'An investigation looking at how formative assessment feedback strategies from students to their teacher can enhance the student learning experience through increased engagement and participation.'

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Abstract

An action research investigation looking at how formative assessment feedback strategies from the student to the teacher can enhance student engagement and participation. The research study was carried out in a mixed Post Primary School in Donegal with 27 second year students. The purpose of the study is to look at how feedback from the students to the teacher can boost student engagement, participation and promote student voice in the classroom. The study focuses on two methods of formative feedback, these include written methods and interactive methods through the use of 'Information Communication Technology'. In addition the research involves teacher observation and reflection and identifying the areas in teaching and learning that can be improved.

The literature critiqued provides a broad range of information. The main areas examined in the literature include student voice, formative assessment and learning, student engagement and participation and the use of technology in the classroom. The research was carried out by implementing the feedback strategies in the class and surveying the students on two occasions, pre-feedback methods and post-feedback methods. The surveys assessed the students' responses to their learning and if they changed over the duration of the study.

Following the inclusion of the feedback methods the results illustrated a positive development in student engagement and participation in class. Likewise student voice positively improved where students exemplified an eagerness to participate in class. The study also highlights the significance of educational reform and the importance of teacher professional development and reflection in education to improve the learning experience for all students.

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1. Introduction

"To me 'formative assessment' describes all those processes by which teachers and learners use information about student achievement to make adjustments to the students learning that improve their achievement. It's about using information to adapt to your teaching and adapt the work of the students to put the learning back on track (Dylan William, 2016).

1.1 Introduction and Background Research

The main purpose of this action research project will look at how formative assessment feedback strategies from the student to their teacher can enhance the student learning experience through increased engagement and participation.

Within this there are a number of sub questions and objectives developed. In brief these involve researching what feedback method students prefer in class and how feedback will encourage greater engagement in the classroom. The study will also hope to identify if students feel more comfortable voicing their opinions from incorporating interactive feedback strategies in the classroom. Finally the research aims to establish what method of feedback students prefer. These results are clearly outlined in the research findings and analysis chapter.

Feedback is vital for students to perform positively. According to a study the main purpose of feedback is to promote higher motivation during learning and more effective teaching and learning (Vollmeyer & Falko, 2005). Therefore to begin the study I looked at my current teaching and learning strategies and my students' attitudes to their learning and investigated where I could improve their learning experience. The project has presented me an opportunity for continued professional development in my teaching through self- reflection where I aimed to maximise my teaching performance. I chose an action research study as I wanted to improve my own methodology from effective to highly effective practice through the use of student feedback strategies in the class. Pine (2009) states that teachers partake in action research to reflect on their practice to improve it, allowing them to become more professional in their judgements, to develop a more energetic teaching and learning environment and recognise their own teaching abilities. Teachers conduct action research purposefully and ethically in a classroom context to solve a current issue (Pine, 2009). For that reason I hoped to enhance the educational outcomes for my students by placing them at the centre of their learning by including various feedback methods into their lessons. From having included these strategies it encouraged students to share their ideas and similarly they were learning from each other.

According to Nicol (2007), the more students are involved both academically and socially, they are more likely to persist and succeed in their studies. Following the completion of the study I intend to distribute the range of feedback strategies to the various subject departments in school to promote cross curricular links and also within my own subject department to provide an opportunity for collaboration. Studies suggest that the more teachers collaborate, the more they are able to share knowledge, theories and methods to improve the overall teaching and learning in the school community (Goddard, 2007).

1.2 Research Site

The study was carried out in a mixed Catholic Voluntary Post Primary school in Donegal that is governed by the trusteeship, CEIST. (Catholic Education an Irish School's Trust) There are currently 865 students enrolled in the school. The duration of each class is 40 minutes. The main aim of the study was to allow students to feel an increased sense of ownership and engagement towards their learning journey with the hope that it would lead to greater participation throughout their school experience. To complete the study, I researched 27 second year students during their English lesson. Firstly, it is recognised that this particular year group have a unique set of difficulties and biological developments that often results in students disengaging with their work (Smyth et al. 2006). Secondly, this year group are not sitting State Examinations, therefore the feedback strategies implemented in class did not affect class time. Teachers have noted that when students' progress to second year they begin to adopt a 'laissez faire' approach, their quality of work begins to deteriorate and their attitude to learning can often become negative. Therefore the implementation of student feedback strategies in class aims to improve this problem

Before carrying out the research and to successfully include the strategies in my lessons I had to be familiar with each of the students' attitudes to learning. This involved surveying the students on two occasions, pre-feedback methods and post-feedback methods. Having completed survey one, I included the various strategies into my lessons in stages where I first focused on written feedback methods and assessed how the students benefitted from these strategies, following this I included ICT feedback methods and likewise assessed their engagement to learning. From doing this I hoped to identify what form of feedback was most beneficial to learning. Studies suggest that student participation in the classroom is valuable to student learning, providing them with the opportunity to learn and practice new knowledge and strategies and recognise personal areas of improvement within the curriculum (Turner and

Patrick, 2004). The study was part of everyday teaching and learning where it would enhance student learning through active engagement. The strategies were manageable and student centred and within the research, students provided their feedback anonymously. From conducting the survey anonymously all students participated without fear. In addition I included the feedback strategies after the completion of a studied topic in class with the desire that students would benefit greatly from it. Research shows that students will tend to focus their energy on topics that are being assessed therefore are likely to positively contribute to assessment and feedback procedures (Armstrong and Boud, 1983). Students value the teacher who allows interaction in the classroom and it is not solely focused on the textbook (Campbell and Groundwater- Smith, 2007). The methodology chapter clearly details the aims that I had for the study and the various stages that were involved to carry out the project successfully.

1.3 Current Educational Reform

Since education is changing, particularly the current reformed Junior Cycle, the framework focuses on the curriculum and assessment procedures to provide students with learning opportunities that will achieve a balance between learning subject knowledge and developing a wide range of thinking and communicating skills (Dept. of Education and Skills, 2015). As a result this project stimulated more active and collaborative learning. The use of these active feedback methods aligned with current key skills implemented from the Junior Cycle reform by putting students at the centre of the learning (NCCA, 2018).

Overall it is anticipated that the results from the study that are outlined in the research findings and analysis chapter will be beneficial to every subject department within the school as the study is not subject specific and it identifies ways of improving student engagement. Likewise since the action research project was successful it is helpful for senior cycle students where it will give pupils an insight into their subject knowledge and areas needed for improvement particularly those sitting State Examinations. In addition the study links in with the Junior Cycle for Teachers (JCT) which offers continuous professional development for teachers by looking at ways of improving the teaching and learning in the classroom. The new Junior Cycle focuses on improving student participation through creative and innovative opportunities. Therefore from the feedback strategies included in the study these will be valuable to student learning (NCCA, 2015). The following chapter will provide an overview of the wide range of literature available to this study.

<center>**2. Literature Review and Critique**</center>

The review aims to examine and critically analyse literature in the areas of feedback by looking at the importance of feedback in the classroom for student voice, formative assessment and learning, student engagement and participation, and the use of technology in the classroom. It will also address the area of Teacher continued professional development.

2.1 Introduction

According to Chen et al. (2017) the use of feedback in education improves student engagement and participation in the classroom. Langer (2011) argues that schools are under increasing demand to improve students' academic performance therefore one way of solving this issue is through feedback in education which is seen to increase student motivation. Feedback can involve both formative and summative assessments conducted by the teacher, but in order for feedback to be highly effective it also involves student participation, with the teacher and student needs clearly identified. This will ensure that feedback is beneficial and both parties are aware of what is expected of them. According to the NCCA (2015) feedback is critical in the classroom to improve student learning, motivation and engagement. Effective feedback will prompt student thinking. Quality feedback involves illustrating to the students their strengths and weaknesses and areas for improvement to promote highly effective learning (NCCA, 2015).

The proposed study is an action research project that looks at how student engagement and participation can improve through the use of student feedback methods in the classroom. Andrade (2010) emphasises the central purpose of self-assessment is to provide learners with feedback that they can use to improve their standards as students are involved in thinking about the quality of their products and processes rather than relying solely on their teacher for feedback. Throughout this study students are gaining an insight into their subject knowledge and likewise the feedback the students share in class will offer an insight into how teaching and learning can be improved for teacher professional development.

2.2 Importance of Feedback in Education

Feedback in education is information provided to the learner to close the gap between current performance and the desired goal (Sadler, 1989). Feedback is divided into formative assessment and summative assessment. Sadler (1989) defines summative assessment as a

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means of summarising student work at the end of an academic term particularly for certification purposes whereas formative assessment focuses on judgements on the quality of student work and responses, and how these judgements can be used to improve or shape student abilities. Formative assessment is an ongoing process in everyday learning environments. Feedback is a key aspect in the assessment process and it encourages students to identify their strengths and weaknesses (Irons, 2008). Irons (2008) further notes that formative assessment enhances the student learning experience, promotes positive dialogue between the teacher and students and motivates students to improve their standards. Smith and Higgins (2006) stress the importance of students being involved in the feedback process to break free from the recitation script and releasing teachers from the burden of asking all the questions and evaluating all the answers. Effective feedback will allow students freedom to respond to each other and the teacher, to answer and ask questions (Smith & Higgins, 2006). For feedback to be successful teachers must understand their reasons for offering feedback in terms of pupil behaviour they are trying to encourage, they must value the relationship between the talk they use for teaching and the talk they hope to inspire their students to use for learning (Smith & Higgins, 2006). The study will focus on formative assessment in learning, developing student voice and participation where the students are sharing feedback with the teacher through interactive strategies.

2.3 Student Voice

Student voice in education promotes narrative voice which influences how teachers and students can construct meanings, share meanings and represent meanings (Bernhardt, 2009). Teachers who are concerned with student voice help students move from silence and invisibility to influence and participation in their learning experience (Rudduck in Thiessen and Cook- Sather, 2007, pg. 591). Research shows that students emphasise the importance of being able to have choices and share decisions, to talk about their work and concerns with their learning and to be given clear explanations as to what they have to do (Rudduck in Thiessen and Cook- Sather, 2007, pg. 591-592). In the learning environment feedback is constantly shared by the teacher to the student, however responsibility must be placed on the student through the sharing of feedback to the teacher on their subject knowledge. This in turn emphasises the importance of student voice in the classroom. To stimulate student voice, instructions of feedback methods and expected participation must be clearly outlined to the students. According to the NCCA (2015) feedback will become most effective when it provides information on correct responses from students with the hope of improving previous responses.

This engagement from students emphasises Professor Laura Lundy's model of child participation where student voice is a vital element to student participation in class, teachers provide appropriate information on the topic and student views are listened too (Lundy, 2007). Her strategy has been included in 'Ireland's National Strategy on Children and Young People's Participation in Decision Making 2015-2020'. Pupil voice is outlined in Article 12 of the United Nations Convention on the Rights of the Child. (UNCRC) This article has been prominent in recognising children in society and their freedom to speak. One issue highlighted in this article relates to education, where it states that students were not fully consulted in matters that affect them and action needed to be taken particularly by Government authorities (Lundy, 2007). As a result of this criticism, research was conducted by Northern Ireland's Commissioner for Children and Young People where the main aim of the project was to identify areas where children's rights were 'ignored' in youth or educational settings. One of the key findings in relation to education, highlighted that students were not consulted in decisions made about them (Lundy, 2007). Similarly Flutter and Rudduck (2004) suggest that consulting young people will improve teaching and learning and foster a positive school experience where educators often overlook students and their views. Lundy (2007) reiterates that actively involving students in decision making is a legal imperative to all adults. From this she developed the model (figure 1.1) to fully capture and enhance student participation in education.

Figure 1:1 Laura Lundy's model of Child Participation (2007)

Professor Lundy's strategy aims are to ensure that young people are given the appropriate space, their voice is listened too, they have an audience when expressing their views and their views are influenced. This enables a child centred approach, particularly in educational settings where children and young people are at the core. Lundy expresses the importance of students being given full information as to why they are taking part, and are provided with a range of options to express their views and feedback. This will enhance formative assessment and engagement from the students.

2.4 Formative Assessment and Learning

Black and William (2009) outline that formative assessment is a classroom practice where student achievement is elicited, interpreted and used by the teacher, learners and peers to make decisions about the next steps in teaching and learning where learning standards can improve.

Hattie's model of feedback (figure 1.2) provides a framework to enhance student learning through the feedback process. Hattie and Timperley (2007) recognise that in order for feedback to be effective it needs to provide specific information relating to a task, and the gap must be filled between what is understood and what is aimed to be understood. The proposed research methodology will mirror this model.

