, actively listen, constructively challenge and give formative feedback. As a result, *Machnamh* became a truly collaborative process rather than the work of one or two. This was evident in the post intervention questionnaire as children voted more positively towards working with classmates in comparison to before the intervention (Figure 4.27). It was also evident in my teacher’s reflective journal in which I observed an increase in participation and inclusion of all students in the group (Table 4.28).

5.3 Embracing Values and Personal and Professional Development

5.3.1 Values

This self-study Action Research process began with a consideration of my core educational values. By reflecting on my classroom practices, challenges, and interactions, I came to realise that I value listening to the children's voices, ensuring they feel safe and enjoy school, while also supporting them in developing the skills they need to navigate in today's world. These aspects were refined into three core values; student autonomy, inclusion, and life-long skill development. By completing this study, I believe that I now embody my values more fully in my practice.

5.3.2 Teacher Identity

Froebel believed that educators must start with the child; their interests, needs and experiences (Froebel, 1887). However, Hattie (2012) claimed that teachers' beliefs and commitments have the greatest influence on students' achievement. Hattie (2012) suggests that while students' needs and interests are vital to consider, the teacher's mindset, expectations, and educational values play an even more decisive role in shaping what and how students learn. Bearing this in mind, learning may not just begin with the child, but with the teacher's ability to respond to, and shape, that child's potential. This research has taught me about the importance of reflecting on my own practice and identifying the changes I can make to my practice to better benefit the children in my class. Though I have moved closer to living in alignment with my values, this does not mark the end of my learning journey. Learning is a life-long journey (Froebel, 1887) and consistent reflection and re-alignment with my values is essential for me to teach in a way that is grounded in my teacher identity.

5.4 Significance of the Research- Curriculum, Policies and Frameworks

Findings from my Action Research project indicated that *Machnamh* has the potential to be a creative, collaborative and integrated approach to student-led reflection. However, it is a classroom practice I created that is not subject specific and therefore lacks dedicated time allocation in the curriculum. As *Machnamh* is a practice I designed, no specific research has been conducted on it to date. While existing research explores creativity, reflection, assessment and collaboration in the classroom, the combination of these aspects within a single methodology such as *Machnamh* has not been examined. As a result, as well as assisting me in improving my practice, this study is of particular significance because it addresses a gap in literature. This research explores how creative, collaborative, student-led reflective practice can be achieved and implemented in a way that supports learning, student autonomy, skill development, and inclusion in the classroom. As outlined in Chapter 4, challenges were faced during the Action Research such as time limitations when completing *Machnamh*, catering to all learning types and setting challenges for learners at all levels. Going forward, future research could focus on these challenges, highlight further links to UDL, and identify more challenges and opportunities for learners within *Machnamh*. Future research could also explore how *Machnamh* can be implemented and adapted for other age groups, as this study was carried out with the specific age group of 9 and 10 year olds. Carrying out this research on a larger scale in the future would provide a more robust research base to evaluate the effectiveness of *Machnamh* and inform future implementation and potential rollout in classrooms.

As discussed in Section 2.6.1, *Machnamh* links with all the Principles of Learning, Teaching and Assessment (Figure 5.1), as well as many of the Key Competencies outlined in the *Primary Curriculum Framework* (Figure 5.2) (NCCA, 2023). With the interventions in

place, a clear correlation with the competency of ‘Being an Active Learner’ now exists. The ability to ‘set collaborative learning goals’, ‘reflect on learning’ and develop ‘knowledge, skills, concepts, attitudes, values, and dispositions’ are all listed as elements of the competency ‘Being an Active Learner’ (NCCA, 2023:11).



Figure 5.1: Principles of Learning, Teaching and Assessment outlined in the Primary Curriculum Framework (NCCA, 2023)



Figure 5.2: Key Competencies outlined in the Primary Curriculum Framework (NCCA, 2023)

The acts of reflecting, summarising, setting and monitoring success criteria and giving and receiving feedback results in *Machnamh* correlating strongly with AfL. As highlighted in Section 2.5, AfL ‘emphasises the child’s active role in his/her own learning, in that the teacher and child agree what the outcomes of the learning should be and the criteria for judging to what extent the outcomes have been achieved’ (NCCA, 2007:9). This was achieved during *Machnamh*, as children were active in setting their own success criteria and taking responsibility for achieving them and reflecting on their success. Having this opportunity to self-assess and engage authentically in AfL is crucial, as ‘this level of involvement in shaping their own learning can heighten children’s awareness of themselves as learners and encourage them to take more personal responsibility for, and pride in, their learning’ (NCCA, 2007:9). Feedback is also highlighted as a core component of AfL (NCCA, 2007:9), as it ‘can help children identify and celebrate their progress and achievements, pinpoint challenges they experience, and decide what the next steps should be’. During *Machnamh*, this feedback was not only provided by the teacher, but by peers as well.

In addition to the links with the PCF, the Participation Framework (DCYA, 2019) (discussed in Section 2.6.2), highlighted the need for children to have Space, Voice, Influence and Audience in their lives. Although all four elements were present to some extent before the intervention, the aspect of Voice was notably strengthened during this AR.

The *Future of Education and Skills* project was also reviewed in Section 2.6.3. The aim of this project developed by the OECD is to help countries re-design their education systems to better prepare learners for the future. It involves equipping students with the knowledge, skills, attitudes, and values necessary in a rapidly changing world (OECD, 2018). With the interventions in place, *Machnamh* equipped my students with all these elements, and linked to many of the competencies that students need to thrive according to the OECD (Figure 5.3 below).

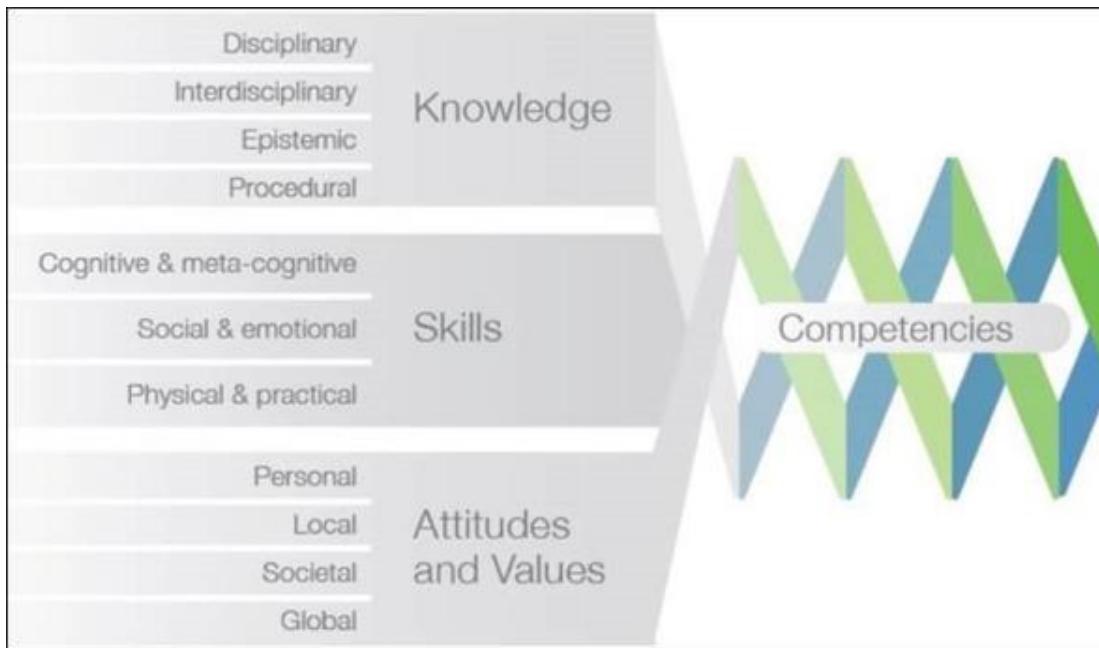


Figure 5.3: OECD Learning Framework 2030: *The Future of Education and Skills*

5.5 Limitations of the study

While this AR offered valuable insights into my practice and areas for improvement in the development of *Machnamh*, it is important to acknowledge its limitations.

5.5.1 Researcher Bias

Acting as both researcher and practitioner, there was potential for bias in how I interpreted observations and data. I was tasked with reflecting on my own practice and generating data from my own work as well as the work of the children. This can lead to selective attention, in which the researcher notices evidence that supports assumptions rather than evidence that challenges them (Whitehead, 2018). However, completely avoiding bias is unrealistic in practitioner research (Whitehead, 2018). Therefore, I used rigorous validation strategies such as meta-reflecting and feedback from critical friends to maintain a level of objectivity throughout the Action Research (Mc Niff & Whitehead, 2011).

5.5.2 Time Constraints

As mentioned in Section 5.4, there is no dedicated time allocation to *Machnamh* in the curriculum. As a result, I was tasked with adapting my timetable to accommodate *Machnamh* sessions. In addition, at least 6 new topics had to be taught before reflection on those topics could be done. This meant that opportunities to collect data during the period of Action Research were quite limited.