Figure 1.2: Hattie & Timperley model of Feedback to Enhance Learning (2007)

Purpose
To reduce discrepancies between current understandings/performance and a desired goal

The discrepancy can be reduced by:
Students
- Increased effort and employment of more effective strategies OR
- Abandoning, blurring, or lowering the goals

Teachers
- Providing appropriate challenging and specific goals
- Assisting students to reach them through effective learning strategies and feedback

Effective feedback answers three questions

Where am I going? (the goals)	Feed Up
How am I going?	Feed Back
Where to next?	Feed Forward

Each feedback question works at four levels:

| **Task level** | **Process level** | **Self-regulation level** | **Self level** |
| How well tasks are understood/performed | The main process needed to understand/perform tasks | Self-monitoring, directing, and regulating of actions | Personal evaluations and affect (usually positive) about the learner |

The model outlines various stages of feedback to ensure student understanding and bridging the gap between what is understood and discrepancies to their understanding that may appear. The model details that effective feedback must answer three important questions in the learning process from the teacher or student, 'Where am I going?', 'How am I going?' and 'Where to next?' (Hattie & Timperley, 2007). Therefore Hattie emphasises that intended goals need to be clear for students to succeed linking with Lundy's model of student voice. (Hattie & Timperley, 2007). Teachers need to create a learning environment where students are interacting and identifying their errors. Hattie and Timperley (2007) argues that for this to be successful, a range of student feedback methods must be put in place where students have the

opportunity to self-reflect on their learning and teachers are highlighting the learning goals and intentions that need to be met to promote positive student participation and engagement. Similarly Irons (2008) affirms that formative assessment focuses on helping students to understand what they have achieved and clarify expectations and standards. Bennett (2011) outlines that well developed and implemented formative assessment strategies should suggest to the teacher where teaching methodologies need to be altered to suit student abilities as well as reveal what students know and do not know. In order for this to be successful, a theory of action and instant results need to be formulated to create desired outcomes. In reference to the 'Keeping Learning on Track Programme' (KLT) designed by Dylan William, a yearly programme that builds on formative assessment and supports teachers to ensure that learning outcomes are being met, Bennett (2011) indicates that the KLT formative assessment strategies that are applied by teachers for example, 'Three Stars and a Wish' or 'Traffic Lights' allow students to develop, reflect and take ownership of their work by sharing expectations, questioning and self and peer assessment.

This emphasises 'Assessment for Learning' (Afl) in education, an assessment process within formative assessment. Klenowski (2009, pg. 264) defines assessment for learning as "part of everyday teaching practice by students, teachers and peers that seeks, reflects upon and responds to information from dialogue, demonstration and observation in ways to enhance ongoing learning". Assessment for learning is a means in which teachers can identify student difficulties in relation to a topic. Students become active learners in the hope of closing the gap from what they understand. Through assessment for learning teachers emphasise the intended learning outcomes, what the student should know and understand where this is achieved through active learning and success criteria (Dept. of Education and Skills, 2020). Hattie and Timperley (2007) illustrates possible methods for students to succeed. They focus on the learning environment, where it is not solely teacher led, but effective teaching involves evaluating and assessing students' capabilities and utilising possible weaknesses or knowledge gaps to start the following lesson. (Hattie and Timperley, 2007) Similarly Price et al. (2011) state that feedback is ineffective when students fail to act on it. As a result it does not improve engagement or participation. A case study carried out at Queen's University Belfast, in numerous Afl classrooms in Northern Ireland highlighted that there was little evidence of student consultation or active engagement in their learning process and students did not feel valued (Leitch and Odena, 2007). Therefore classrooms that create Lundy's model of the four concepts are establishing positive active engagement from the students through feedback

(Leitch and Odena, 2007). A study from Carless and Boud (2018) acknowledged that student feedback is recognising and understanding what feedback is and how it can be managed effectively so students can make productive use of feedback and appreciate the roles of the teacher and themselves. The study argues for feedback to be successful students need to be capable of making judgements about their own work and their peers, where they are given the opportunity for self- evaluation (Carless and Boud, 2018). As a result it encourages active participation and engagement.

2.5 Student Engagement and Participation

Participation is linked to both students' attitude to learning and their motivation to learn (Turner and Patrick, 2004). Hepplestone et al. (2011) recognises that effective feedback increases student learning and participation by providing opportunities for improvement and future learning. Nicol (2009) supports this view by agreeing that for feedback to be effective it must be timely and manageable where it should focus more on learning and not grades. They argue that goals are not pivotal for feedback to become effective. Instead a positive learning environment is essential for students to develop confidence to openly reflect on their difficulties (Carless and Boud, 2018). Price et al. (2011) supports this notion that student engagement is enhanced through a positive relationship between the student and teacher where feedback plays a dominant role in ensuring effective engagement between the student and teacher. The reformed Junior Cycle fits into this criteria as its main focus is allowing the student to make a greater connection with their quality of learning with the focus on creating an engaging environment where students are sharing their views and understanding. Throughout the assessment and reporting element of the new Junior Cycle, the importance of feedback is highlighted. By providing focused feedback to the student it will improve their standard of work and as a result aim at producing high quality results. This will enhance further learning (NCCA, 2018).

However in order for the student to become more aware of their learning, they must also provide feedback on their learning experience resulting in a more student centred approach. A study carried out in Dublin Institute of Technology, found that in order for feedback to be effective for the student to self-evaluate, the focus on learning needs to move from the teacher to the student (Gibbons et al., 2018). Various feedback strategies will help measure student performance (Gibbons et al. 2018). Studies in schools across England and Australia incorporated student to teacher feedback strategies (Ndisang and Benson, 2014). Results from

these studies illustrated that students became more proactive and engaged in their learning. In addition motivation levels from students surrounding their learning increased. Sadler (2010) outlines that teaching and learning will increase when students are given the responsibility to evaluate their own work and compare their efforts with their fellow peers by sharing feedback in an engaging setting. Studies suggest that although students want feedback only a minority of students will read the feedback they receive (Price et al. 2010). In order to overcome this problem, students are likely to engage with the feedback they receive from their peers, to reflect on their understanding and improve their final grades. They are likely to compare their grades and use the feedback to their advantage (Race, 2001).

Likewise, Petty (2009) believes that active learning promotes engagement and participation by students where the learners are sharing feedback with their teachers on what is understood. It provides an opportunity for students to reflect on their understanding and encourages them to improve their skill. In this study students are participating in feedback initiatives to improve their teaching and learning experience. Thompson et al. (2012) expresses that from incorporating the impromptu teaching methodology approach where the feedback strategies are not included in every lesson it will stimulate student engagement where students become active learners through collaborative learning. From including these approaches to the typical structured class, it creates a greater opportunity for increased learning (Thompson et al. 2012). Similarly, Voelkl (1995) states that teachers who demonstrate an interest in student work and create an interactive environment through the use of technology in the classroom will foster greater participation from the students.

2.6 Use of Technology in the Classroom

'The Digital Strategy for Schools' recognises that teachers are continuously trying to improve their teaching, therefore believes that it can further be improved through the use of Information Communication Technology (ICT) to enable students to learn effectively (Department of Education and Skills, 2015). Kler (2014) defines 'Information Communication Technology' (ICT) in education as society's effort to teach, using current technology to students in this digital age, the knowledge and skills about computing and communicating through these devices. Eschenbrenner and Nah (2007) agree that the use of mobile technology not only makes information easily available but it makes learning interactive and fun. With that, subject topics are more engaging for students through the use of technology. Livingstone (2012) expresses that applying ICT in education aims at improving educational outcomes. The use of

educational ICT has made the teaching and learning process exciting, students are eager and curious, resulting in an improvement to learning through enhanced interaction between the student and teacher (Kler, 2014). Livingstone (2012) recognises that technology, in particular interactive whiteboards are beneficial to students when studying English as opposed to Mathematics as it improves pupil performance particularly for low achieving students and the writing process. Likewise Kler (2014) supports this view that ICT helps to motivate and engage all learners through opening up new opportunities in the teaching and learning process. It is a valuable resource for assessment of learning where it can support the teacher and learner by providing them with feedback through various software programmes highlighting teaching and learning strengths and weaknesses. Petty (2009) states that the use of interactive feedback in the classroom is beneficial for a teacher to observe differentiation and the various learning abilities amongst their students. From this, students are actively engaging with their learning and taking ownership of their work where ICT is introducing them to new styles of learning. It prompts teachers to take a more facilitative role in the classroom creating a student centred environment in an innovative style (Department of Education and Skills, 2015). According to Livingstone (2012) ICT enables self-paced learning. Based on a study on the use of ICT in schools in the US, Norris et al. (2002) express that ICT had a positive effect on teaching and learning with results ranging from increased time on tasks, higher test scores and increased motivation amongst students.

However few studies note the barriers encountered when implementing ICT in the classroom. Kler (2014) refers to 'teacher level barriers' and 'school level barriers'. 'Teacher level barriers are due to lack of confidence and competence when using technology and resistance to change where teachers adopt a negative approach to changes within education and are not willing to accept new technology for teaching and learning therefore is a difficulty for ICT integration in education. Based on British school inspections from the national body Ofsted, Livingstone (2012) claims that teachers tend to give more attention to the limited elements of ICT that they were more familiar with therefore hindered students' use of transferable skills. In reference to 'school level barriers' Attwell et al. (2009) maintain that although technologies can make learning more engaging and convenient it requires a considerable amount of work from schools with regards to teacher training, preparation and production of appropriate resources to enhance teaching and learning. However Le Baron and Mac Donough (2009) consider these obstacles as an open opportunity for continuing professional development for school leadership, and coordination of leadership roles within the school environment to coordinate teacher ICT in-

service. They also see it as an opening to integrate ICT in teacher training courses, therefore the difficulties within teaching and school levels will soon dissipate (Le Baron and Mac Donough 2009).

Kler (2014) addresses the procedures that teachers and schools can implement to remove ICT difficulties in the teaching and learning process. According to her work, she believes that problems can easily be removed and ICT can work effectively in schools. Firstly teachers need to be open minded and willing to accept change, by participating in ICT in-service. Likewise schools need to provide the appropriate training for teachers in relation to ICT and provide sufficient time for training purposes (Kler, 2014). If these steps are applied, Kler (2014) argues that teaching and learning will improve, students will engage in collaborative learning and promote their critical thinking skills, traditional assessment methods can be altered so teachers can easily keep track of student ability through online resources and from this results can be stored and easily accessed through an ICT database.

This is further strengthened by the 'Digital Schools Strategy' where a key principle for ICT in education is enhancing the learning experience of all students through teaching, learning and assessment. It notes that Irish teachers tend to hold a constructivist view with the aim of fostering motivated, critical thinkers. However the dominant pedagogy in most schools is the traditional teacher directed practices (Dept. of Education and Skills, 2015). With this in mind the 'Digital Schools Strategy' has formulated the 'ICT Competency Framework' to assist the education system including principals and teachers to reflect on their existing teaching and learning practices, inform decision making and support continued professional development. It will provide clear standards for teachers on how they can boost the connections between innovative ICT practices and effective teaching and learning strategies (Dept. of Education and Skills, 2015). The framework outlines that effective use of digital technology with a constructivist view to teaching will improve the learning experience through engagement with the students prior knowledge, active learning and provide an opportunity for learners to make decisions and take ownership of their learning experience. Corresponding with Kler's (2014) view that ICT can improve assessment strategies, the 'Digital Schools Strategy' supports this idea that through ICT, schools will have access to a range of technologies that can be used for both formative and summative assessments. ICT has been used throughout the PISA reports through computer based assessments where students are asked to interpret texts, solve mathematical problems using their knowledge and reasoning skills. Therefore evolving ICT

methods are an integral part to the education system. The strategy views ICT as a principal component for students to learn in an exciting and new way, encouraging engagement and benefitting their communication skills particularly for children at risk of an educational disadvantage with low levels of achievement (Department of Education and Skills, 2015). The 'National Council for Curriculum and Assessment' (2004) outlines that ICT in teaching and learning has numerous benefits with higher levels of student achievement, motivation and improvements in students' abilities to work collaboratively. It has noted that teachers who engage in ICT in the classroom have reported that the use of technology has supported active, collaborative learning amongst students from the teacher led learning and promotes continual professional development for teachers. (NCCA, 2004).

2.7 Teacher Professional Development and Reflection

Darling- Hammond et al. (2017) define professional development as structured professional learning that results in changes to teacher practices and improvement to student learning outcomes. Professional development involves active learning that engages teachers directly in designing teaching and learning strategies to improve their methodologies. From participating in continued professional development teachers are offered feedback and reflection of their practices and insights on areas needed for improvement (Darling-Hammond et al., 2017). Howard (2003) also states that teacher reflection becomes relevant when teachers engage in honest, critical reflection that challenges them to see how their teaching methodologies influences students in either positive or negative ways. Likewise Rodgers (2002) establishes teacher reflection as a "mean- making" process that moves a learner in from one experience to the next with a deeper understanding and progress in learning. Rodgers (2002) envisions reflection as a process of bridging the gap of meaning that connects one experience to the next and offers direction and growth. Teacher professional development and reflection not only has a positive impact on teachers themselves but it benefits student learning outcomes and school development (Kowalczuk et al. 2019).

2.8 Conclusion

In conclusion, it is evident from the literature that feedback can promote student voice, engagement and performance. The feedback the students share provides them with an overview of their learning and helps identify their strengths and weaknesses. Feedback can motivate students to identify gaps in their knowledge and it provides an opportunity for them to assess their learning and share ideas with their peers in a student centred environment.

Similarly the feedback methods allow teachers to self-reflect on their practices and develop their methodologies to improve learning outcomes for their students. Hattie and Timperley (2007) emphasise the importance of setting goals in feedback methods, however this is not as evident in additional studies, where the main focus looked at how to increase student engagement through feedback and ensuring that students are aware of why they are sharing feedback. A creative and interactive learning environment must be created and this can be achieved through the successful use of technology in learning. Maclellan (2001) supports this notion that students must monitor their own performance to make effective use of feedback and increase learning. Finally it is noted that students prefer the immediacy of feedback through electronic methods. The following chapter will outline the stages involved in implementing the feedback strategies.

3. Methodology

This chapter is divided into two sections. This first section looks at teacher action research in education. I will outline the validity and reliability of using action research in the proposed study and the research aims of the project will be discussed. I will also outline the supports that are available to teachers for improving teaching and learning. I will discuss the ethical considerations taken for this study. Finally the proposed methodology will be summarised.

In the second section I will give details of the methodology implementation stages, the feedback strategies included and data collection methods. These stages are described and justified.

Section 1- Introduction to the Methodology

3.1 Introduction

This section looks at how the proposed research project will be conducted, the aims of the project and supports available to teachers on teaching and learning. The aim of the action research project is looking at how student feedback to the teacher both written and technology based can enhance student participation, motivation and promote student voice. The action research project is student centred to encourage greater participation to their learning experience. Students have received all necessary information about the study. According to Kong et al. (2017) the focus of education nowadays is boosting students to become self-regulated learners who take responsibility of their learning experience.

3.2 Teacher Action Research

The idea of teacher action research was first introduced by Stenhouse, who believed that teachers should not be seen as objects of study but instead they should be involved in carrying out 'systematic and self-critical enquiry' (Elliot and Norris, 2012). According to Rudduck (1985) teachers are like artists who can learn from everyday practices and through reflective study. Research assists teachers to see behind what is taken for granted in everyday teaching (Rudduck 1985). Therefore within my study I want to reflect on the everyday teaching environment for my students by examining various research questions relating to student feedback. My main research question looks at the everyday classroom setting and how feedback from the student to the teacher can enhance the student learning experience through increased motivation and participation. If students are sharing feedback in class through numerous strategies will it encourage students to take more responsibility towards their

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learning by improving their work and standards? Similarly I intend to focus on numerous sub questions where I will look at how the use of interactive feedback methods will encourage student engagement and student voice in the classroom and from conducting the study and reflecting on the data it is anticipated that it will provide me with a clearer insight into areas of teaching and learning. Research indicates that engagement from students towards their learning improves when their views are collected and considered (Mockler and Groundwater-Smith, 2015).

Teacher action research involves a systematic and sustained study of a particular area of teaching and learning (Souto-Manning, 2012). Studies suggest that teacher action research is to facilitate teachers in assessing practices whether it is through introducing a new concept or looking at how to improve an existing practice and reflecting on its effectiveness (Koshy, 2005). Norton (2018) outlines that action research by a teacher can happen at any stage of our career, it requires an interest into how our students learn and a readiness to explore our teaching and assessment methods. In order for action research to be a valid approach we want to see an improvement in our practices and in the educational settings that our students are immersed in (Feldman, 2007).

3.3 Validity and Reliability of Action Research in this Study

Action research is best suited to this study. As the investigation focuses on improving teaching and learning where students particpation and motivation levels in class improve, the research approaches must be student friendly and focused without implementing considerable changes to the classroom environment. This can be observed within my study. Cohen et al. (2007) state that for a study to be valid, appropriate methods must be used throughout the research, to collect data and carry out the proposed methodology stages. The proposed study is an internal valid approach through the use of an online student survey and practical methods. The use of internal validity seeks to demonstrate that the explanation of a particular event, data or study can be sustained in education (Cohen et al. 2007). This study emphaises the importance of student feedback to encourage improvement. Students and teachers are engaging in feedback on a daily basis.

Furthermore Kember and Leung (2008) states that students must be aware of why they are completing a certain task and must be actively engaged in the lesson. Effectively, within this study students are informed of the research and all strategies included are student centred. The

students are at the centre of the study through interative learning strategies. In addition it provides an opportunity to enhance further learning and upskill my teaching practices. Likewise the study does not affect class time. The action research project is a valid and reliable approach when teachers implement strategies and reassess the learning environment (Alridge et al., 2012). As student voice is vital in the study the data gathered from students supports me in transforming the learning environment in ways that closely match what students prefer and ultimately the transformation can be used in future efforts at improving learning environments (Alridge et al., 2012). According to the NCCA (2017), young people are essential to curriculum development therefore they need to know that they are heard and their opinions have been acknowledged. For this to be valid and reliable, students are active particiapants in the project.

The focus of the study is on 2nd year students to improve their attitudes to learning before sitting a State Examination at Junior Cycle. Smyth et al., (2006) states that second years are percieved to be passive learners who challenge the system. Consequently the reliability of the study will depend on student attitudes to both the surveys and feedback methods. Engagement amongst students varies where few students can become disengaged and lack interest in school. However as this study is carried out in the normal classroom setting it provides an open opportunity for students to participate. Therefore to notice positive attitude changes with regards to learning, the main research aim looks at student engagement and how it is important in education. Engagement in this study is promoted through the interactive feedback strategies.

3.4 Research Aims

Within the proposed research, the aim is looking at student participation and engagement in my 2nd year English class and to enhance the learning experience for all my students. Research in education suggests improvements for practices (Creswell, 2012). The research objective is focusing on student feedback strategies and whether these strategies can strengthen the teaching and learning experience for all students through positive engagement and participation. The study will also highlight what form of feedback students found most beneficial to learning. I will focus on student voice where students are sharing their knowledge with me by providing feedback and I will listen to that feedback and reflect on my own practice accordingly. The study is to allow students to feel an increased sense of ownership and engagement towards their learning journey with the hope that this will lead to greater

participation throughout their school experience. The Department of Education offers support to teachers on how to improve the teaching and learning experience for students.

3.5 Improving Teaching and Learning in Post Primary Schools

'Looking at our Schools Document 2016: A Quality Framework for Post Primary Schools' (LAOS) gives teachers and schools an opportunity to look at their teaching practices and offers support on how to improve the teaching and learning experience for students within the school. The framework centres on teaching and learning and leadership and management. It recognises that these are the two key areas that impact student learning and provides effective teaching methods to improve student engagement (Dept. of Education and Skills, 2016). The framework views students as active learners who engage in the learning process through interaction in the lessons. Kong et al. (2017) recognises that formative assessment in teaching is vital to educational improvement. Therefore the use of feedback methods from the students to the teacher will seek to improve this concept within my own teaching and support student learning. Similarly the document outlines the importance of teachers having the ability to self-reflect on their practices and identify areas where they can improve their pedagogy. The framework can be used as a tool for teachers to question their actions and examine the impact of their actions as a means of improvement for their own teaching and learning abilities (Dept. of Education and Skills, 2016). From this framework I intend to base my methodology on 'The Statements of Practice for Teaching and Learning'. I intend to focus the study on 'Domain 1' (figure 1.3) which involves learning outcomes for students.

Figure 1.3 The Statements of Practice, Teaching and Learning. Department of Education and Skills (2016)

The statements of practice – teaching and learning

DOMAIN 1: LEARNER OUTCOMES

STANDARDS	STATEMENTS OF EFFECTIVE PRACTICE	STATEMENTS OF HIGHLY EFFECTIVE PRACTICE
Students enjoy their learning, are motivated to learn and expect to achieve as learners	Students' enjoyment in learning is evident and is often linked to a sense of making progress and of achievement. Their engagement with learning contributes to their sense of well-being. Students are motivated to learn, and this is often linked to having a clear sense of attainable learning outcomes. Students see themselves as learners and demonstrate this in their positive approach to classwork and homework.	Students' enjoyment in learning is evident and **arises from** a sense of making progress and of achievement. Their engagement with learning contributes to their sense of well-being. Students are motivated to learn **through having** a clear sense of attainable **and challenging** learning outcomes. Students see themselves as learners and demonstrate this in their positive **and reflective** approach to classwork and homework.

The proposed research considers 'Standard 1' within this Domain, where students enjoy their learning, are motivated to learn and are expected to achieve to the best of their abilities. The goal is for students to see themselves as learners and have the ability to reflect on their classwork and homework to improve their efforts. I aim to improve this standard in my own teaching by moving from effective to highly effective practice through the implementation of the feedback strategies. To successfully complete the research there are a number of ethical procedures that need to be adhered too.

3.6 Ethical Considerations

The main focus of the research is personally reflecting on my own pedagogy with the aim of improvement. Pedagogical research involves looking at a teaching or learning issue and implementing a series of steps to improve the problem. Educational research aims to extend knowledge and understanding in areas of education. (British Educational Research Association, 2018) According to Norton (2019), the fundamental purpose of action research within the school setting is to investigate our own teaching and learning practices and implement the necessary actions to modify the issue.

Within this study, research states that those involved in the study must understand and respect mutual responsibilities with relation to the project (Campbell and Groundwater- Smith, 2007). Stenhouse argues, in order for teachers to improve their methods they must conduct the research themselves in the classroom as opposed to reading theory on the topic (Campbell and

Groundwater- Smith, 2007). I feel that the research I undertook with the students benefits my teaching practices and in addition seeks to maximise student performance. It is part of everyday teaching and learning where students are regularly encouraged to give feedback on a daily basis therefore students will benefit from the feedback methods in class. Before carrying out the research an ethics application was submitted to the LYIT Ethical Committee and permission to carry out the study was granted in December 2019. As the students involved were under the age of 18 there where various ethical issues that needed approval in accordance with LYIT's ethical procedures and policies.

Firstly, consent from school management had to be obtained to begin the study. (Appendix 1) This outlined the aim of the study, data collection methods and who will be involved in the research. Once this was granted, parental consent was compulsory for each student. (Appendix 2) The permission letter for parents outlined the aim of the study, what it hoped to achieve and how their son/daughter would be involved in the research. Similarly it included data collection methods informing parents that research from students is strictly anonymous and only accessed by me. School and parental consent was also required to publish results at the end of the study which will be made available to parents and school management after completion. Data collection was managed by 'Google Docs' through an online survey. Students were also informed of the study as they were acting as co- researchers in the project. The information they received outlined why they were invited to participate in the research and how it was conducted. They were also made aware that they could withdraw from the study at any time and this would not affect their participation in class. (Appendix 3) Campbell and Groundwater- Smith (2007) state that when conducting insider research the participants involved in the studies must receive detailed information regarding the study, its reasoning and must not feel obligated to participate. Likewise power from the researcher must not be inflicted on the students (Campbell and Groundwater- Smith, 2007). As the research was conducted within the classroom, it did not affect class contact time. The research aimed to benefit learning through increased feedback.

3.7 Proposed Methodology

Torrance and Pryor (2001) argue that assessment within the classroom through the method of feedback is accomplished by the teacher and the student together to consider future development. According to Norton (2018), the fundamental purpose of action research within the school setting is to investigate our own teaching and learning practices and implement the

necessary actions to modify the issue. The proposed research methodology will involve the input of two formative assessment feedback interventions and short online surveys to assess attitude changes with 27 2nd year students who are mixed ability learners. Mixed ability settings are seen to foster self-esteem and a positive attitude to school where students acknowledged that a mixed ability setting led to positive friendships and equality of learning opportunities (Tereshchenko et al. 2018). The advantage of conducting the survey online allows for data to be collected efficiently and economically within a short time frame (Lefever et al. 2007). The research will take place in the classroom during timetabled English classes as part of normal teaching and learning practice which I consider to be a respectful and fair environment. Studies show that schools play an important role in the cognitive development of a child, therefore research of natural classroom interaction and engagement amongst students plays a critical part in youth development (Alibali and Nathan, 2010).