5.5.3 Research Tools

As discussed in Chapter 3, I used a wide variety of data collection tools for this study as it supported triangulation. This enhanced the validity of findings by allowing different sources to confirm or challenge emerging data (Glenn et al., 2023). While Photovoice enabled the children to document and share their perspectives in ways that traditional methods may overlook, I was unable to facilitate its use consistently and fairly due to having only two iPads

in the classroom. This meant it was only accessible to a limited number of children at certain times.

5.5.4 Contextual and Data Limitations

The results of this study are based solely on the implementation of *Machnamh* in my classroom, which naturally limits its applicability in other contexts. Age group, relationships and school culture also have influence on the process and outcomes of such research (McDonagh et al., 2018). The small sample size of 26 children means the identified themes reflect the experiences of a specific group and may not be applicable to other educational settings. Future research could include ensuring having a larger data sample, broader variety of data collection and time for more research cycles.

5.6 Disseminating the Research

The final stage of McDonagh et al.'s (2018) suggested approach to Action Research is about relating actions and reflections to future possibilities and demonstrating how you have influenced the educational community's knowledge and practice. Engaging in collaborative practices that promote the sharing of knowledge and ideas is a vital part of the Action Research process (McNiff & Whitehead, 2011), yet many teachers are reluctant to put their findings before colleagues or other educational contexts (McDonagh et al., 2018). Despite having these reservations, Whitehead (2018) claimed that as part of conducting living educational theory (Section 3.6.4), educators have an ethical responsibility to disseminate findings and contribute to the professional knowledge base of education. I am grateful to have already had the opportunity to share and disseminate my research and practice with others. For example, in collaboration with Monaghan Education Centre I spoke about achieving student autonomy in the classroom through *Machnamh*. I also had the opportunity to speak about *Machnamh* at the 'Froebel-Teach Meet' in Maynooth University- a time for teachers,

lecturers and training teachers to learn from each other's practice. I was honoured to have my proposal accepted to be presented at the International Symposium for UDL (Universal Design for Learning) which will be hosted by Maynooth University in September 2025. In addition to that, I have been asked to give a presentation on my research at the NEARI meet (Network of Educational Action Research in Ireland) in October 2025, under the theme 'Teacher as Researcher'. To date, I have embraced every opportunity to speak about my practice, and I remain committed to continuing this in the future.

5.7 My Claim to Knowledge

Claims to knowledge arise from new learning around educational practice, represent personal theory of practice, or living educational theory (Whitehead 2018). Through the implementation of my interventions to *Machnamh* I have shown that developing student autonomy in reflective practice requires deliberate teacher decisions around feedback, time management, differentiation, and collaboration. By aligning feedback with skill development rather than praise, allowing incubation time, differentiating supports through UDL, and explicitly teaching skills to engage in collaborative work, I enhanced the students' ability to reflect and engage with their learning.

5.8 Conclusion

This learning journey has been rewarding both professionally and personally. I have come to appreciate the benefits that consistent reflection can have on teacher identity and student learning. My findings showed that teachers have a significant influence on student autonomy through the way they provide feedback during *Machnamh*. Time and energy management are crucial when facilitating creative, reflective and collaborative work. Differentiated support is vital for students who are struggling, as well as those who find the material too easy, even when trying to encourage student autonomy. Finally, the findings indicated that children need

to be explicitly taught skills on how to work with others, if true collaboration is to be facilitated. Limitations to the study were outlined in section 5.5, along with the challenges I faced as a teacher-researcher during the process. However, with more time and a greater sample of data, adaptations and improvements could be made to *Machnamh*. Despite the limitations and challenges I faced such as contextual, data and time limitations, the four key findings from this AR project indicate that *Machnamh* has the potential to be a creative, collaborative and integrated approach to student-led reflection, not only in my classroom, but in all classrooms.

Having referred to Hattie frequently throughout this research, I would like to conclude with the following quote: 'it might seem obvious to start with the student, but that would not be the correct place to start. Teachers' beliefs and commitments are the greatest influence on student achievement' (Hattie, 2012:22). This quote highlights that teacher's beliefs, values and expectations are the most powerful drivers of learning outcomes. By reflecting on my own practice and identifying areas for improvement, I was enabled to enhance the learning environment for the children in my class and live in closer alignment to my values. Although much of my research focused on amplifying the child's voice, I never considered that my own voice held enough value to contribute meaningfully to the area of educational development. Yet, from doing this research and studying the work of many theorists and scholars such as Vygotsky (1978), Freire (1972), Whitehead (2018), Dewey (1930), Carr (2011), Braun and Clarke (2006), I have gained greater confidence in the validity of my insights and the self-belief to share my contributions to educational knowledge with others.

References

Appleton, J. J., Christenson, S. L., and Furlong, M. J. (2008) Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools*, 45(5), 369-386.

Arnold, P. J. (1979) *Meaning in Movement, Sport and Physical Education*. London: Heinemann.

Athanasou, J. (1999) *Adult Education Psychology*. Katoomba: Social Science Press.

Askew, M. and Wiliam, D. (1995) *Recent Research in Mathematics Education*. London: HMSO.

Baskerville, D. and Goldblatt, H. (2009) Learning to be a Critical Friend: From Professional Indifference Through Challenge to Unguarded Conversations. *Cambridge Journal of Education*, 39(2), 205-221.

Bassey, M. (1999) *Case Study Research in Educational Settings*. Birmingham: Open University Press.

Baumeister, R. F., Campbell, J. D., Krueger, J. I., and Vohs, K. D. (2003) Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, 4(1), 1-44.

Bereiter, C. (2002) *Education and Mind in the Knowledge Age*. London: Lawrence Erlbaum Associates.

Black, P. and Wiliam, D. (2018) Classroom Assessment and Pedagogy. *Assessment in Education: Principles, Policy & Practice*, 25(6), 551-575.

Black, P.J. (2003) *Assessment for Learning: Putting it into Practice*. Maidenhead: Open University Press.

Bolton, G. (2000) It's All Theatre: Drama Research. *The research journal of national drama*, (1), 21-29.

Boud, D. and Walker, D. (1998) Promoting Reflection Professional Courses: The Challenge of Context. *Studies in Higher Education*, 23(2), 191 – 206.

Boud, D., Cressey, P. and Docherty, P. (2006) *Productive Reflection at Work: Learning for Changing Organizations*. London: Routledge.

Boud, D., Keogh, R. and Walker, D. (1985) *Reflection: Turning Reflection into Learning*. London: Routledge.

Bradbury, H., Frost, N., Kilminster, S. and Zukas, M. (2010) *Beyond Reflective Practice*. London: Routledge.

Braun, V. and Clarke, V. (2006) Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77–101.

Bright, B. (1996) Reflecting on Reflective Practice. *Studies in the Education of Adults*, 28(2), 162 – 84.

Brookfield, S.D. (2017) *Becoming a Critically Reflective Teacher*. 2nd ed. San Francisco, CA: Jossey Bass.

Broström, S. (2006) Children's perspectives on their childhood experiences In Einarsdottir, J. and Wagner, J.T., ed (2006) *Nordic childhoods and early education: Philosophy, research,*

policy, and practice in Denmark, Finland, Iceland, Norway, and Sweden. Connecticut: Information Age Publishing.

Bruner, J. (1996) *The Culture of Education.* Cambridge, MA: Harvard University Press.

Bullough, R. V., Jr and Pinnegar, S. E. (2004) Thinking about the thinking about self-study: An analysis of eight chapters in *International Handbook of Self-Study of Teaching and Teacher Education Practices.* Dordrecht: Springer Netherlands, 313–342.

Carr, M. (2011) Young Children Reflecting on their Learning: Teachers' Conversation Strategies. *Early Years: An International Journal of Research and Development*, 31(3), 257–270.

Carr, W. and Kemmis, S. (1986) *Becoming Critical: Education, Knowledge and Action Research.* London: Falmer Press.

Chin, C. and Osborne, J. (2008) Students' Questions: A Potential Resource for Teaching and Learning Science. *Studies in Science Education*, 44(1), 1–39.

Cohen, L., Manion, L. and Morrison, K. (2018) *Research Methods in Education.* 8th ed. London: Routledge.

Collier, K. (2010) Re-imagining reflection: Creating a theatrical productive reflection space for the imagination In: Bradbury, H., Frost, N., Kilminster, S. and Zukas, M. (2010) *Beyond reflective practice.* London: Routledge.

Costa, A.L. and Kallik, B. (1993) Through the Lens of a Critical Friend. *Educational Leadership*, 51(2), 49– 51.

Creswell, J.W. and Creswell, J.D. (2018) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. 5th ed. Thousand Oaks, CA: SAGE Publications.

Csikszentmihalyi, M. (1990) *Flow: The Psychology of Optimal Experience*. New York: HarperCollins.

Cullen, J., Hedges, H. and Bone, K. (2011) Planning, undertaking and dissemination research in early childhood settings: An ethical framework. In Callan, S. and Reed, M. (2011) *Work-Based Research in the Early Years*. London: SAGE.

Davies, A. (2011) *Making Classroom Assessment Work*. 3rd ed. Bloomington, IN: Solution Tree Press.