I have chosen these students as I am their English teacher and there are a range of learning abilites in this class. It is recognised that teachers partake in action research projects to improve their pedagogical practices and generate new ideas (Mc Niff and Whitehead, 2005). As this study is classroom based with students as co- researchers its objective is to assist further learning and improvement for both the student and myself. My goal is to improve teaching and learning in the classroom as I examine my own teaching practice through the action research project and reflect on the implemented student feedback strategies and how these are benefiting classroom learning. According to Marcos et al. (2011) reflection in education scaffolds crital thinking, provides an opportunity for improvement and promotes self regulation in teachers. Torrance and Pryor (2001) examined the idea of teacher research and reflection and how these methods support teachers in identifying strengths or weaknesses in their own practices and to modify these issues to improve learning. Therefore teacher led research enhances learning, providing teachers with continued professional development which ultimately links to student learning outcomes (Timperley in Kelly 2016, pg. 4). Similarly, teacher professional development can take place in the form of mentoring, practitioner inquiry or school based research, these opportunities provide an insight for teachers to rethink their practices and improve where necessary (Mockler and Groundwater-Smith, 2015). Stenhouse states that in order for teachers to improve their methods they must conduct the research themselves in the classroom, opposed to reading theory on the topic (Campbell and Groundwater- Smith, 2007). I feel that the research I propose to undertake with the students' benefits my teaching as it is part of everyday teaching and learning where students are regularly

encouraged to give feedback on a daily basis. From practising formative assessment, it allows learners to self-assess and evaluate their knowledge and receive feedback from others (Kong et al. 2017). As a result students will benefit from the feedback methods in class.

3.8 Section 2- Methodology Implementation

This section looks at the various stages involved in the methodology through the implementation of feedback strategies and data collection methods.

3.8.1 Methodology Stages

Feedback from assessment methods is critical to learners as it challenges students to identify the gap in their knowledge and the standards they must reach, it pushes them to become self-regulated learners (Kong et al. 2017). According to Petty (2009) self-assessment by students aids in the development of student understanding and confidence, where the feedback is immediate and errors are instantly identified. Self-assessment encourages students to take responsibility of their own learning (Petty, 2009). The methodology in this study included classroom feedback strategies and an online student survey to assess learning attitudes. In educational research questionnaires or surveys tend to be more reliable than interviews as answers are anonymous encouraging greater honesty from participants and are a valuable resource for gathering factual information and attitudes (Cohen et al. 2007). In this study, two methods of feedback were included within lessons to encourage feedback from the students to myself. Firstly it involved written formats, this then followed with ICT based feedback methods. Before the strategies were put in place, a survey was distributed to each of the students in the class through their 'Google Classroom' account, an online forum where teachers share materials and lessons with their students. The purpose of this survey was to assess student attitudes to their learning experience. Studies relating to measuring educational changes must involve a questionnaire that is based on current teaching and learning models in the classroom (Kember and Leung, 2008). With that the survey was easy to distribute as all students are engaging with 'Google Classroom' daily and it is cost effective. Their input to the questions was strictly anonymous and confidential and is only accessed by me. (Appendix 4) School management and parents had been informed of this and results will be discarded when the study is complete. Students completed these surveys during normal classtime in the school computer suite or through their own devices. The survey is student centred where questions are easy to understand and answer.

3.8.2 Feedback Strategy 1

Once students completed survey one, the first feedback strategy was introduced to the class. This was through written format. These types of written feedback methods inculded quick and easy to use strategies for the students. One example I used was a 'twitter' feedback method, (Appendix 5) where at the end of a topic, students shared their understanding of what they had learned. These tweets were pinned on a board in the classroom and were visible to all students. This strategy of formative assessment should provide an analysis of student learning and areas needed for improvement (Holmeier et al. in Dolin and Evans, 2018 pg. 177). The feedback shared from the students was discussed to assess if there were common strengths or weaknesses and with that it provided me with an overview of student knowledge or gaps within a studied topic. This strategy provided a structure for students to record what they have learned and it provides teachers with the opportunity to identify areas of the topic that need more attention (Junior Cycle for Teachers, 2017). From using these feedback methods it is anticiapted that students will become more active learners where they are willing to share their thoughts. Studies outline where it is the students' role to actively engage in the various learning processes, it is the teachers' role to support the learning (Elen et al. 2007).

Throughout the study students provided feedback anonymously and as a result of this they felt comfortable sharing their ideas. Research indicates that there are notable differences in students reactions when they are not confident with the appropriate answer, consequently they are reluctant to share their respsones openly (Langer, 2011). Therefore from sharing feedback anonymously they are more assertive in expressing their views. The aim of the student feedback methods are to create a student centred environment. This student centred approach will be successful when more responsibilites and tasks are handed over to the students and less for the teacher (Elen et al. 2007). Al Bashir et al. (2016) recognises that student feedback towards their learning helps provide information to the students about their own learning and it somewhat inspires students to motivate themselves around their learning. Likewise, it offers a chance for students to acknowledge their peers feedback and identify their common responses, self reflect and evaluate their skills.

3.8.3 Feedback Strategy 2

Following the implementation of written feedback strategies, ICT feedback methods were incorporated into the lessons. This involved, students using their mobile phones or school chrome books to provide feedback online. Prensky (2011) outlines that educators need to

review their teaching and learning methodologies and must be willing to meet current technological demands in education.

One common online feedback application used in education is 'Kahoot'. This online site allows teachers to design unique quizzes to test their students learning and understanding associated with a studied topic. This method of classroom feedback is instantaneous and interactive. It activates prior knowledge in a fun and exciting way that appeals to the students where teachers can ask thought- provoking and challenging questions (Junior Cycle for Teachers, 2017). It involves the students connecting to the website or app and using an access code provided by the teacher to complete the task. The students can use an anonymous identity. Once students submitted their answers to a question, these were shared immediately on the whiteboard. This strategy allowed students to observe their peers answers and identify common errors. In addition it allows for a peer led learning approach which research suggests deepens students own learning and improves grades (Abegglen and Morris, 2015). A classroom where formative assessment is implemented can be identified as informal, spontaneous and engaging where learner motivation is heightened (Kong et al. 2017). With that, the use of ICT feedback methods gives students social support, scaffolds their critical thinking through peer interaction and enables them to co-construct their knowledge with their teacher and peers in the classroom (Kong et al. 2017). After the strategies were applied, students completed a final survey and results were assessed. These are outlined in the next chapter.

3.8.4 Data Collection

Results from the two student surveys were anaysled through 'Google Docs' where a spreadsheet of answers was formulated. The students were familiar with using 'Google Docs' from their various subjects, it is a quick and simple method for submittitng answers. Student names were not included as the surveys promote a non bias approach. The questions are student friendly with easy to read multiple choice statements. (Appendix 4) According to Kember and Leung (2008) student surveys need to be designed effectively as they are often used to improve teaching and learning standards. To complete the surveys successfully students were informed to choose one answer per question. It was hopeful that there would be a change in student attitudes to learning following the implementation of both strategies where student engagement improved. In addition it was anticiplated that the final survey will outline if written or ICT feedback is most effective for student learning.

Similarly from keeping a reflective journal throughout the study my expectation was to see a change in student learning where it became more focused and their motivation in class began to improve. Reflective writing by teachers allows educators to connect new learning with prior knowledge and explore new methods for teaching and learning (Shandomo, 2010). It provided an opportunity to assess my teaching methodology. According to Lee (2005) the central goal of reflective writing from educators is to develop teachers' reasoning on why they employ certain strategies and how they can improve their teaching to have a positive effect on students. As this study took place in a school setting, results will be provided to parents on completion and changes to students perceptions regarding teaching and learning in the classroom will be highlighted.

3.9 Conclusion

The study seeks to maximise student performance and participation in class through the implementation of student feedback strategies. It will encourage student voice in the classroom through the sharing of ideas, leading to peer led learning and promoting a positive attitude to learning. Overall the study will outline if student attitudes to their learning improved with the use of the feedback strategies, what feedback method, if any do students find most effective and to what extent are students more willing to commit to their learning journey when responsibility and ownership is placed on them?

As it is an action research study involving teacher reflection it is noted that reflection will provide an opportunity to become aware of a problem that may exist and therefore measures can be taken to rectify the issue (Aldridge et al., 2012). Finally it is noted that formative assessment strategies foster student voice as it provides an opportunity for students to share their knowledge with their teacher and engage in peer and self assessment to monitor and reflect on their learning (Aldridge et al., 2012). Likewise, when students are capable of recognising the link between their assessment and learning in a student centred environment, assessment becomes educative and contributes positively to student learning (Aldridge et al., 2012). The following chapter will discuss the research findings and analysis from the two student surveys.

<center>**4. Research Findings and Analysis**</center>

In the previous chapter I included a detailed account of the methodology strategies used in the study. In this chapter I will return to the initial research questions and their aims and objectives, I will discuss my reasoning and evaluation for choosing action research for this particular study. I will refer to the importance of reflecting in action research and the benefits of surveys for data collection.

In the second section of this chapter I will discuss the results of my findings based on the student surveys, the feedback strategies implemented in the class and my own reflective judgement throughout the analysis of the results.

4.1 Research Questions, Aims and Objectives

At the outset of this study, I was concerned with student participation, engagement and student voice with my second year English class. Therefore I looked at areas of teaching where I could improve this issue and student to teacher feedback was highlighted as it was putting the students at the centre of their learning and encouraged interaction amongst students. My aim was to transform the "passive learners" to become "interactive learners" who valued their learning experience. From that I developed a central research question, including sub questions and outlined their aims and objectives as highlighted in (figure 1.4).

Figure 1.4 Research Questions, Aims and Objectives

Central Research Question	Primary Research Aim and Objective
How student feedback (from student to teacher) can enhance the student learning experience through increased motivation and participation?	If students are sharing feedback in the class through numerous strategies will it enhance their learning experience and encourage them to take more responsibility towards their learning by improving their work and standards.
Sub Research Questions	**Research Aims and Objectives**
From using interactive feedback methods will students engage more with their work?	Use/implement feedback strategies to improve the learning experience of second year students.
From using student friendly feedback strategies will students feel more comfortable to voice their opinions as it is a whole class initiative?	Encourage student voice to improve engagement of second year students towards their studies.
What method of feedback will be most beneficial to learning?	Compare student interaction with feedback using non ICT and ICT methods.
Will teacher reflection in this study provide me with the knowledge of areas where I can improve my teaching methodology?	Improve my own teaching practice in this area from effective to highly effective.

<center>27</center>

As already noted, the main objective of the study was to improve student engagement in the classroom by including feedback methods both in written and interactive styles. The study would also allow me to reflect and improve my pedagogy to suit all students learning needs. I choose action research for the methodology as I wanted to upgrade my own practice. According to Mc Niff and Whitehead (2006) action research is a form of enquiry that allows practitioners to investigate and evaluate their work. Norton (2009) maintains the purpose of action research is making things better than they were before. Therefore, I wanted to enhance my teaching skills to benefit my students.

4.2 Evaluation of Action Research in the Study

Action research was first established by Kurt Lewin in the 1940's and has evolved since to improve the teaching and learning experience for teachers and students. Norton (2009) states that Lewin taught people to analyse and become leaders of change by being aware of social forces that where happening around them. Consequently educators became leaders of their educational settings to instigate a positive change. Cohen et al. (2007) express that action research is research conducted by particular people on their own practice to help them improve their methods and how they work with others and for others. It involves 'problem-posing' and not only 'problem solving' in which it is motivated by a desire to effect change to see improvements (Cohen et al. 2007).

According to Norton (2019) pedagogical action research involves using a reflective lens to examine a problem in our practice and methodically working out a system for taking action to solve the issue. It involves a 'bottom up' approach in which educators feel confident to take ownership of their professional development by undertaking pedagogical action research which encourages teachers to become reflective practitioners and critically engage in the literature of teaching and learning (Norton, 2019). From this Norton (2009) highlights the mainstream purposes of pedagogical action research which include: support for teacher professional development, an aid to reflective thinking which results in action being taken, a method of improving the student learning experience and to challenge existing teaching and learning practices. Similarly Carr and Kemmis (1986) define the goals that surround action research in education which involve enhancing teaching practices, increasing teachers' awareness of decision making with regards to their own practice and improving the conditions where these practices take place. Norton (2009) claims the fundamental purpose of action research is to investigate our own teaching and learning practice with the aim of improving that practice to

benefit student learning. Student participation, motivation and student voice where the issues raised in my second year English class that I aimed to enhance. As a result this study involves participatory action research. Kemmis et al. (2014) explain how this style of research has come under scrutiny in the past as participants involved in this action research are known as 'insiders', however Norton states that 'insiders' have special advantages when it comes to doing participatory action research in their area of practice.

Action research is inquiring about problems and taking action to solve them (Pine, 2009). According to Pine (2009) teachers partake in action research purposefully and ethically in a specific classroom context to enhance the teaching and learning experience, enabling them to reflect and make judgements on their professional practice. Teacher action research is about developing change through observation, listening, analysing, questioning and being involved in the process (Koshy, 2005). Action research is required to learn through 'action' for personal and professional development (Koshy, 2005). I chose an action research study for my own professional development. According to Norton (2019) action research requires both 'reflection in action' which entails reflecting on ones behaviour and 'reflection of action' which involves reviewing and reflecting on our findings. Mc Niff and Whitehead (2005) claim that action research is commonly used in the initial and continuing professional development for teachers to improve practices and generate new ideas.

I decided action research was best suited to my study as I wanted to change my students' negative attitudes towards their learning. To do this successfully I followed Lewin's research cycle in (figure 1.5).

Figure 1.5 Lewin's process of Action Research
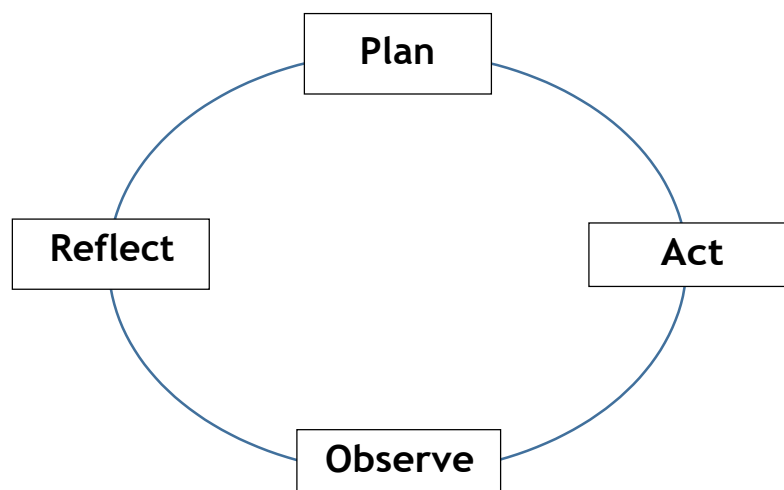
Throughout the study these four steps were taken to establish a positive learning environment where students were eager to learn and take responsibility for their learning. I observed student attitudes to learning, planned a student centred learning strategy, implemented these strategies in an interactive way and reflected on the changes to student attitudes to learning from the surveys they completed.

4.3 Teacher Reflection in Action Research

As Norton (2019) affirms the idea of becoming a reflective practitioner eluded from the work of Donal Schön (1983) in his book "The Reflective Practitioner", who argued that no matter what a person's profession is, everyone needs to reflect. Reflection has been suggested as a means of supporting the goals of action research as it affords educators to view the effectiveness of their practices before, during and after the enactment of their study and identify the areas needed for improvement (Schön, 1983). Leitch and Day (2000) suggest that action research represents a powerful means of developing reflective processes throughout the teaching profession. Reflection is a means by which experience can be turned into action (Norton, 2009). Reflective practice is a system in which professionals become aware of their knowledge and thus learn from experience (Norton, 2019). Studies suggest that reflective thinking is an integral part of action research where it begins by sensing the problem to planning and implementing a solution and evaluating the results (Abou Baker El-Dib, 2007). According to a study by Kowalczuk et al. (2019) teachers are urged to partake in continual professional development and reflection in order to overcome the challenges the 21st century raises in education such as the increasing complexity of teaching and learning in diverse classrooms, rapid increase of technology in the classroom, and the need to alter teaching methodologies to suit the needs of every learner. From participating in teacher action research, self-reflection and professional development, these have a positive impact on teachers on their knowledge and skills and therefore improves the learning outcomes for the students and the school through collaboration and the sharing of resources (Kowalczuk et al. 2019).

Cohen et al. (2007) claim a key factor of action research involves keeping a personal journal to reflect both on the practices that are being studied and the process of the study and how it evolves. Action research data includes both accurate data from the study but it also entails teachers collecting and analysing their personal judgements on the proposed study (Cohen et al, 2007). Similarly Brookfield (2017) believes that the actions of teachers are based on assumptions on how best students can learn and these assumptions can be broad in scope or

relate to a specific situation. These assumptions are categorised into four areas involving, *students' eyes, colleagues' perceptions, personal experiences, theory and research* (Brookfield, 2017). Regarding *'students eyes',* teachers can see the effects of their words and actions on students and make sense of areas that need to be improved or changed (Brookfield, 2017). In relation to *'colleagues perceptions'* these allow teachers to critically engage in conversations that relate to their practice (Brookfield, 2017). *'Personal experience'* allows teachers to become learners by enrolling in continuous professional development courses and putting themselves in the position of the learner to identify areas needed for improvement (Brookfield, 2017). Finally, the use of *'theory and research'* can provide unexpected literature and ideas (Brookfield, 2017).

Norton (2009) argues that reflection by teachers is an essential element to action research if change is to be effected from previously held assumptions to adopting a new framework. The purpose of reflective practice puts educators at the centre of their learning by taking control of their professional development and becoming active learners from gaining insights into teaching and learning and providing teachers with the conceptual tools to establish new links between what they do and what they need to do (Norton, 2009). Action research in education encourages teacher ownership in the change of initiatives, gives teachers a voice, encourages collaboration amongst teachers and increases teacher willingness to invest their time in educational problems (Hannay et al., in Norton, 2009, pg. 23). Educators take on critical participatory action research to reshape their lives and work where they change the situation they find themselves in by taking on an active and reflective approach to change themselves, their practice and their educational settings (Kemmis et al., 2014). Similarly Rodgers (2002, pg. 845) refers to John Dewey's (1933) conception of reflective thinking and establishes the four principles for undertaking reflective practice that appeared in his work, these include:

1. *"Reflection as a means making process where the learner is moved from one experience to the next with a greater understanding of connections.*
2. *Reflection is a systematic, rigorous, disciplined way of thinking with its roots in scientific enquiry.*
3. *Reflection needs to happen in community, in interaction with others.*
4. *Refection requires attitudes that value the personal and intellectual growth of oneself and of others".*

Within my study, these four principles were taken into consideration in the school environment. Throughout the study, I reflected on students' participation and motivation levels in class to assess if their attitudes towards their learning had changed either positively or negatively. These factors also became more noticeable through the online anonymous survey that students completed. I also reflected on my own teaching in the classroom and how I could move from effective to highly effective practice. As the study focuses on teacher reflection, Norton (2009) notes that action researchers need to be transparently reflective about their own practice and willing to address any issues that may arise throughout their research. In addition Leitch and Day (2000), discuss the idea of 'reflection in action' and 'reflection on action' established by Schön (1983). Throughout this study 'reflection on action' is incorporated as this involves teachers considerations and analysis of their performance to gain knowledge from experiences whereas 'reflection in action' is a more complex method involving thinking and improvising on the spot so the experience is viewed differently (Leitch and Day, 2000).

According to Leitch and Day (2000) the role of reflective practice for teacher professional development is essential. There are three reasons why reflection must be considered as having a central role in good teaching. Firstly reflection is vital when concerning the nature of teaching. Without having the ability to evaluate their practice and assumptions, teachers' professional effectiveness will not change throughout time and remain static. Secondly reflection leads to positive personal development. Finally and most importantly, reflective practice is central for the development of teachers as inquirers who engage in collaborative discussions with their colleagues both inside and outside their school community to generate new knowledge of practice (Leitch and Day, 2000). Likewise Mc Niff and Whitehead (2006) emphasise the reason teachers conduct action research is to evaluate and reflect on what they are doing and if their pedagogy is influencing them and their students learning and if not what action needs to be taken to improve the learning experience. Trauth and Buck (2011) believe that through reflective practice, teachers gain greater self-awareness of their personal ideas and beliefs regarding their teaching and have the ability to generate their knowledge of new ideas to their colleagues. Overall action research through reflection is a generative and transformational process where the end of one practice becomes the beginning of a new practice (Mc Niff and Whitehead, 2006).

By using action research I incorporated interactive formative feedback strategies into my classroom and from engaging in critical self-reflection it offered me the opportunity to make

instructional decisions to support and enhance student learning. As Trauth and Nare (2011) state, formative assessment can happen in many forms from teacher- student questioning and classroom discussion, however for any strategy to be formative it must be a cyclical process where teachers are gaining student ideas and identifying their responses to learning. Therefore to gain this knowledge for my own study I conducted two surveys to assess my students' views to their learning experiences.

4.4 The Use of Surveys for Data Collection

Firstly Norton (2019) distinguishes the difference between a survey and a questionnaire. A survey is the process of collecting data and analysing the results, whereas the questionnaire is a tool used within the survey to collect data (Norton, 2019). In action research, survey research covers both questionnaire and student attitudes (Norton, 2009). According to Norton (2009) an advantage of conducting an anonymous survey online encourages respondents to respond honestly and it can be completed in respondents own time and at their own convenience. In addition, if participants involved in the study are the researcher's students, an anonymous survey will minimise power relations and authority (Norton, 2019). As this study focuses on student attitudes to learning by looking at their participation and engagement levels I choose a survey for data collection since Norton (2009) outlines a questionnaire within a survey is the most suitable measurement to use when looking to find out information about a person's habits and behaviours. In the student survey (Appendix 4) I designed closed questions as I wanted to have a measurable count of my students' attitudes and as it was a second year class participating in the study, closed questions are quick to complete and do not discriminate against student abilities (Cohen et al. 2007). Closed questions are easier to categorise and from the formation of bar charts and pie charts the responses are easy to analyse (Norton, 2009). With that Cohen et al. (2007) state that closed questions can generate frequencies of response which are straightforward to analyse. Similarly surveys are beneficial to the research design as they tend to observe patterns of response and make generalisations for particular focus groups, they are efficient by also providing descriptive and explanatory data (Cohen et al., 2007). The results from the two student surveys are outlined in the following section.
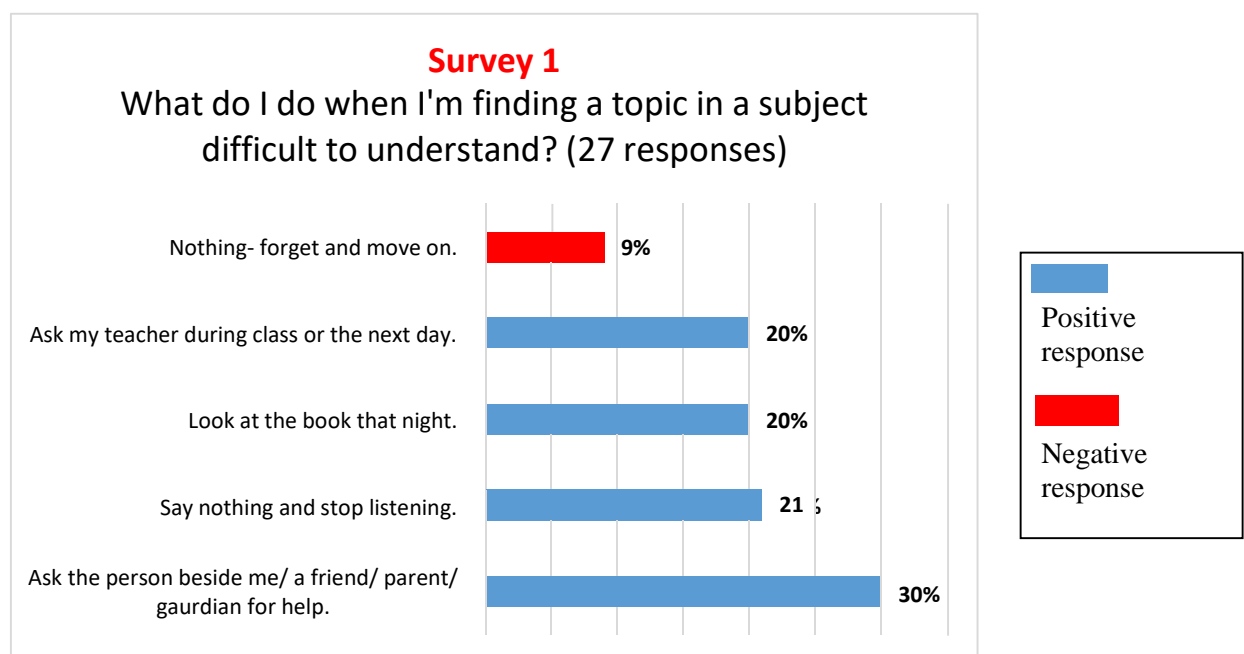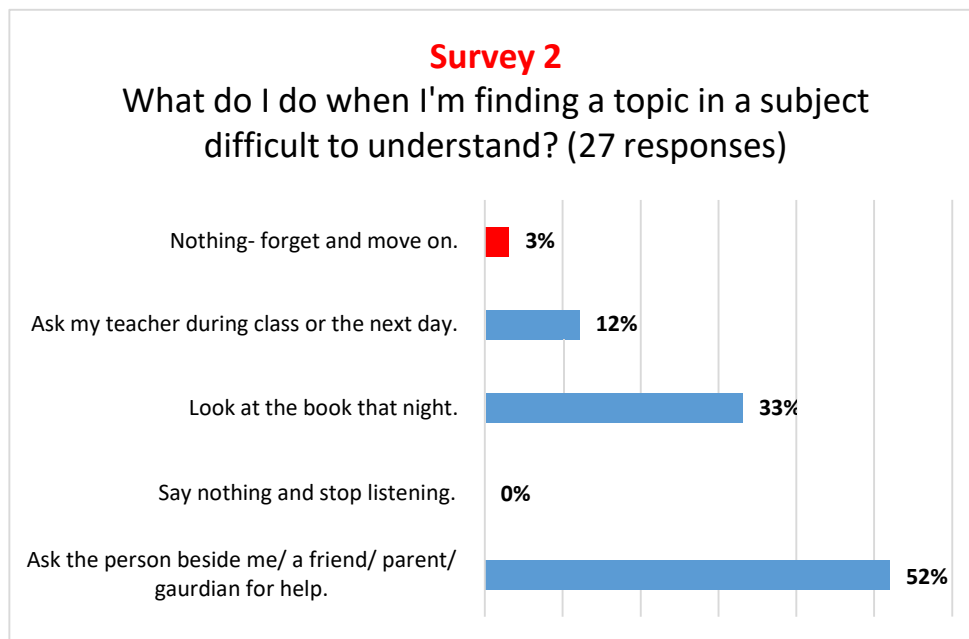
4.5 Research Findings