Dawes, L., Mercer, N. and Wegerif, R. (2000) *Thinking Together*. Birmingham, UK: Questions Publishing.

Deci, E.L. and Ryan, R.M. (2013) The Importance of Autonomy for Development and Well-Being. *Self-Regulation and Autonomy: Social and Developmental Dimensions of Human Conduct*, 96, 19-46.

Department of Children and Youth Affairs. (2019) *Participation Framework: National Framework for Children and Young People's Participation in Decision-making*. Dublin: Hub na nÓg.

Dewey, J. (1930) *Democracy and Education: An Introduction to the Philosophy of Education*. New York: Macmillan.

Drapeau, P. (2014) *Sparking Student Creativity: Practical Ways to Promote Innovative Thinking and Problem-solving*. Alexandria, VA: Association for Supervision and Curriculum Development.

Dueck, M. (2014) *Grading Smarter, Not Harder: Assessment Strategies that Motivate Kids and Help Them Learn*. Alexandria, VA: Association for Supervision and Curriculum Development.

Duschl, R. A. and Gitomer, D. H. (1997) Strategies and Challenges to Changing the Focus of Assessment and Instruction in Science Classrooms. *Educational Assessment*, 4, 37–73.

Dweck, C. (2014) How Can You Develop a Growth Mindset About Teaching? *Educational Horizons*, 93(2), 15-55.

Eckhoff, A. (2015) Ethical Considerations of Children's Digital Image-Making and Image-Audiencing in Early Childhood Environments. *Early Child Development and Care*. 185(10), 1617-1628.

Eraut, M. (2006) Schön Shock: A Case for Reframing Reflection in Action? *Teachers and Teaching: Theory and Practice*, (1), 9 – 22.

Erkens, C., Schimmer, T. and Vagle, N. D. (2017) *Essential Assessment: Six Tenets for Bringing Hope, Efficacy, and Achievement to the Classroom*. Bloomington, IN: Solution Tree Press.

Foreman, P. and Arthur-Kelly, M. (2014) *Inclusion in Action*. 4th ed. Melbourne: Cengage Learning.

Freire, P. (1972) *Pedagogy of the Oppressed*. New York: Continuum.

Froebel, F. (1887) *The Education of Man*. Translated by W. N. Hailmann. New York: D. Appleton and Company.

Glenn, M. (2021) Developing Holistic Practice Through Reflection, Action and Theorising. *Educational Action Research*, 19(4), 489-502.

Glenn, M., Sullivan, B., Roche, M. and McDonagh, C. (2023) *Action Research for the Classroom: A Guide to Values-Based Research in Practice*. London: Routledge.

Green, M. (1984) How We Think About the Craft of Teaching. *Teachers College Record*, 86(1), 55-67.

Greene, M. (1995) *Releasing the Imagination: Essays on Education, the Arts, and Social Change*. San Francisco: The Jossey-Bass Education Series.

Gresham, P. (2014) Fostering Creativity Through Digital Storytelling: “It’s a Paradise Inside a Cage.” *Metaphor*, (1), 47– 56.

Harcourt, D. and Conroy, H. (2005) Informed Assent: Ethics and Processes When Researching with Young Children. *Early Child Development and Care*, 175(6), 567-577.

Hattie, J. (2012) *Visible Learning for Teachers: Maximizing Impact on Learning*. London: Routledge.

Hattie, J. and Donoghue, G. M. (2016) Learning Strategies: A Synthesis and Conceptual Model. *Science of Learning*, 1(16013), 16013.

Hedges, H. (2022) *Children’s Interests, Inquiries, and Identities: Curriculum, Pedagogy, Learning and Outcomes in the Early Years*. London: Routledge.

Johnson, A.P. (2012) *A Short Guide to Action Research*. 4th ed. New York: Pearson Education.

Johnson, D.W. and Johnson, R.T. (2009) An Educational Psychology Success Story: Social Interdependence Theory and Cooperative Learning. *Educational Researcher*, 38(5), 365-379.

Kara, H., Lemon, N., Mannay, D. and McPherson, M. (2021) *Creative Research Methods in Education: Principles and Practices*. Bristol: Policy Press.

Kelly, R. (2012) *Educating for Creativity: A Global Conversation*. Calgary, Canada: Brush Education.

Kirschner, P. A., Sweller, J. and Clark, R. E. (2006) Why minimal guidance during instruction does not work: An analysis of the failure of constructivist, discovery, problem-based, experiential, and inquiry-based teaching. *Educational Psychologist*, 41 (2), 75– 85.

Kohn, A. (2006) The Trouble with Rubrics. *Language Arts*, (1) 12-15.

LaBoskey, V.K. (2004) The Methodology of Self-Study and Its Theoretical Underpinnings In: Loughran J.J., Hamilton M.L., LaBoskey V.K. and Russell T. (2004) *International Handbook of Self-Study of Teaching and Teacher Education Practices*. Dordrecht: Springer.

Lloyd, K. and Emerson, L. (2017) (Re)examining the Relationship Between Children's Subjective Wellbeing and Their Perceptions of Participation Rights. *Child Indicators Research*, 10, 591–608.

Loehr, J., and Schwartz, T. (2003) *The Power of Full Engagement: Managing Energy, Not Time, is the Key to High Performance and Personal Renewal*. New York: Free Press.

Luttrell, W. (2020) *Children Framing Childhoods: Working-Class Kids' Visions of Care*. Bristol: Policy Press.

Lyons, N. and LaBoskey, V.L. (2002) *Narrative Inquiry in Practice: Advancing the Knowledge of Teaching*. New York: Teachers College Press.

Maslow, A. H. (1954) *Motivation and Personality*. New York: Harper & Row.

McAteer, M. (2013) *Action Research in Education*. London: SAGE.

McDonagh, C., Roche, M., Sullivan, B., & Glenn, M. (2019). *Enhancing Practice Through Classroom Research: A Teacher's Guide to Professional Development*. 2nd ed. London: Routledge.

McNiff, J. (2013) *Action Research: Principles and Practice*. 3rd ed. London: Routledge.

McNiff, J. and Whitehead, J. (2011) *All You Need to Know About Action Research*. 2nd Ed. London: Sage Publications.

Mercer, N. (2009) The Analysis of Classroom Talk: Methods and Methodologies. *British Journal of Educational Psychology*, 80, 1-14.

Mercer, N. (2000) *Words and Minds*. London: Routledge.

Mertens, D.M., Cram, F. and Chilisa, B. (2016) *Research Methods for Social Justice and Equity in Education*. London: SAGE.

Meyer, A., Rose, D.H and Gordon, D.T. (2014) *Universal Design for Learning: Theory and Practice*. Wakefield, MA: CAST Publishing.

Miller, A. K. (2015) *Freedom to Fail: How do I Foster Risk-Taking and Innovation in my Classroom?* Alexandria, VA: Association for Supervision and Curriculum Development.

Miller, J.P., Karsten, S., Denton, D., Orr, D., Colalillo Kates, I. (2005) *Holistic Learning and Spirituality in Education: Breaking New Ground*. Albany: New York Press.

Moon, J. A. (2004) *A Handbook of Reflective and Experiential Learning: Theory and Practice*. London: Routledge Falmer.

Mooney, C.G. (2000) *Theories of Childhood: An Introduction to Dewey, Montessori, Erickson, Piaget & Vygotsky*. Redleaf Press, St. Paul Minnesota.

Morgan, G. (2015) *Innovative Educators: An Action Plan for Teachers*. Portsmouth, NH: Heinemann.

NCCA. (2017) *Assessment in Primary School: Guidelines for Teachers*. Dublin: NCCA.

NCCA. (2007) *Assessment in the Primary School Curriculum: Guidelines for Schools*. Dublin: Department of Education.

NCCA. (2008) *Assessment Guidelines in School: Primary Overview*. Dublin: NCCA.

NCCA. (2010) *Curriculum Overload in Primary Schools: An Overview of National and International Experiences*. Dublin: Department of Education.

NCCA. (2020) *Guidelines for Good Practice: Supporting learning and development through assessment*. Dublin: NCCA.

NCCA. (2023) *Primary Curriculum Framework*. Dublin: Department of Education.

NCSE. (2011) *Inclusive Education Framework: A Guide for Schools on the Inclusion of Pupils with Special Educational Needs*. Meath: National Council for Special Education.

Noddings, N. (2013) *Caring: A Relational Approach to Ethics and Moral Education*. 2nd ed. Berkeley, CA: University of California Press.

Organisation for Economic Co-operation and Development (OECD). (2018) *The Future of Education and Skills*. France: OECD.

Pink, D. H. (2009) *Drive: The Surprising Truth About What Motivates Us*. New York: Riverhead Books.

Race, P. (2001) *A Briefing on Self, Peer and Group Assessment*. York: Learning and Teaching Support Network.

Reeve, J. (2006) Teachers as Facilitators: What Autonomy-Supportive Teachers Do and Why Their Students Benefit. *The Elementary School Journal*, 106 (3), 225–236.

Reeves, D. (2015) *Inspiring Creativity and Innovation in K–12*. Bloomington, IN: Solution Tree Press.

Renzulli, J. S. (2000) *New Directions in Creativity: Mark 2*. Mansfield Center, CT: Creative Learning Press.

Ritchhart, R. (2015) *Creating Cultures of Thinking: The 8 Forces We Must Master to Truly Transform our Schools*. San Francisco, California: Jossey-Bass.

Rogers, C. R. (1954) Toward a Theory of Creativity. *ETC: A Review of General Semantics*, 11 (4), 249– 260.

Rojas-Drummond, S. M. and Mercer, N. (2003) Scaffolding the Development of Effective Collaboration and Learning. *International Journal of Educational Research*, 39(1), 99-111.

Rothstein, D. and Santana, L. (2014) The Right Questions. *Educational Leadership*, 72 (2).

Rowe, M.B. (1972) *Wait-Time and Rewards as Instructional Variables: Their Influence on Language, Logic and Fate Control*. Chicago: National Association for Research in Science Teaching.

Rowley, J. (2014) Designing and Using Research Questionnaires. *Management Research Review*, 37(3), 308-330.

Ruiz-Primo, M. (2011) Informal Formative Assessment: The Role of Instructional Dialogues in Assessing Students' Learning. *Studies in Educational Evaluation*, 37, 15-24.

Sadler, R. D. (1989) Formative Assessment and the Design of Instructional Systems. *Instructional Science*, 18, 119–144.

Sawyer, R. K. (2006) *Explaining Creativity: The Science of Human Innovation*. New York: Oxford University Press.

Schön, D.A. (1991) *The Reflective Practitioner: How Professionals Think in Action*. England: Routledge.

Shirzad, F. and Ebadi, S. (2022) Developing a Learner Autonomy Questionnaire in English as a Foreign Language Reading Comprehension. *Teaching English Language*, 14(1), 273-307.

Silverman, D. (2010) *Doing Qualitative Research: A Practical Handbook*. 3rd ed. London: SAGE Publishing.

Skipper, Y. and Douglas, K. (2011) Is no praise good praise? Effects of positive feedback on children's and university students' responses to subsequent failures. *British Journal of Educational Psychology*, 2, 327-239.

Sullivan, B., Glenn, M., Roche, M. and McDonagh, C. (2016) *Introduction to Critical Reflection and Action for Teacher Researchers*. Abingdon: Routledge.

Swaffield, S. (2008) Critical Friendship, Dialogue and Learning, in the Context of Leadership for Learning. *School Leadership & Management*, 28(4), 323– 336.

Sweet, J. (2003) 'Curriculum', in Sweet, J., Huttly, S. and Taylor, I. eds (2003) *Effective Learning and Teaching in Medical, Dental and Veterinary Education*. London: Kogan Page.

Tan, A. (2004) *Exploring Children's Perceptions of Learning*. New York: Marshall Cavendish.

Taylor, P.C. and Medina, M.N.D. (2013) Educational Research Paradigms: From Positivism to Multi-Paradigmatic. *Journal for Meaning Centered Education*, (1), 1.

Vygotsky, L. S. (1978) *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.

Wagner, T. (2008) Rigor Redefined. *Educational Leadership*, 66 (2), 20– 25.

Wang, C. and Burris, M. A. (1997) Photovoice: Concept, Methodology, and Use for Participatory Needs Assessment. *Health Education & Behaviour*, 24(3), 369–387.

Wellman, H. (1985) The Child's Theory of Mind: The Development of Conscious Cognition.

The Growth of Reflection in Children. San Diego: Academic Press.

White, K. (2019) *Unlocked: Assessment as the Key to Everyday Creativity in the Classroom*.

Solution Tree Press: Bloomington, IN.

Whitehead, J. (2009) Generating Living Theory and Understanding in Action Research

Studies. *Action Research*, 7(1), 85-99.

Whitehead, J. (2018) *Living Theory Research as a Way of Life*. Bath UK: Brown Dog Books.

Wiliam, D. and Black, P. (1996) Meaning and Consequences: A Basis for Distinguishing

Formative and Summative Functions of Assessment? *British Educational Research Journal*,

22(5), 537–548.

Zeichner, K. (1999) The New Scholarship in Teacher Education. *Educational Researcher*,

28(9), 4–15.

Appendices

Appendix A: Lesson Plan for the current reflective sessions that take place in the classroom

Lesson Plan: Collaborative, Child-led Reflective Session

Class: 3rd class **Duration:** 45 minutes **Topic:** Reflecting on and re-teaching concepts learned in the past fortnight.

Objectives:

1. Reflect on and consolidate their understanding of a previously learned topic.
2. In small groups, revise the topic and clarify information in order to re-teach it.
3. Present their reflections to their peers.
4. Formulate and pose three questions to their peers based on the topic.

Materials: *Flip chart for each group (completed by me during a lesson in the past fortnight), markers/pens for each group.*

Introduction (5 minutes)

I will explain the structure of the lesson to the children:

- In groups of four, they will be given a flip chart paper that has already been filled in by me during a lesson in the previous two weeks (it could be based on any subject area).
- They will then have to reflect on the flip chart paper by talking about it in their groups. They can add more information to the paper.
- After that they will stand up and re-teach the topic to the class. I.e., present their reflections.
- They will ask the class three questions based on their topic.
- They will receive feedback from peers and the teacher.

Middle (20 minutes)

Reflect and discuss: (in groups of 4) Review the content on the flip chart paper. Discuss and clarify any unclear points. Add notes, additional information, or visuals to enhance understanding.

Presentation Planning: In their groups, they will decide what each member will say when they reteach this topic to the class. Together, think of three questions they can ask the class based on their topic.

End (20 minutes)

Presentations and questioning: Each group presents their topic to the class, with each member contributing a part of the explanation.

Groups pose their three questions to the class, encouraging responses and fostering discussion.

Feedback (two stars and a wish): Groups receive feedback from their peers and from the teacher.

Teacher's role: *observe and take notes to assess the students' understanding, communication, and teamwork skills. Note strengths and areas for improvement and put these notes in the assessment folder.*

Appendix B: Lesson Plan for the revised reflective sessions that will take place in the classroom.

Revised Lesson Plan: Fortnightly Reflective Session

Class: 3rd class **Duration:** 1 hour **Topic:** Reflecting on and re-teaching concepts from the last two weeks.

Objectives:

1. Learn one specific dialogue skill that will enhance their ability to collaborate
2. Reflect on and consolidate their understanding of a previously covered topic.
3. In small groups, use the new dialogue skill when discussing their given topic.
4. Clarify information and revise the topic in order to re-teach it.
5. Present their reflections to their peers.
6. Formulate and pose three questions to their peers based on the topic.
7. Co-create success criteria for their presentations and monitor them during the lesson.
8. Discuss their experience of using the new dialogue skill.

Materials: Flip chart paper for each group (completed by the teacher during previous lesson), markers/pens for each group, self-assessment and goal setting template.

Introduction (5 minutes)

Teacher explains the structure of the lesson to the children (which is as follows):

- After learning a new dialogue skill they will be put into groups of four and have to practice using that new skill.
- In these groups, they will be given a flip chart piece of paper that has already been filled in during a lesson in the previous two weeks (it could be based on any subject area).
- Before beginning their reflection and discussion, they will co-create success criteria for the lesson with their teacher.
- They reflect on the flip chart paper that was given to them and talk about it in their groups.

They can add more information to the flip chart paper.

- They will have to stand up and re-teach the topic to the class. I.e., present their reflections.
- They can ask the class three questions based on their topic.
- They will receive feedback from peers and the teacher.
- Finally, they will review their success criteria and self-assess their work based on their success criteria and feedback received.

Beginning (15 minutes)

Specific dialogue skill (direct teach). Today's new talking skill is _____. Whole class discussion about what it is, why it is important, what it might look like. During today's lesson they have to use it in their groups.

Small group discussion: Setting criteria. What will success look like? Discuss in groups and set three goals for their group. Children write them into their self-assessment and goal setting template.

Middle (20 minutes)

Reflect and discuss: (in groups of 4) Review the content on the flip chart paper. Discuss and clarify any unclear points.

Use their new specific dialogue skill. Add notes, additional information, or visuals to enhance understanding.

Presentation Planning: in their groups, they will decide who will say what when they reteach this topic to the class.

Together, think of three questions they can ask the class based on their topic.

Before presentations, children can review and fill in areas of the self-assessment and goal setting template.

End (20 minutes)

Presentations and questioning: Each group presents their topic to the class, with each member contributing a part of the explanation.