In this section I will discuss the key findings from the student survey and my own personal reflection of student attitudes within the class and how these changed over the course of the study. There were 27 students in my 2nd year English class who all willingly participated in the study through the feedback methods and completion of the online surveys. The results will be discussed under various sub questions that are outlined in my research action aims. The main findings I will be looking at are student engagement, student participation, student voice and the method of feedback students prefer. I will include results of these findings.

4.5.1 Sub question 1- Student Engagement

To assess student engagement levels, the class were asked to respond to how they see themselves engaging with their studies and their understanding of a topic. In the results illustrated in (figure 1.6) the main aim of the question was to assess if feedback improved student engagement and how students respond to their learning. Based on the results from the two student surveys it is evident that student engagement with their classwork improved over time as evident in (figure 1.6).

Figure 1.6 Student Engagement Results

Survey 1
What do I do when I'm finding a topic in a subject difficult to understand? (27 responses)

- Nothing- forget and move on. **9%** (Negative response)
- Ask my teacher during class or the next day. **20%** (Positive response)
- Look at the book that night. **20%** (Positive response)
- Say nothing and stop listening. **21%**
- Ask the person beside me/ a friend/ parent/ gaurdian for help. **30%** (Positive response)

Positive response

Negative response

Survey 2
What do I do when I'm finding a topic in a subject
difficult to understand? (27 responses)

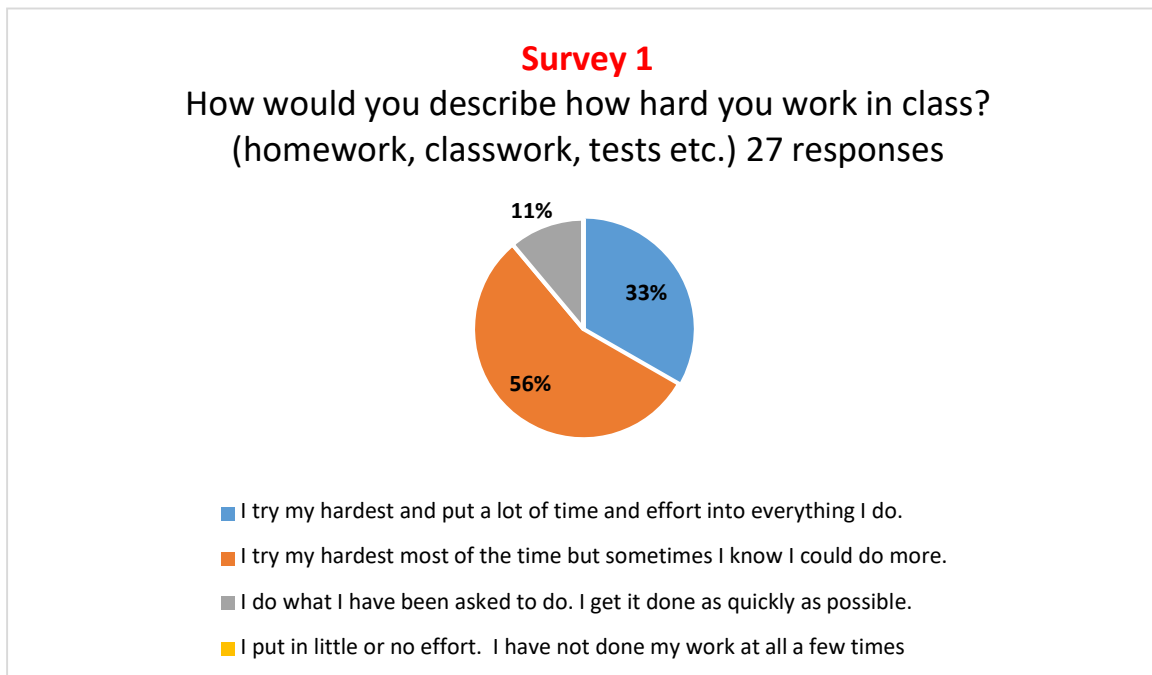| Category	Percentage
Nothing- forget and move on.	3%
Ask my teacher during class or the next day.	12%
Look at the book that night.	33%
Say nothing and stop listening.	0%
Ask the person beside me/ a friend/ parent/ gaurdian for help.	52%

Displayed in the findings (figure 1.6) there was an increase in the number of students who felt comfortable in asking a friend/ parent/guardian for help after the feedback strategies were applied. The aim of the feedback strategies were to increase student engagement over time and this can be seen as a positive change from before the strategies were included. This supports the claim by Price et al. (2011) that student engagement will improve when a positive teacher-student relationship is established through feedback. Likewise as interactive feedback strategies were implemented within the study, research by Hepplestone et al. (2011) argue that student engagement is enhanced through the use of technology therefore suggesting that by changing the method to which feedback is given between the teacher and the student to a technology based method will enhance greater student engagement. Parkes and Fletcher (2017) suggest that technology based feedback methods are generally welcomed by students and results in increased engagement. Price et al. (2011) express that whatever the purpose is for the feedback, it is a response to students work that expects a response from the student, where this can result in an increased sense of motivation, greater understanding of a topic and improvement in a subject. The results from the survey (figure 1.6) illustrate how students are more willing to engage with their work where there was a 0% rate in the number of students who stated that they would do nothing and move forward after the study was carried out. This is a positive development in increasing student engagement and participation in class. It expresses their willingness to take responsibility for their learning and are confident in seeking help when needed. As stated by Price et al. (2011) for feedback to be effective it is a two way construct that involves both the teacher and the student. Student engagement can be improved

when there is a shared understanding of the nature of the feedback (Price et al., 2011). With that the extent of which students are involved in the learning community will also play a part in the engagement process (O Donovan et al, in Price et al., 2011, pg.881). Students must be placed at the centre of the learning.

4.5.2 Sub question 2- Student Participation

Through the introduction of the feedback strategies, students were surveyed on their response to learning and how they are responsible for their own learning. I wanted to assess if the feedback methods altered the students to become more conscious of their learning journey and how they can improve their participation levels with their work, in class and at home. The results illustrate an increase in student participation with their work over the duration of the study. These statistics are outlined in (figure 1.7).

Figure 1.7 Student Participation Results

Survey 1

How would you describe how hard you work in class? (homework, classwork, tests etc.) 27 responses

- ■ I try my hardest and put a lot of time and effort into everything I do.
- ■ I try my hardest most of the time but sometimes I know I could do more.
- ■ I do what I have been asked to do. I get it done as quickly as possible.
- ■ I put in little or no effort. I have not done my work at all a few times

Survey 2

How would you describe how hard you work in class?
(homework, classwork, tests etc.) 27 responses
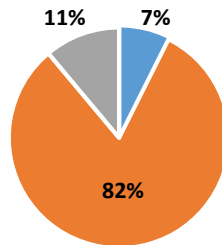
- I try my hardest and put a lot of time and effort into everything I do.
- I try my hardest most of the time but sometimes I know I could do more.
- I do what I have been asked to do. I get it done as quickly as possible.
- I put in little or no effort. I have not done my work at all a few times
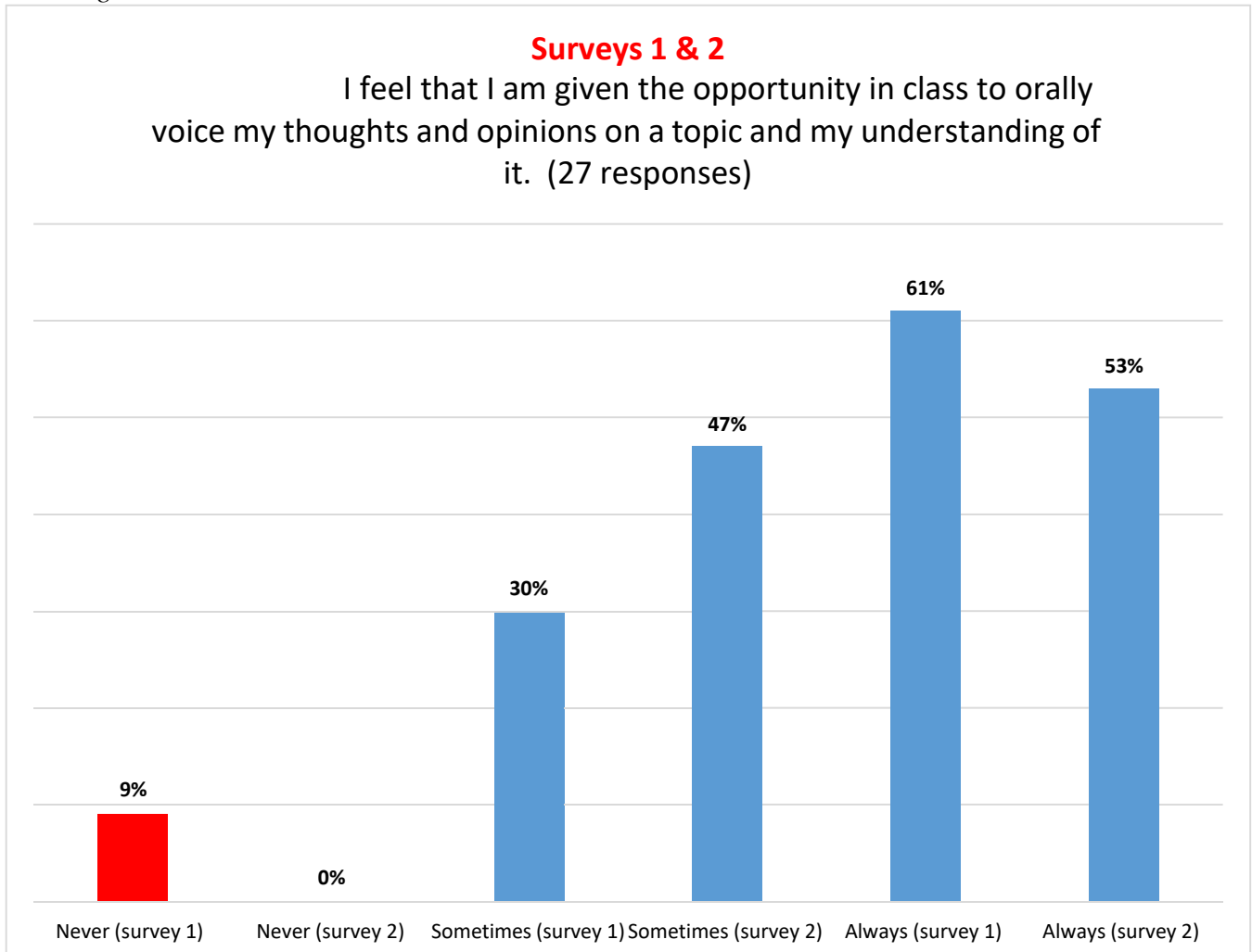
A positive result was illustrated after completing survey 2 where there was a 26% increase in the number of students who agreed that they know they can do more in relation to their classwork, homework and tests. I believe this is a positive development as it illustrates that students are beginning to take responsibility for their own learning and realise that they can improve through asking questions and putting effort into their work. I also noticed from my own observation a significant improvement in student effort into their classwork. Petty (2009) acknowledges that high quality feedback plays a vital role in interactive teaching where students are encouraged to participate and to give feedback of their understanding of a topic. Smith and Higgins (2006) recognise that an interactive classroom through the use of feedback strategies will promote students 'exploratory talk' where they openly participate with their learning and understanding. For feedback to be effective, the conditions and settings for student engagement must be supported (Price et al. 2011). Therefore from the use of the interactive methods I felt that students were actively supported in their learning allowing them to openly participate with their peers. Hattie and Timperley (2007) outline that feedback must be focused allowing students a greater skill to self-evaluate and to engage further with the task.