Groups pose their three questions to the class, encouraging responses and fostering discussion.

feedback: groups receive feedback from their peers and from the teacher

self-assessment: Children self-assess, taking on board the feedback received and complete their self-assessment template.

talk and discussion: Children talk about using their new dialogue skill when collaborating

Appendix C: Specific Dialogue skills

Specific Dialogue Skills to Encourage Exploratory Talk

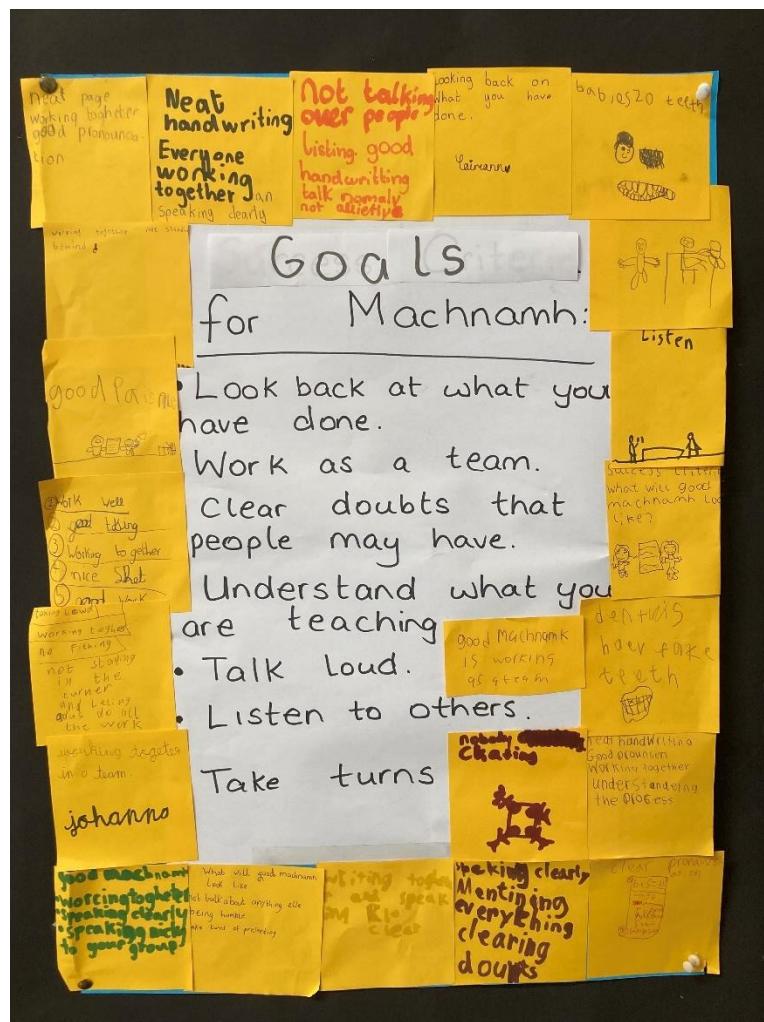
- Building on another person's idea
- Actively listen
- Justify and elaborate
- Challenge constructively
- Seek consensus
- Manage disagreements
- Seek clarification
- Self-regulate
- Encourage inclusivity
- Give and receive feedback
- Reflect on the process
- Encourage others

Derived from Mercer's (2009), work on enhancing collaboration and using Exploratory Talk in the classroom.

Appendix D: White (2019) Self-Expression and Reflection on Goals and Success Criteria

Date:				
What am I working on?	How am I feeling about my progress?	How will I know when I am successful?	What challenges am I experiencing?	What are my next steps?

Appendix E: Overall goals of Machnamh decided by the class at the beginning of Cycle 1



*Appendix F: 'Select and Reflect' questions as prompts for children's reflective entries
(White, 2019)*

Select and Reflect: Questions to Support Students Setting Goals and Criteria

Questions to support students setting goals and criteria:

- ◆ What is beginning to seem important to me? Why?
- ◆ What is less important?
- ◆ How do I imagine my product might look?
- ◆ What are my goals for this work?
- ◆ Do I have creative goals that connect to learning goals the teacher has provided me?
- ◆ How do I see my work happening? What will tell me my work is good work?
- ◆ What are criteria for a good solution to this problem? How do I know?
- ◆ How will I know when I have achieved what I hoped to achieve?
- ◆ What would signal failure?
- ◆ How might this look, sound, or feel when I am done?
- ◆ Where might I go to see examples of quality or success?
- ◆ What am I trying to do, learn, or achieve?
- ◆ What do I need to do to avoid missing my goal?
- ◆ How will I know when I am learning? How will I know when I am not learning?
- ◆ When I explore mentor texts, what do I notice?

*Appendix G: 'Select and Reflect' questions as prompts for children's reflective entries
(White, 2019)*

Select and Reflect: Questions to Support Students Verifying Whether Their Work Meets Their Established Goals and Criteria

Questions to support students verifying whether their work meets their established goals and criteria:

- How closely did I come to a result I hoped for?
- Do I feel satisfied with my efforts? To what degree?
- Did I encounter any problems while I was building (or creating)? How did I recognize these problems?
- Did I produce what I set out to?
- What is the most original aspect of this piece? How do I know?
- What problem does my product solve? What question does it answer?
- Did my prototype give me the results I was looking for? Why or why not?
- What were the criteria for a good solution to the problem? How do I know when I achieve what I hope to achieve?
- How were my decisions my own? To what degree did others influence me?
Am I happy with those influences?
- What questions remain unanswered? How might I continue my exploration?

*Appendix H: 'Select and Reflect' questions as prompts for children's reflective entries
(White, 2019)*

Select and Reflect: Questions to Support Students When Working in the Intellectual Space

Questions to support students when working in the intellectual space:

- What am I trying to find out?
- Did I choose the most important thing to focus on right now? How do I know?
- How am I expanding my understanding of my challenge? Where am I going for help?
- Which question or problem am I most interested in exploring? Why?
- What knowledge do I need to reach my goals? Where do I have to do some more learning before starting?
- What helps me get new ideas?
- How does what I know affect what I am planning to do?
- Why do problems matter?
- Do I feel ready to create? How might I feel more ready?
- When do I think it might be helpful to share my ideas with someone else?

Appendix I: 'Select and Reflect' questions as prompts for children's reflective entries (White, 2019)

Select and Reflect: Questions to Support Students Collaborating, Trusting, and Playing

Questions to support students collaborating, trusting, and playing:

- How would I describe what is going on with me and my group members?
- What are we trying to do together?
- How might each of us do something to achieve our goal?
- What am I looking for feedback on?
- Who might I ask for help or ideas?
- What do I think other group members are thinking, feeling, or wanting?
- How might I check my assumptions about group members in a respectful way?
- How is collaboration frustrating? How might we overcome that?
- Am I clear about my role?
- Do I know how to offer respectful feedback?
- How might I relate differently with my partner?
- What do I want for myself and others in this moment?
- How can we reach agreement about our goal in working together today?
- How might each of us feel great about what we are offering to the group?

Appendix J: 'Select and Reflect' questions as prompts for children's reflective entries (White, 2019)

Select and Reflect: Questions to Support Students Establishing Their Method of Sharing and Their Reasons for Doing So

Questions to support students establishing their method of sharing and their reasons for doing so:

- How will I know when I am ready to share?
- Why am I sharing my work? What am I hoping will happen?
- How might I build my confidence to share my creative work?
- Did I address the needs I was hoping to address?
- What problem does my product, performance, or service solve? What question does it answer for a potential audience?
- How will others see my work?
- Is my work important, appropriate, and relevant?
- What am I hoping to learn by sharing?
- Which criteria define a strong creative expression? Do I know what I am hoping to achieve?
- How might I best share my creative work?

Appendix K: 'Select and Reflect' questions as prompts for children's reflective entries (White, 2019)

Select and Reflect: Questions to Support Student Reflection

Questions to support student reflection:

- What advice would I give to someone else attempting this practice, skill, or creative pursuit?
- How might I address my next creative project?
- What did I learn?
- How did I learn?
- How do I feel about this work in relation to others?
- What is my favorite way to reflect?
- Do I prefer to reflect orally or in writing?
- How might I support my ideas with details and examples?
- What kinds of questions make me think most?
- How might I get ready to reflect? What materials do I need?
- Who is someone I enjoy reflecting with?
- What conditions help me to be the most honest I can be about myself?

Appendix L :Pre- Intervention Questionnaire

Please tick only one answer box for the following statements. You can give reasons for your answer if you want.

1. How do you feel about working with your classmates on projects?

1 I love it!	2 It's okay sometimes	3 I don't mind either way	4 I don't like it	5 Another answer

Comments: _____

2. How do you feel when you talk about your work in front of the class?

1 I love it!	2 It's okay sometimes	3 I don't mind either way	4 I don't like it	5 Another answer

Comments: _____

3. How do you know that you have done a good job doing Machnamh?

1 I review my own work	2 My friends tell me	3 Teacher tells me	4 I'm not sure when i've done a good job	5 Another answer

Comments: _____

4. How do you feel when your classmates give you feedback on your work?

1 I love it!	2 It's okay sometimes	3 I don't mind either way	4 I don't like it	5 Another answer

Comments: _____

Appendix M: Pre- Intervention Questionnaire

5. What's your favourite way to review what you have learned?

1 Writing about it	2 Drawing pictures of it	3 Talking about it with a friend	4 Explain it and teach it to someone else	5 Another answer

Comments: _____

6. Do you think reflecting on things we've learned about is important to do?
Why/why not?

7. Do you enjoy Machnamh? Why/why not?

Appendix N: Pre- Intervention Questionnaire

Thinking about Machnamh, circle the thumb that best describes your answer:

1. People listen to me

1- Strongly Agree	2-Somewhat agree	3-Neither Agree/ Disagree	4-Somewhat Disagree	5-Strongly Disagree
				

2. I enjoy working with others during Machnamh

1- Strongly Agree	2-Somewhat agree	3-Neither Agree/ Disagree	4-Somewhat Disagree	5-Strongly Disagree
				

3. I feel comfortable sharing my opinion and my ideas

1- Strongly Agree	2-Somewhat agree	3-Neither Agree/ Disagree	4-Somewhat Disagree	5-Strongly Disagree
				

4. When there is a disagreement, we find it easy to reach a compromise together

1- Strongly Agree	2-Somewhat agree	3-Neither Agree/ Disagree	4-Somewhat Disagree	5-Strongly Disagree
				

5. We get distracted and start talking about other things

1- Strongly Agree	2-Somewhat agree	3-Neither Agree/ Disagree	4-Somewhat Disagree	5-Strongly Disagree
				

Appendix O: Pre- Intervention Questionnaire

6. The same few students do the talking and the rest just listen

1- Strongly Agree	2-Somewhat agree	3-Neither Agree/ Disagree	4-Somewhat Disagree	5-Strongly Disagree
				

7. It's ok to disagree with what one of my group members want to say

1- Strongly Agree	2-Somewhat agree	3-Neither Agree/ Disagree	4-Somewhat Disagree	5-Strongly Disagree
				

8. It's important that everyone agrees before writing something down

1- Strongly Agree	2-Somewhat agree	3-Neither Agree/ Disagree	4-Somewhat Disagree	5-Strongly Disagree
				

9. Is there anything else you would like to say about Machnamh?

Appendix P: Information Sheet for Parents



Maynooth University Froebel Department of
Primary and Early Childhood Education
Roinn Froebel Don Bhun- agus Luath-
Oideachas Oillscoil Mhá Nuas

Dea Parents and Guardians,

I am a student on the Master of Education programme at Maynooth University. As part of my degree I am doing a research project. The focus of my research is based on children working together to re-teach topics to their peers and see whether this increases their understanding, and develops their autonomy and motivation to learn.

In order to do this, I intend to carry out research in the classroom by putting the children in groups to review topics we have covered in class. It will be their job to review the topic and make sure they understand it, as they will become the teachers. The group decides what key points to share, brainstorms questions to ask the class, and assigns each member a part to present during the lesson.

The data will be collected using observations, student feedback and a daily teacher journal. The children will be asked their opinions through discussing what they like/don't like about these reflection sessions, what they have learned and if/how it helps them to learn.

The child's name and the name of the school will not be included in the thesis that I will write at the end of the research. While the processes and results of the project will be published and available online, no personal identifiers will be given (like their name or their picture). Your child will be allowed to withdraw from the research process at any stage.

All information will be confidential and information will be destroyed in a stated time frame in accordance with the University guidelines. The correct guidelines will be complied with when carrying out this research. The research will not be carried out until approval is granted by the Froebel Department of Primary and Early Childhood Education.

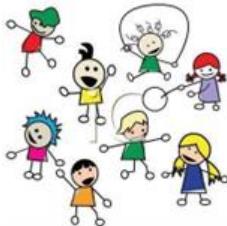
I would like to invite you and your child to give permission for him/her to take part in this project.

If you have any queries on any part of this research project feel free to contact me by email at eimear.colreavy.2020@mumail.ie

Yours faithfully,

Eimear Colreavy

Appendix Q: Information letter for child



Child's name

I am trying to find out some ways for us to look back and remember what we have learned in class. I am going to put you in a group and give you a topic or lesson we have learned. You and your group will then teach it to the class again. I would like to find out more about this and see if it works and helps you to remember and understand better. I would like to watch and listen to your group doing this and write down some notes too.

Would you be ok with that? Circle one.

YES

NO

I have asked your Mum or Dad or Guardian to talk to you about this. If you have any questions, I would be happy to answer them. If you are happy with that, could you sign the form that I have sent home?

If you change your mind after we start, that's ok too.

Appendix R: Information letter for participants



Maynooth University Froebel Department of Primary and Early Childhood Education

Roinn Froebel Don Bhun- agus Luath- Oideachas

Ollscoil Mhá Nuad.

Information Sheet Parents and Guardians

Who is this information sheet for? This information sheet is for parents and guardians.

What is this Action Research Project about? Teachers undertaking the Master of Education in the Froebel Department of Primary and Early Childhood Education at Maynooth University, are required to conduct an action research project, examining an area of their own practice as a teacher. This project will involve an analysis of the teacher's own practice. Data will be generated using observation, reflective notes and questionnaires. The teacher is then required to produce a thesis documenting this action research project.

Title of the Thesis: 'How do I foster reflective practice and student autonomy through *Machnamh*, a collaborative and creative approach to learning?'

What are the research questions? How does collaborative reflective practice contribute to children's development? How can I encourage autonomy and intrinsic motivation through creative assessment approaches?

What sorts of methods will be used? Observation, Reflective Journal, Questionnaires, Talk and Discussion with the class.

Who else will be involved? The study will be carried out by myself as part of the Master of Education course in the Froebel Department of Primary and Early Childhood Education. The thesis will be submitted for assessment to the module leaders, Prof. Marie McLoughlin and Dr Suzanne O'Keeffe and will be examined by the Department staff. The external examiners will also assess the final thesis.

What are you being asked to do? You are being asked for your consent to permit me to undertake this study with my class. In all cases the data that is collected will be treated with the utmost confidentiality and the analysis will be reported anonymously. The data captured will only be used for the purpose of the research as part of the Master of Education in the Froebel Department, Maynooth University and will be destroyed in accordance with University guidelines.

Contact details: eimear.colreavy.2020@mumail.ie

Appendix S: Consent Form for Parents/Guardians



Maynooth University Froebel Department of Primary and Early Childhood Education

Roinn Froebel Don Bhun- agus Luath- Oideachas

Ollscoil Mhá Nuad.

Parental/Guardian Consent Form

I have read the information provided in the attached letter and all of my questions have been answered. I voluntarily agree to the participation of my child in this study. I am aware that I will receive a copy of this consent form for my information.

Parent / Guardian Signature _____

Parent / Guardian Signature _____

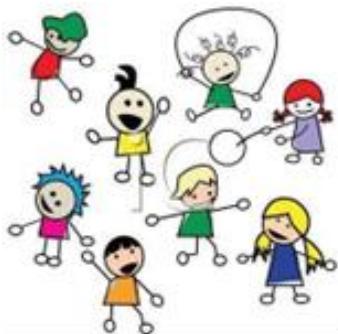
Date:

Name of Child

Child's signature _____

Date: _____

Appendix T: Child's Assent Form



Child's assent to participate

My parent/guardian has read the information sheet with me and I agree to take part in this research.

Name of child (in block capitals):

Signature:

Date:

Appendix U: Board of Management Consent Form.