4.5.3 Sub question 3- Student Voice

As previously stated, second year students are less eager to fully engage with their work. Therefore I anticipated that by including whole class interactive teaching strategies into the classroom, students would feel at ease in orally expressing their opinions and knowledge in

front of their peers. Represented in the data, student voice improved in class following the implementation of the feedback methods. These results can be analysed in (figure 1.8) where results from both surveys have been incorporated into one table.

Figure 1.8 Student Voice Results

Surveys 1 & 2
I feel that I am given the opportunity in class to orally voice my thoughts and opinions on a topic and my understanding of it. (27 responses)

Based on the results it is evident that the students felt more comfortable in voicing their thoughts and opinions after the strategies where included in the lessons. Prior to the strategies being implemented, there was approximately 30% of the class who felt they did not always have the opportunity to voice their opinions. However from my own observation I felt that sometimes students were embarrassed with speaking out in class in front of their peers. This has been noted by the NCCA in a study carried out on second year students across Ireland. According to the study teachers noted a deterioration in their second year students with regards to behaviour and interest in their studies (Smyth et al., 2006). The study outlined that students preferred lessons with open discussions and interactive lessons where the teacher changed their
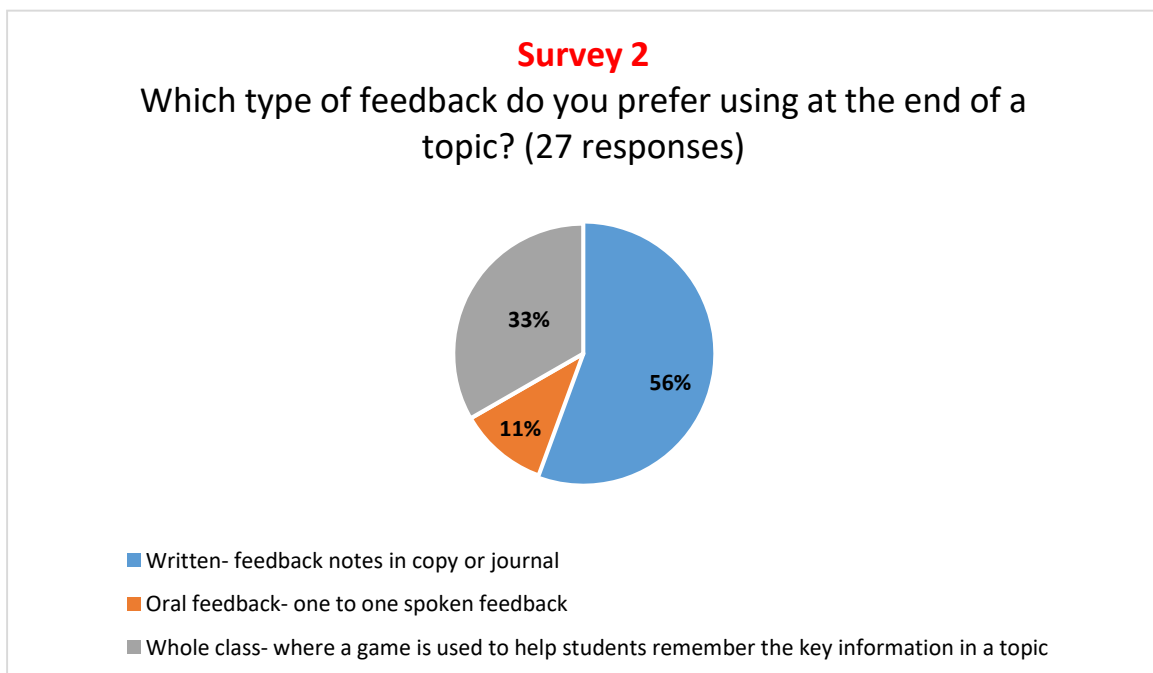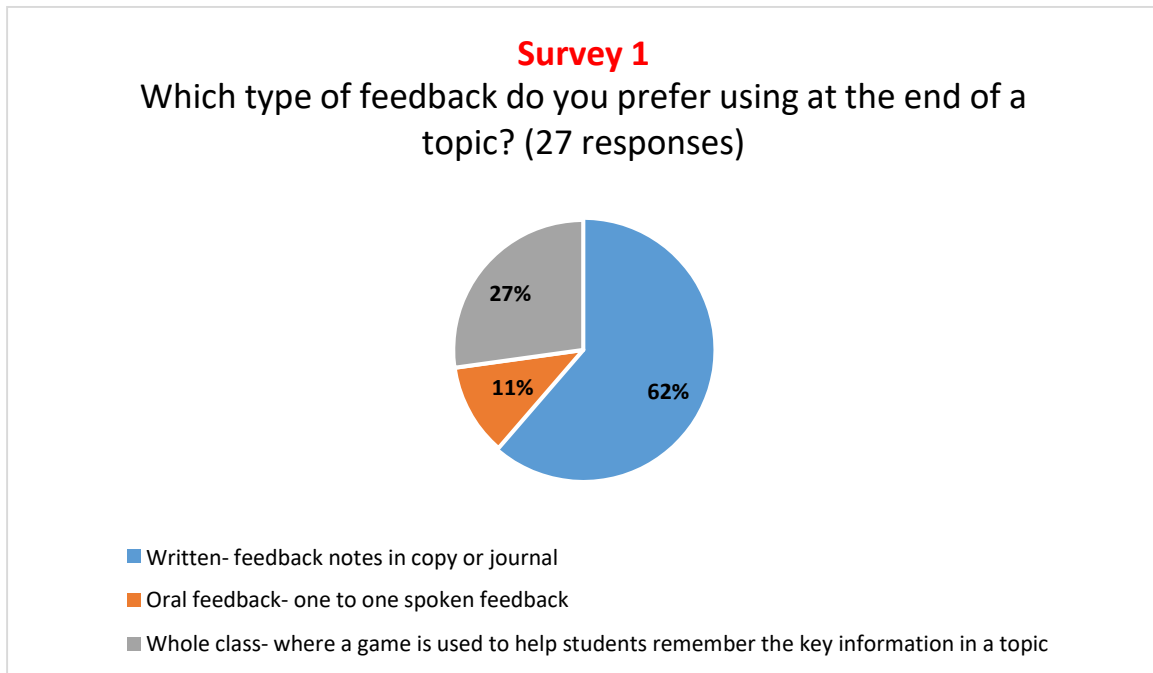
teaching style regularly. This supported their interest and engagement with the subject (Smyth et al., 2006). Therefore I think that from changing my own teaching approach and introducing the interactive feedback methods this prompted student voice and engagement in the classroom. Similarly Carless (2012) suggest that when a trusting learning atmosphere is created students are more likely to develop the confidence to reveal what they do not fully understand. Hattie and Timperley (2007) also acknowledge that student voice and student engagement can often be constrained by the environment in the classroom, where there is a personal risk involved from students responding publically or failing in front of their peers. Students want to feel that they are respected by their teacher and peers when voicing their ideas (Rudduck in Thiessen and Cook- Sather, 2007, pg. 592).

However since the implementation of the strategies all students feel that they have the freedom and comfort to voice their opinions. Although there has been a slight decrease by 10% in the numbers who felt they could 'always' voice their thoughts I feel that this is not a worrying statistic as one of the main aims of the study was to promote student voice in the classroom, and students feel they have that opportunity. Czerniawski and Kidd (2011) suggest that student voice is a powerful mechanism for educational change, growth and development by involving learners in the decision making process. Student voice moves 'passive learners' to 'active learners' and supports the teacher-student relationship for a more collaborative learning experience (Rudduck in Thiessen and Cook- Sather, 2007, pg. 587). With that, student voice is most successful when students feel they are members of the learning community and have something valuable to offer (Rudduck in Thiessen and Cook- Sather, 2007, pg. 587). To continue to promote student voice all students should be given active and direct involvement in certain school matters to evoke a sense of inclusion and respect (Flutter and Rudduck, 2004). The feedback strategies were successful in stimulating student voice.

4.5.4 Sub question 4- Students Preferred Feedback Strategy

The study focused on two feedback strategies, from written to ICT methods. I wanted to identify what method students found most beneficial to learning as it is hopeful that these strategies will be shared with other subject departments. From the data provided in (figure 1.9) written feedback is the most preferred method of feedback for students. However there was a slight increase of 6% in the number of students who preferred using an interactive game as a feedback method. The feedback strategies introduced to the students were student centred to encourage engagement and participation with the learning process.

Figure 1.9 Preferred Feedback Method Results

Survey 1

Which type of feedback do you prefer using at the end of a topic? (27 responses)

27%
11%
62%

■ Written- feedback notes in copy or journal
■ Oral feedback- one to one spoken feedback
■ Whole class- where a game is used to help students remember the key information in a topic

Survey 2

Which type of feedback do you prefer using at the end of a topic? (27 responses)

33%
11%
56%

■ Written- feedback notes in copy or journal
■ Oral feedback- one to one spoken feedback
■ Whole class- where a game is used to help students remember the key information in a topic

Although there was an increase in the whole class initiative, it is evident that the main method of feedback preferred by students is through written form. Students are more familiar with feedback in this format although stated in the literature students preferred the immediacy of feedback through technology however this result is not evident from both surveys. Hattie and Timperley (2007) acknowledge that feedback strategies are considered to reduce the discrepancies that students may have in relation to their learning and these proposed strategies

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may or may not be effective in enhancing learning. Therefore it is important to ensure that feedback is targeted at students at an appropriate level to ensure effectiveness and desired learning outcomes (Hattie and Timperley, 2007). As students stated their preferred method of feedback, Hattie and Timperley (2007) state that this is a positive development in closing the gap between students' knowledge and their misunderstandings as students can seek improved feedback strategies to complete the task and obtain more information from which they can solve problems. Therefore effective written feedback must provide students with their expected learning goals, information on how to reach their intended goals and the feedback must inform students of their current level of achievement (Holmeier et al., 2017). Similarly, in order for written feedback to be highly effective Holmeier et al. (2017) suggest that rubrics on feedback should be considered as a mechanism to support learning. These rubrics will provide students with both information on their current level of learning and the information they need to succeed (Holmeier et al., 2017). For this to be successful the intended written feedback rubrics must be clear for students to understand, students need to be familiar with the intended learning goals and must be able to assess their goals through an interactive classroom activity (Holmeier et al., 2017). When rubrics are established, for example the twitter posts that are used in this study, these rubrics allow the teacher to outline the learning goals and with that students are aware of their learning process (Holmeier et al., 2017).

Although there was no statistical change in oral feedback from the two surveys, this is somewhat not surprising as research suggests that feedback through open comments must ensure it answers the three main questions outlined by Hattie "Where am I going?", "How am I going?" and "Where to next?" (Hattie and Timperley, 2007). Therefore feedback in the form of open comments can often be ignored or misunderstood by students (Holmeier et al., 2017). Likewise open comments can often be difficult to communicate with students as teachers note they are often unsure of what to comment on in particular (Holemeier et al., 2017). In addition as the study focuses on student to teacher feedback, this links to student voice and their reluctance to speak out in front of their peers' particularly pre-feedback strategies. Overall feedback is effective when it directs information to the learner to enhance self- efficacy, and more self-regulated learning where students' attention is directed back to the task resulting in pupils investing more time and effort into their work (Hattie and Timperley, 2007).