Maynooth University Froebel Department
of Primary and Early Childhood Education

Róinn Froebel Don Bhun-
agus LuathOideachas Ollscoil Mhá Nuad

Board of Management,
Scoil Áine Naofa,
Lucan,
Co.Dublin

Dear Chairperson,

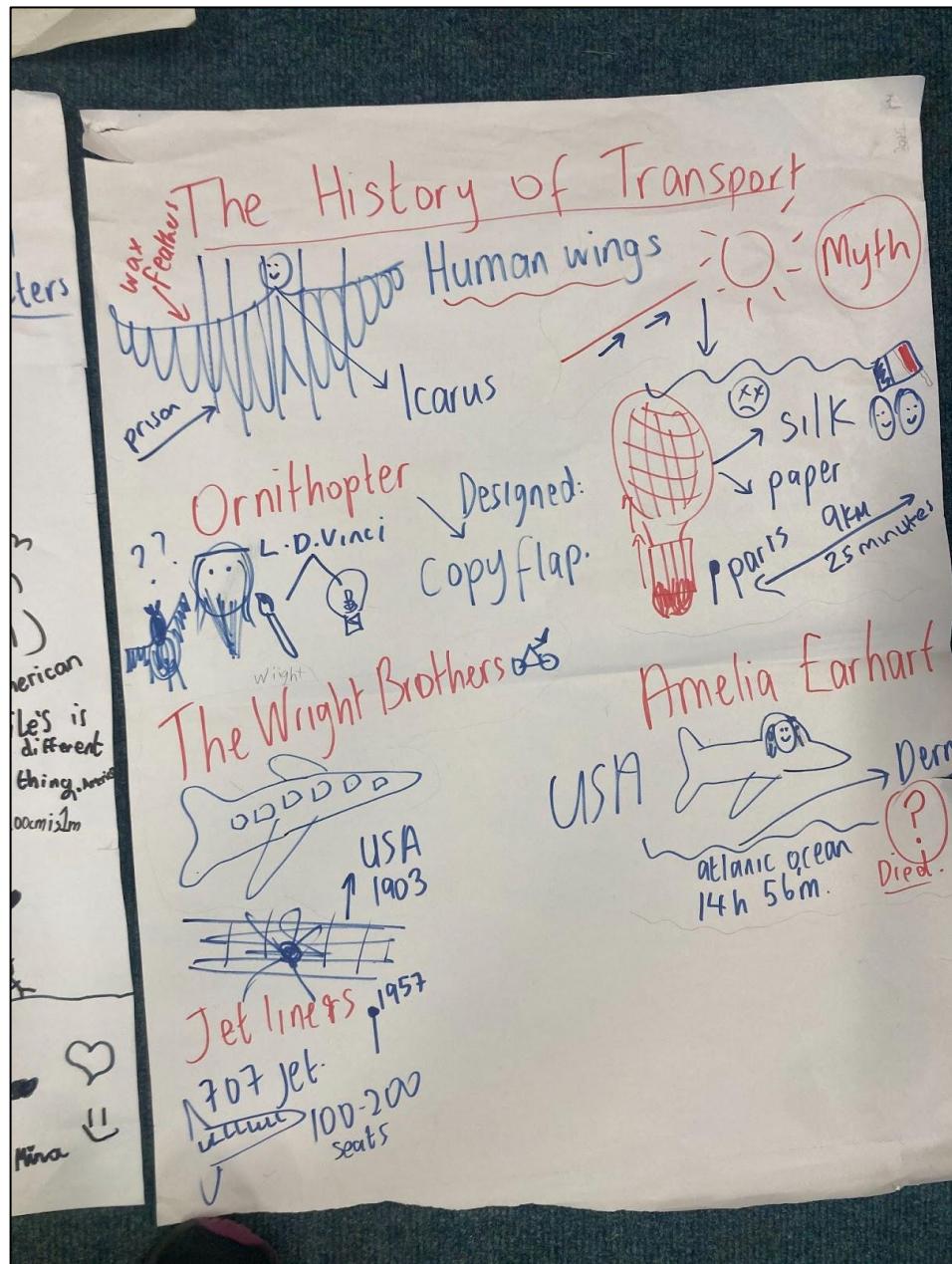
I am currently undertaking a part time Master of Education programme at Maynooth University. As part of my degree, I am doing a research project. The focus of my research is based on children working together to re-teach topics to their peers and see whether this increases their understanding, and develops their autonomy and motivation to learn. The data will be collected using observations, student feedback and a daily teacher journal. The children will be asked their opinions through discussing what they like/don't like about these reflection sessions, what they have learned and if/how it helps them to learn.

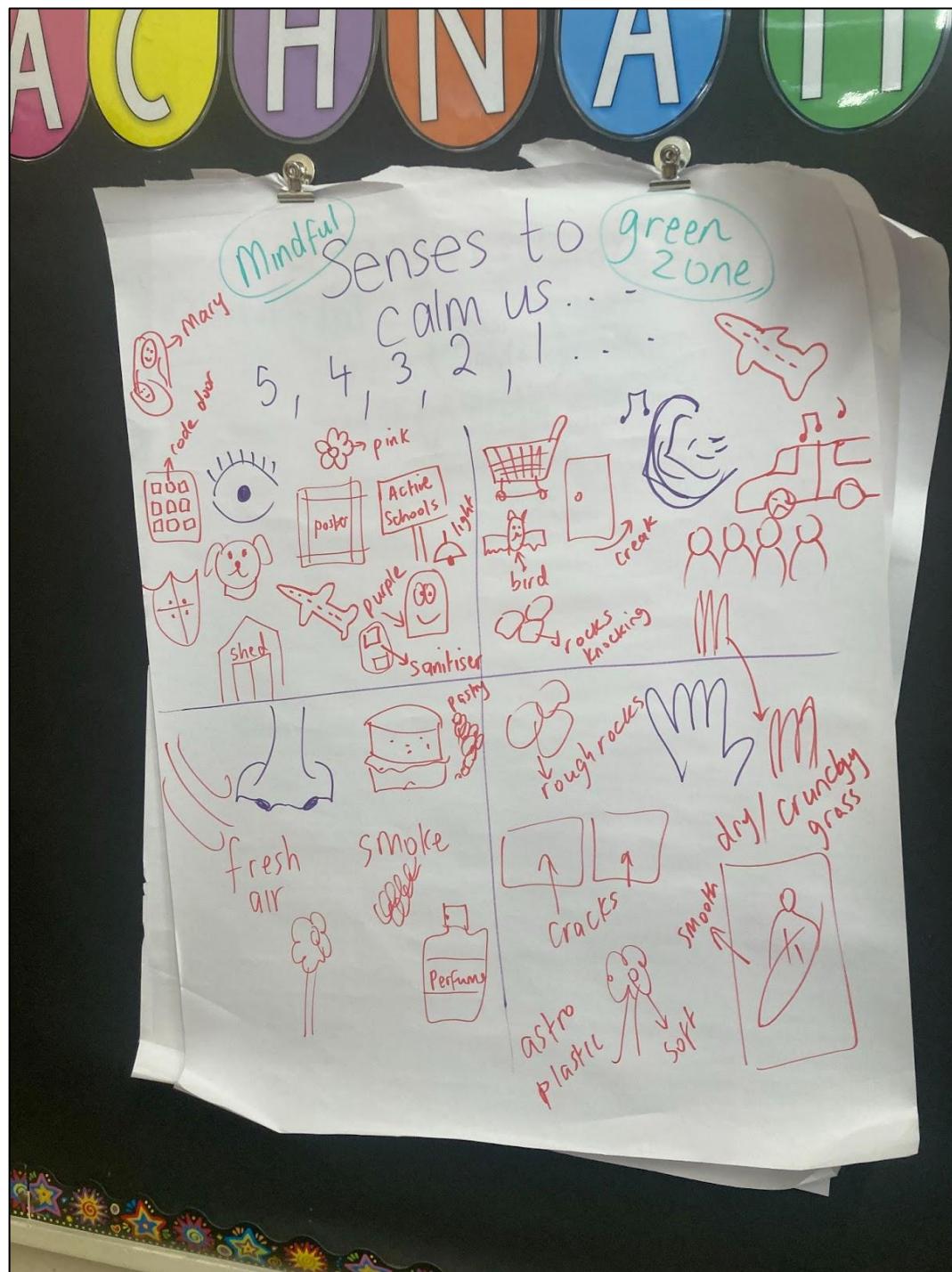
My focus is entirely on my own practice. All information will remain confidential and information will be destroyed in a stated time frame in accordance with the University guidelines. The correct guidelines will be complied with when carrying out this research. The research will not be carried out until approval is granted by the Department of Primary and Early Childhood Education. In order to carry out the research, I need the Board of Management approval to proceed and I would be very grateful if you could agree to this request.

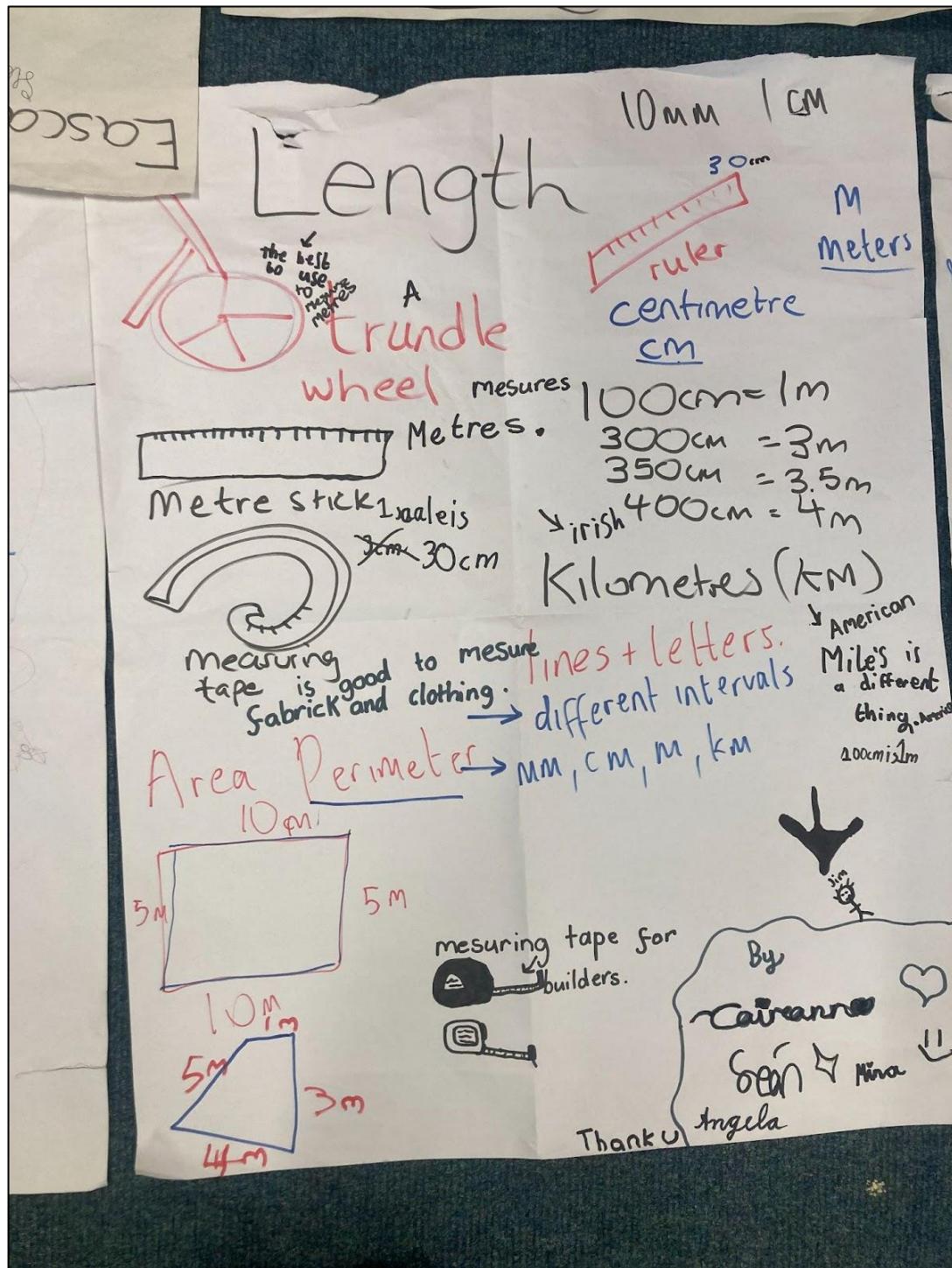
Yours sincerely, Eimear Colreavy

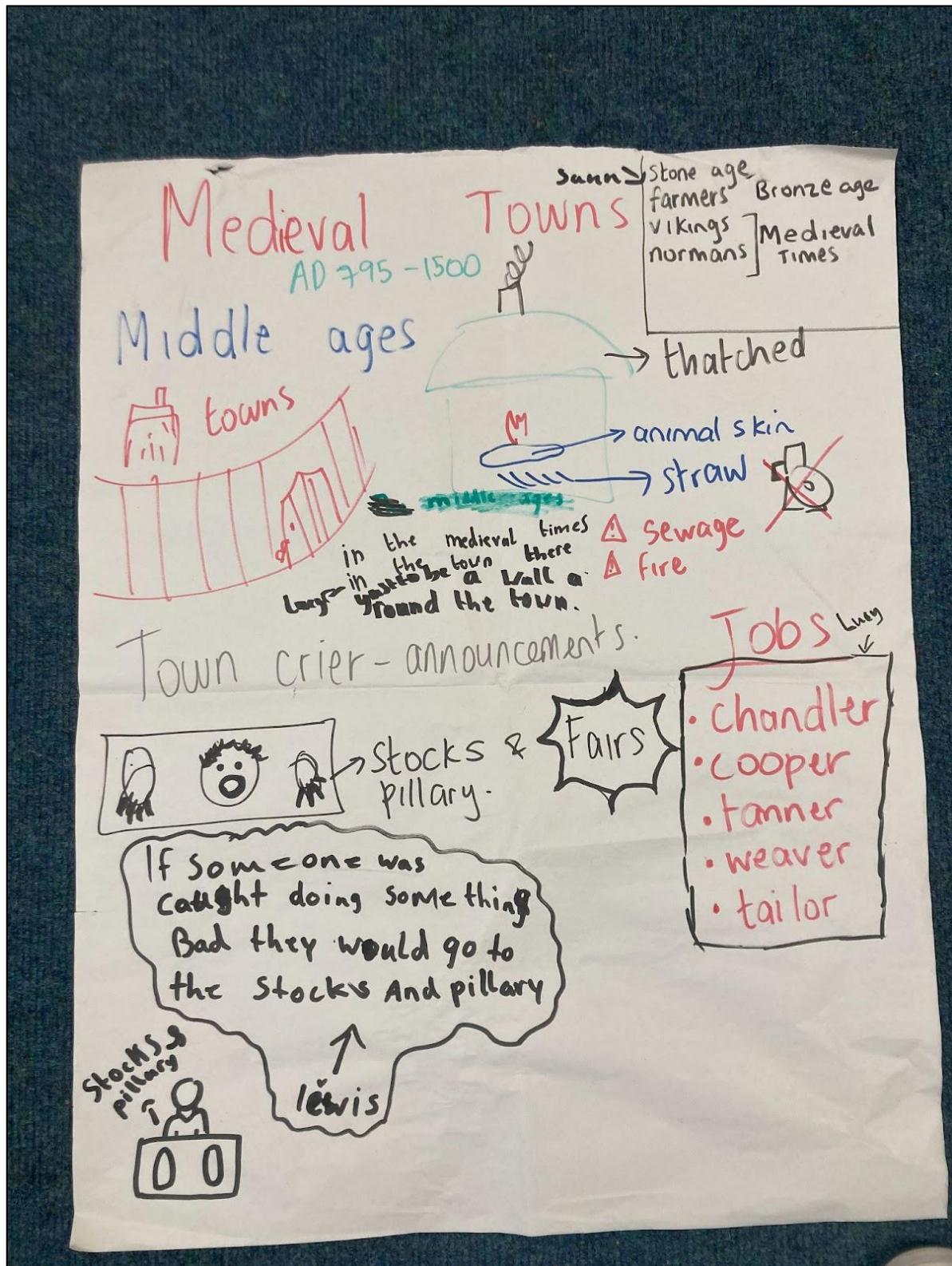
Signed: _____

Appendix V: Additional examples of Machnamh sheets in Cycle 2, to facilitate all learners and UDL









Appendix W: Additional extracts from my Teacher Reflective Journal indicating collaboration in action

Dialogue I hear "but they won't know the answer to that". Reply: "they should know if they have been listening". "Can I do x"? "Of course". "You say this, I'll say this".

"You can say this if you want?" "But what are you doing?" this. Do you want to do that instead?

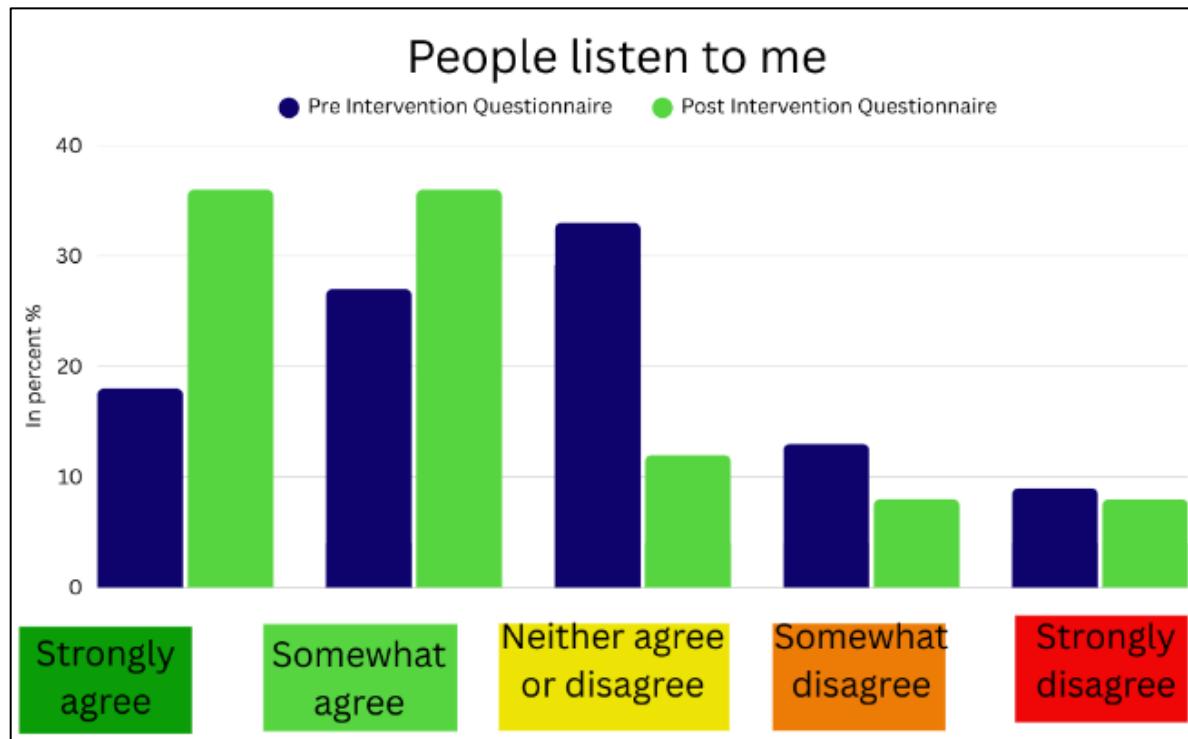
They are giving easy sentences to the children they know struggle to read.

The natural leaders of the class are being so helpful and caring towards the quieter children. One boy explained exactly to his partner what to say because she forgot. He was so patient.

They are differentiating work appropriately for their team members and themselves. This shows that inclusion is a value not only felt by me, but by the class.

Whispering sentences to each other
All saying some lines together.
thumb up to team mate

Appendix X: Children's self-reported feelings in the Pre and Post Intervention statement 'People listen to me'.



Appendix Y: Children's self-reported feelings in the Pre and Post Intervention statement 'The same few students do the talking and the rest just listen'.