There was a slight increase in the number of students who stated they prefer using the 'whole class' initiative in the feedback process, where an interactive game is used. In this study,

'Kahoot' was the online teaching method that students joined to share their knowledge. This 6% increase is a positive reflection in creating a more student focused classroom. However as technology is developing and through my own observation in the study I believe that students prefer using technology for their own personal use. Studies outline that the use of technology in the classroom for teaching and learning can ultimately change the learning environment that students are most familiar with therefore they are more reluctant to embrace change (Bitner and Bitner, 2002). Nevertheless, ICT is rapidly evolving in the Irish education system through the 'Digital School's Strategy' where the strategy envisions that through the use of ICT, students will be open to new forms of learning and collaboration and they will become actively engaged in their learning (Department of Education and Skills, 2015). Therefore it is anticipated that the feedback methods proposed in this study will become more recurrent in the classroom and the students perceptions of these methods will be welcomed in the future.

4.5.5 Personal Observation

From keeping a personal journal throughout the research study, there are various observations that I collected. The main aim for personally reflecting on the study was to improve my teaching standards from effective to highly effective practice. As previously stated the 'Looking at our Schools Document 2016: A Quality Framework for Post Primary Schools' (LAOS) supports teachers and school bodies at improving their standards where they can enhance the learning experience for their students. It provides an opportunity for schools to look at their practices to identify what they are doing well and areas needed for improvement (Dept. of Education and Skills, 2016). Likewise it is designed for teachers to use when implementing the most effective teaching and learning approaches to their classrooms (Dept. of Education and Skills, 2016). I wanted to enhance the learning experience for my second year students by using a teaching and learning strategy to assess if their attitudes to learning had changed. With that I designed a research study where I can share my research findings with my colleagues to benefit the educational journey for all our students. The 'LAOS' document supports communities of practice with educators where the framework views schools as dynamic learning organisations where teachers can work individually or collectively to promote continuous professional development and learning in the school environment (Dept. of Education and Skills, 2016). I felt that the study would be beneficial to all subjects and not solely focused on English.

From completing the study, I noticed how students began to interact more in class even when the feedback strategies were not being used. In a positive way, students became more vocal, demonstrating a willingness to ask and answer questions about their work and I felt that this was a promising reflection on the feedback strategies as they encouraged a student centred approach to learning. I was also quite surprised in the number of students who preferred using the written feedback strategies in comparison to the ICT methods, however I think that the written methods compel students to orally interact in class through sharing their views openly. Overall students confidently participated with the study and their attitudes in class and to their learning changed positively.

4.6 Research Limitations and Challenges

Although the project was a success and the strategies and surveys were fully complete, one limitation from the study was the loss of student face to face classroom contact time due to Covid-19. Unfortunately schools were forced to close on March 12th 2020 and as a result teachers taught classes online until June 2020. Although the research was carried out and the strategies were implemented into the lessons pre-Covid 19, I felt that the lack of classroom interaction and informal discussion with the students was a major disadvantage. There was limited opportunity for students to openly share their thoughts and opinions on the feedback methods that were included in lessons. I believe that this would have been an invaluable source of gathering students' views on the strategies and the study as a whole. Pollock et al. (2011) state that classroom open discussion develops students' communication skills and improves learning. Likewise as it was a small scale study representing one second year group, the results do not reflect every Post Primary student. Results will tend to vary from other class groups and year groups and student opinions on the feedback methods may change. According to Hackshaw (2008) the main limitation with small scale studies is the interpretation of results. Therefore the results analysed from this study will not necessarily correspond with results provided by other students.

4.7 Conclusion

Based on the survey responses from the students it is evident that feedback from the student to the teacher is beneficial to learning. One of the main objectives of the study was to enhance student engagement and participation with their coursework. From examining the findings these undoubtedly improved over the duration of the study where the pupils have demonstrated their enthusiasm to take more responsibility for their learning. Likewise students felt more

comfortable in expressing their thoughts and opinions and this was positive in developing student voice. I am more familiar with the feedback method students prefer, however as there was only a slight increase in those preferring a whole class strategy I feel that this is a welcoming sign for future learning. As a result of the study student voice improved with students feeling more content in expressing their knowledge in the subject topic.

5. Conclusion and Recommendations

5.1 Conclusions

The research study had the aim of finding out if student engagement and participation through the use of formative feedback strategies improved. Based on the results the three main findings of the research including student engagement, participation and student voice significantly improved. This is a welcoming development for student centred learning where Levin (2000) advocates that educational reform cannot succeed without the direct involvement of students in certain aspects. According to Levin (2000) by including students in educational changes they can offer unique knowledge and perspectives that can make reform efforts more successful and meaningful. As stated by Chen et al. (2016) feedback in education will improve student engagement and participation and this is noticeable in the research findings. With that, the analysis of student voice in the classroom is a positive result as students responded to feeling more comfortable in voicing their opinions. The purpose of enhancing student voice in education is to promote constructive participation and to encourage positive relationships where teachers and students can communicate and learn from each other (Cook-Sather, 2006).

5.2 Research Growth and Reflection

Through self-reflection I feel the study was beneficial to my own learning and has addressed areas in my teaching practice that can be improved for the benefit of myself and the students. These improvements include, introducing more student centred approaches to learning by placing reasonable responsibility on the students in relation to their learning experience. Hattie and Timperley (2007) recognise that students can use feedback to identify new strategies to complete a task or can use their feedback to obtain extra information for which they can solve problems, therefore adopting a student centred approach. Norton (2009) advocates that reflection by teachers in action research is essential if we want to see an effective change. Therefore action research was the most suitable approach for this study as I aimed to identify if feedback from students boosted their learning experience. The study allowed me to continually progress as a teacher and as emphasised by Norton (2009) reflective practice is strongly linked with continuing professional development and puts educators in the centre of their own learning and self-development.

5.3 Recommendations

Going forward I intend to share the feedback strategies with my fellow colleagues in the English department. I believe they are valuable resources to teaching and learning particularly for revision purposes. Likewise I will distribute the strategies to all other subject departments in the school to encourage cross curricular links and communities of practice. I feel that these strategies will benefit teachers attending Junior Cycle in-service as the main aim of the Junior Cycle for Teachers is to offer support and professional development services for teachers (JCT, 2020). The research findings will align with the new Junior Cycle Reform where the main purpose of the reform is to enable learners to use and analyse information in creative ways, to investigate issues and explore new ideas (Dept. of Education and Skills, 2015). The study achieves a balance between learning subject knowledge and assessment and developing a wide range of skills including responsibility, engagement and student voice. Finally the action research project enabled me to move from effective to highly effective practice to the advantage of my students learning journey.

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Appendices

Appendix 1
<div align="right">
XXXXXX,
XXXXXX,
XXXXXX.

14th Nov 2019
</div>

Dear XXXXXX,

As part of my 'Master of Arts for Learning and Teaching' study at the LYIT I am seeking your permission to conduct a research project with XXXXXX. Research has shown that second year students are most likely to disengage with their learning during theyear, therefore the purpose of my project is looking at ways of improving teaching and learning in the classroom. I propose to work with XXXXXX to improve their engagement and participation in class through classroom based feedback.

To begin the study, students will be surveyed online through Google Docs, the information they provide will be anonymous. The data collected from the students is strictly confidential and only accessed by me. I will then introduce a range of written feedback strategies in the second year class. I want to identify student knowledge with regards to a topic they covered in class and their motivation for learning. I will then re-survey the students assessing possible changes to learning. Following this I intend to include current technologies as a feedback method for students. This will involve students using their mobile phones or school chrome books in class to answer questions interactively. Having completed this study I will review my work and identify what I found most beneficial to student learning.

If you have any further queries I would be happy to clarify.

Yours sincerely,

Lauren Mc Gill

XXXXXX

Dear Parent/ Guardian,

As part of my Action Research Project for Letterkenny Institute of Technology I will be looking at ways to improve teaching and learning in the classroom. I will be focusing on XXXXXX that your son/daughter is a pupil of. The aim of my project is to improve student engagement and motivation in class through classroom based feedback fromthe students.

To begin the study, students will be surveyed online through Google Docs, the information they provide will be anonymous. The data collected from the students is strictly confidential and only accessed by me. I will then introduce a range of written feedback strategies in the second year class. I want to identify student knowledge with regards to a topic they covered in class and their motivation for learning. I will then re-survey the students assessing possible changes to learning. Following this I intend to include current technologies as a feedback method for students. This will involve students using their mobile phones or school chrome books in class to answer questions interactively. Having completed this study I will review my work and identify what I found most beneficial to student learning.

Following the study, an information evening will be held for the Parents outlining results from the project which I hope to publish under your consent. The results will reflect changes, if any to teaching and learning in the classroom through classroom based feedback.

If you require any further information on the project, please do not hesitate to contact me at the above number. If you give consent for your son/daughter to participate in the study, please return the permission slip to Ms. Mc Gill. Participants can withdraw from the study at any time. This will not affect their participation in class.

Kind regards,

_____

Lauren Mc Gill (Research Investigator)

I give permission for _____ to take part in the research project and for his/her data being used for the purpose of this research study as outlined in the information letter.

> ➢ I confirm that I have been given and have read and understood the information sheet for the above study and have asked and received answers to any questions raised.
>
> ➢ I understand why my son/ daughter has been chosen to participate in this study and the methods of research used in the project and collection of data.
>
> ➢ I understand that his/her participation is voluntary and that he/she are free to withdraw at any time, without giving a reason and without their rights being affected in any way.
>
> ➢ I understand that the researchers will hold all information and data collected securely and in confidence and that all efforts will be made to ensure that my son/ daughter cannot be identified as a participant in the study (except as might be required by law) and I give permission for the researchers to hold relevant personal data on my son/daughter.
>
> ➢ All information will be confidential and used only for the purposes of the research study.
>
> ➢ I give permission for the anonymous results to be published at the end of the research study.

Signed Parent/ Guardian: _____   Date: _____

Signed Investigator : _____   Date: _____

Appendix 3

Dear Student,

You have been invited to participate in a research project for XXXXXX. The aim of the project is to improve your learning experience by including classroom based feedback methods in your lessons.

- The study requires parental consent to participate.

- All data that is collected is strictly confidential. You will not need to state your name.

- It will take place during normal class time.

- You will be surveyed on numerous occasions on your learning in class.

- The survey is straightforward with multiple choice answers.

- Phones or school chrome books will be included for certain topics.

- You are free to withdraw from the study at any time.

Your cooperation in this exercise would be greatly appreciated.

Thanking You,

Ms. Mc Gill

Appendix 4

Student Feedback Survey

Mark only one box.

1.
   What do I do when I'm finding a topic in a subject difficult to understand?
   Check all that apply.

   ☐ Ask the person beside me/ a friend/ parent/ guardian for help.

   ☐ Say nothing and stop listening.

   ☐ Look at the book that night.

   ☐ Ask my teacher during class or next day.

   ☐ Nothing- forget and move on.

2.
   How do I know I'm understanding a topic?
   Check all that apply.

   ☐ I can do my homework without help.

   ☐ I can explain the topic to others.

   ☐ I can participate in class.

   ☐ I can remember the information the next day.

3.
   At the end of a topic I review/ check my learning by?
   Check all that apply.

   ☐ Asking the teacher a question.

   ☐ Giving my understanding a rating between 1-10.

   ☐ Reading over the material at home.

   ☐ Making my own study/ revision/summary notes.

   ☐ I don't review/ check my own learning.

4.
   I feel that I am given the opportunity in class to orally voice my thoughts and opinions on a topic and my understanding of it.
   Check all that apply.

   ☐ Always

   ☐ Sometimes

   ☐ Never

5.

Which type of feedback do you prefer using at the end of a topic?
Mark only one oval.

◯ Written- feedback notes in copy or journal.

◯ Oral feedback- one to one spoken feedback.

◯ Whole class- where a game is used to help students remember the key information in a topic.

6.

How would you describe how hard you work in class? (homework, classwork, tests etc)
Mark only one oval.

◯ I try my hardest and put a lot of time and effort into everything I do.

◯ I try my hardest most of the time but sometimes I know I could do more.

◯ I do what I have been asked to do. I get it done as quickly as I can.

◯ I put in little or no effort. I have not done my work at all a few times.

Powered by

Google Forms

Appendix 5

Tweet: One thing I
understand....

_____
_____
_____
_____